



VISUAL RESOURCE INVENTORY IMPLEMENTATION GUIDELINES

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National Operations Center
Division of Resource Services
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Purpose of Implementation Guidelines

This document describes the physical design for the national data standard for the geospatial dataset. It is intended as a guideline for implementation. States may extend and expand upon this guideline in order to meet their specific needs, provided that when the data is pushed up to the national level, it will meet the minimum requirements as set forth in the Data Standard.

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INTRODUCTION

Data Structures Implemented

The data for inclusion in this data set shall be collected in a known datum and coordinate system. The data stored on the EGIS server in Denver shall be stored in geographic coordinates for national layers using the Bureau standard NAD 83 datum rather than in a specific projection. While the standard datum is NAD 83, there are multiple realizations of that datum in existence. The metadata for each data set shall contain more specific labeling of the datum as appropriate. Examples of this would include: NAD 83 (2007) or NAD 83 (CORS 96) (1997). Every effort should be made to be as specific as possible in delineating the appropriate datum.

Data Structures Implemented		
	There are 17 structures in this implementation	
	Scenic Quality Rating Units and Associated Inventory Observation Points	
A	<i>vri_iop_pt</i>	Represents the point features that show the inventory observation points.
B	<i>vri_sqru_arc</i>	Represents the arc features that will make up the polygons for the Scenic Quality Rating Units. These arcs will have the feature level metadata attributes shown assigned to them.
C	<i>vri_sqru_poly</i>	Represents the polygon features that show the Scenic Quality Rating Units.
D	<i>vri_iop_sqru_tbl</i>	Will contain information on the observations of scenic quality conducted from the inventory observation points. This table is related to both the <i>vri_iop_pt</i> and the <i>vri_sqru_poly</i> feature classes.
E	<i>vri_sqru_landscape_tbl</i>	Will contain the descriptive text for the landscape element features and their characteristic attributes. This table is related to the <i>vri_sqru_poly</i> feature class through the <i>sqru_landscape_rel</i> relationship class. The attribute values in this table should contain the scenic quality landscape characteristic values for the entire rating unit as determined from the different observations.
F	<i>vri_sqru_factors_tbl</i>	Will contain the scores assigned to each of the seven factors for scenic quality. This table is related to the <i>vri_sqru_poly</i> feature class through the <i>sqru_factors_rel</i> relationship class. The attribute values in this table should contain the scenic quality factor scores for the entire rating unit as determined from the different observations.
	<i>vri_sqru_iop_rel</i>	Is a relationship class which links the <i>vri_sqru_poly</i> feature class to the <i>vri_iop_sqru_tbl</i> table. Information for both the scenic quality rating unit and its associated inventory observation point(s) can be

		accessed through this relationship. Further, this relationship resolves one side of the many-to-many relationship that may exist between scenic quality rating units and inventory observation points.
	<i>vri_iop_sqru_rel</i>	Is a relationship class which links the <i>vri_iop_pt</i> feature class to the <i>vri_iop_sqru_tbl</i> table. Information for both the inventory observation point and its associated scenic quality rating unit(s) can be accessed through this relationship. Further, this relationship resolves one side of the many-to-many relationship that may exist between inventory observation points and scenic quality rating units.
	<i>vri_sqru_landscape_rel</i>	Is a relationship class which links the <i>vri_sqru_poly</i> feature class to the <i>vri_sqru_landscape_tbl</i> table. Information from both the scenic quality landscape table and the poly feature class can be accessed through the use of this relationship.
	<i>vri_sqru_factors_rel</i>	Is a relationship class which links the <i>vri_sqru_poly</i> feature class to the <i>vri_sqru_factors_tbl</i> table. Information from both the scenic quality factors table and the poly feature class can be accessed through the use of this relationship.
Sensitivity Level Rating Units and Visual Distance Zones		
G	<i>vri_slru_arc</i>	Represents the arc features that will make up the polygons for the Sensitivity Level Rating Units. These arcs will have the feature level metadata attributes shown assigned to them.
H	<i>vri_slru_poly</i>	Represents the polygons that show the Sensitivity Level Rating Units.
I	<i>vri_slru_ratings_tbl</i>	Will contain the ratings assigned to each of the factors for sensitivity according to the level of concern for maintaining visual quality. This table is related to the <i>vri_slru_poly</i> feature class through the <i>slru_ratings_rel</i> relationship class. The attribute values in this table should contain the sensitivity level ratings for the entire rating unit as determined from the different observations.
	<i>vri_slru_ratings_rel</i>	Is a relationship class which links the <i>vri_slru_poly</i> feature class to the <i>vri_slru_ratings_tbl</i> table. Information from both the sensitivity ratings table and the poly feature class can be accessed through the use of this relationship.
J	<i>vri_vdz_arc</i>	Represents the arc features that will make up the polygons for the Visual Distance Zones. These arcs will have the feature level metadata attributes shown assigned to them.
K	<i>vri_vdz_poly</i>	Represents the polygons that show the Visual Distance Zones.

	Visual Resource Inventory Classes	
L	<i>vri_class_poly</i>	Represents the polygons that show the Visual Resource Inventory Classes. These are inventory classes and should not be confused with the final Visual Resource Management Classes.
	Guidance Tables: These tables are being distributed in the GIS (with “gde” suffix) and may be used to assist with assigning appropriate values as required during the inventory process. The guidance tables documentation is located in the domains document referenced in Appendix A. These tables are optional and may be removed from the geodatabase if not needed.	
	<i>vri_class_asgn_gde</i>	Is a non-spatial table with general information providing guidance relative to assigning an inventory class to an area. The information in this table corresponds to the BLM Manual H-8410-1, Section V. Visual Resource Classes and Objectives, and Illustration 11 – Determining Visual Resource Inventory Classes.
	<i>vri_sl_factor_gde</i>	Is a non-spatial table with general information providing guidance relative to the different factors that should be considered when conducting a sensitivity level inventory for an area. The information in this table corresponds to the BLM Manual H-8410-1, Section III-A. Sensitivity Level Analysis – Factors to Consider.
	<i>vri_sl_rating_gde</i>	Is a non-spatial table with general information providing guidance relative to rating the different sensitivity level factors. The information in this table corresponds to the “instruction” sheet accompanying Illustration 8 in the BLM Manual H-8410-1.
	<i>vri_sq_criteria_gde</i>	Is a non-spatial table with general information providing guidance relative to scoring the seven factors of scenic quality. The information in this table corresponds to Illustration 2 – Scenic Quality Inventory and Evaluation Chart, in the BLM Manual H-8410-1.
	<i>vri_sq_factor_gde</i>	Is a non-spatial table with general information providing guidance relative to the criteria that should be used in scoring each of the seven factors of scenic quality. The information in this table corresponds to Illustration 1 – Scenic Quality – Explanation of Rating Criteria, in the BLM Manual H-8410-1.
	<i>vri_vdz_criteria_gde</i>	Is a non-spatial table with general information providing guidance on determining the different distance zones. The information in this table corresponds to the BLM Manual H-8410-1, Section IV. Distance Zones.

Design Considerations

Background

This document is divided into three sections; full implementation of the data standard shall incorporate all of these sections. Section 1 defines the feature classes for the inventory observation points, and addresses the analysis and scoring of scenic quality rating units. Each scenic quality rating unit will have at least one inventory observation point associated with it; likewise, each inventory observation point will have at least one rating unit associated with it. Section 2 addresses sensitivity level analysis and distance zone determinations. Section 3 addresses assigning inventory classes resulting from the visual resource inventory. Appendix B contains physical database diagrams outlining each section. The logical entity and attribute names may be documented in the Data Standard Report, the Logical Data Model, or in Appendix C, the Logical Data Model Diagram.

Inventory Observation Points

The Visual Resource Management system utilizes two different types of observation points. An Inventory Observation Point (IOP) is determined and used as part of the Visual Resource Inventory process where land use planning-level evaluations of current scenic quality are completed. A Key Observation Point (KOP) is determined as part of the contrast rating system process, where the potential visual impact of a proposed project or activity is being analyzed. The BLM Manual 8431 - Visual Resource Contrast Rating contains additional information on Key Observation Points.

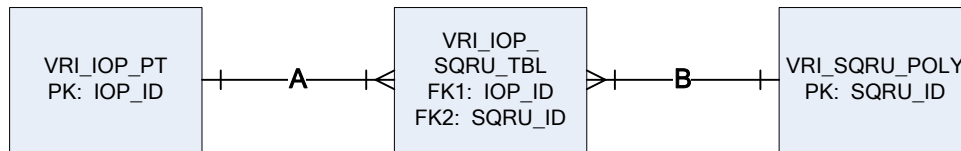
For the Visual Resource Inventory, an evaluation of the scenic quality of an area should be done from viewpoints that are most representative of the area being inventoried. These locations may coincide with important viewpoints along a route (road, river, trail, flyway); at a stationary location (viewpoints, campgrounds, or some other location that is similar to the remainder of the scenic quality rating unit); or along the boundary of an adjacent parcel (national park, wilderness area). An IOP may reside either within or outside of the rating unit being inventoried. Whereas selecting a KOP for project analysis must consider numbers of viewers, type of view, degree of visibility, and similar environmental factors in order to evaluate potential contrast, an IOP is primarily intended to serve as a typical, holistic representation of the area being evaluated for scenic quality. At least one observation should be taken for each scenic quality rating unit, and the information taken at the IOP(s) forms the basis of the Scenic Quality Rating Score that is assigned to each Scenic Quality Rating Unit.

Relationship Classes for this Data Standard

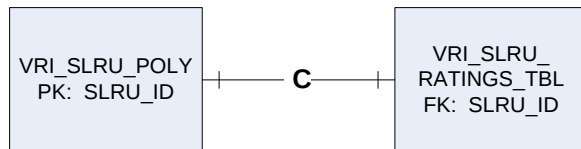
The implementation of the geodatabase supporting this data standard includes both simple one-to-one, and simple one-to-many relationship classes. There must be one or more observation points for each polygon; and there must be one or more polygons for each observation point. This constitutes a many-to-many relationship; however, this standard does not include attributed many-to-many

relationships as they can not be queried in the same manner as a one-to-many relate. The following lists the relationship classes and provides a brief description of each:

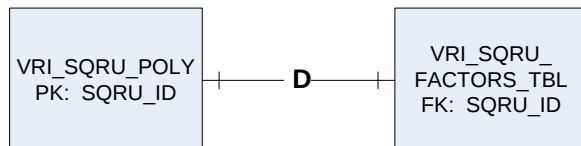
- A. *vri_iop_sqr_rel*: one-to-many relationship class capturing the information observed at an observation point for one or more scenic quality rating units.
- B. *vri_sqr_iop_rel*: one-to-many relationship class capturing the information observed for each scenic quality rating unit from one or more observation points.



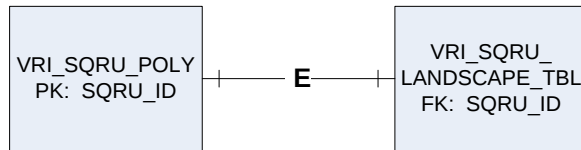
- C. *vri_slru_ratings_rel*: one-to-one relationship class linking each feature in *vri_slru_poly* to a record in *vri_slru_ratings_tbl*, where the various sensitivity levels are recorded.



- D. *vri_sqr_factors_rel*: one-to-one relationship class linking each feature in *vri_sqr_poly* to a record in *vri_sqr_factors_tbl*, where the scores for scenic quality are recorded.



E. *vri_sqru_landscape_rel*: one-to-one relationship linking each feature in *vri_sqru_poly* to a record in *vri_sqru_landscape_tbl*, where the landscape characteristics are recorded.



For more information on relational data structures, please refer to the document located at http://web.blm.gov/data_mgt/std_proc.htm.

Domains

There are domain tables that are common across other data standards and feature classes, and as such they must be implemented differently than those domains that are specific to the data standard (reference *Domain Information Section* located at http://web.blm.gov/data_mgt/std_proc.htm). These shared domains are not included in the geodatabase associated with these implementation guidelines.

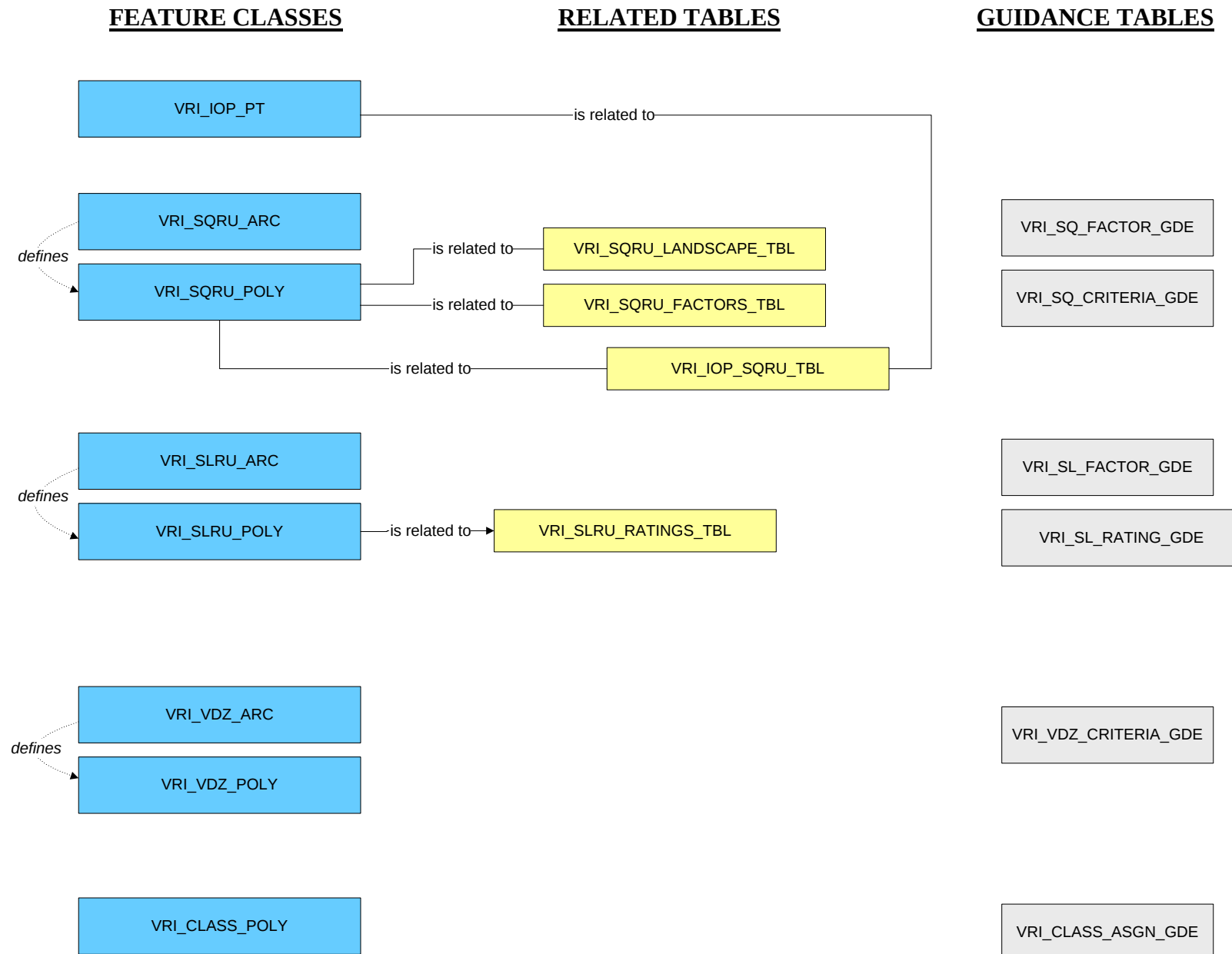
The common domain names are included in the tables, in italic text. The domain values may be located in the Access Database at http://web.blm.gov/data_mgt/std_proc.htm.

- *DOM_COORD_SOURCE_TYPE*
- *DOM_DEF_FEATURE_TYPE*
- *DOM_ADMIN_ST*
- *DOM_ADM_UNIT_CD*
- *DOM_YES_NO* (this domain had not been included in the Access Database as of this writing; therefore, this domain is included in the geodatabase)

The following domains are unique to the dataset; therefore, they are associated in the geodatabase and are included in the XML schema. The domain names are included in the tables, in normal text.

- VRI_DOM_IOP_RPRSNT
- VRI_DOM_SQ_TOT_SCR
- VRI_DOM_SQ_CODE
- VRI_DOM_SQ_LFORM_SCR

- VRI_DOM_SQ_VEG_SCR
- VRI_DOM_SQ_WATER_SCR
- VRI_DOM_SQ_COLOR_SCR
- VRI_DOM_SQ_ADJNT_SCR
- VRI_DOM_SQ_SCARC_SCR
- VRI_DOM_SQ_CULT_SCR
- VRI_DOM_SL_RATING
- VRI_DOM_SLNA_RATING
- VRI_DOM_VDZ_CODE
- VRI_DOM_CLASS_CODE

Physical Database Diagram

Topology

Geodatabase and map topologies will be established to relate the active feature classes together, to maintain feature geometry, and to aid in the editing of features. The implementation of this data standard requires that polygons be defined by bounding arcs. Therefore, a minimum set of geodatabase topology rules are defined as part of the geodatabase to verify the coincidence between these two feature classes.

Map topology shall be established during edit sessions. Edits to the polygon shape will be performed by modifying the bounding arc. (Historical or archived polygons will not be edited once they become inactive). For additional information, refer to the best practices document located at: http://web.blm.gov/data_mgt/std_proc.htm. It is recommended that these tools be used and implemented to improve data quality and integrity.

Geodatabase Topology Rules	
The following are the minimum that should be implemented. Additional topology rules may be added depending on data requirements for each office.	
Topology Rule	Required?
The topology rules are included in three rule files; one each for scenic quality, sensitivity level and visual distance zones.	
<u>Scenic Quality Rating Units</u>	
<i>vri_sqru_arc</i> Must Be Covered By Boundary Of <i>vri_sqru_poly</i>	Mandatory
<i>vri_sqru_poly</i> Boundary Must Be Covered By <i>vri_sqru_arc</i>	Mandatory
<i>vri_sqru_arc</i> Must Not Overlap	Mandatory
<i>vri_sqru_arc</i> Must Not Self-Overlap	Mandatory
<i>vri_sqru_poly</i> Must Not Overlap	Mandatory
<u>Sensitivity Level Rating Units</u>	
<i>vri_slru_arc</i> Must Be Covered By Boundary Of <i>vri_slru_poly</i>	Mandatory
<i>vri_slru_poly</i> Boundary Must Be Covered By <i>vri_slru_arc</i>	Mandatory
<i>vri_slru_arc</i> Must Not Overlap	Mandatory

vri_slru_arc Must Not Self-Overlap	Mandatory
vri_slru_poly Must Not Overlap	Mandatory
<u>Visual Distance Zones</u>	
vri_vdz_arc Must Be Covered By Boundary Of vri_vdz_poly	Mandatory
vri_vdz_poly Boundary Must Be Covered By vri_vdz_arc	Mandatory
vri_vdz_arc Must Not Overlap	Mandatory
vri_vdz_arc Must Not Self-Overlap	Mandatory
vri_vdz_poly Must Not Overlap	Mandatory

If you are creating new data where the polygons are being created by the bounding arcs, you may want to include the GDB topology rule “*Must not have dangles*” for each arc feature class. This way any gaps in the arcs defining your polygon boundaries can be discovered and corrected before you construct your polygons.

Data Guidelines

Implementation of the data standards will occur at those organizational levels of the Bureau as appropriate. The standards are intended to be platform-independent.

There are some attributes that are intended to eventually become system generated when a system or application is developed to manage this dataset. At the present time there is no specific application for maintaining this data layer and therefore those attributes will currently need to be manually edited.

The attributes included in this implementation are those that have been established for the national data standard and cannot be modified except through the Data Standards Maintenance process. If additional attributes or domain values are desired by individual states/offices, create a new attribute and populate with a new attribute domain assignment. Metadata for the additional attributes must be documented by that office.

The format for entering the date in the geodatabase (GDB) will be MM/DD/YYYY. The ESRI software displays the date field according to how dates are formatted for display on the computer. The FGDC-compliant format for the date field is YYYYMMDD. There are two methods in which the FGDC format could be used for storing the date. The date format on the computer can be reset which may

introduce unintended consequences within other programs, or the date field could be defined as a text field which would leave ample room for errors being introduced to the data. Although the National Data Standards are intended to be platform-independent, the ESRI GDB format is the current platform implemented throughout the BLM.

Administrative State, District and Field Office codes were part of a three tier identification system, which has been replaced by the ten-character DOI FPPS Organization Code. For BLM national data standards, we will be using only the last eight characters of the FPPS organization code (the two-character BLM Administrative State Code and the six-character Administrative Office Code). While using these codes in combination can contribute to the creation of a unique identifier, they are also listed as separate attributes so that if the codes change at a single level, the concatenated code can then be regenerated. However, if the 8 character code is used as part of a unique identifier, the unique identifier is not re-generated if the organization code changes.

To populate the field for the Administrative Unit Code attribute in the geodatabase (ADM_UNIT_CD), individual offices should download the Access database containing the common domains at the following website: http://web.blm.gov/data_mgt/std_proc.htm. Click on the link for “Shared Domain Values (Access DB)” to download the Access database. The field should be populated with the office code for the lowest level of the organization that has jurisdiction.

Dataset Review Cycle

The data for the Visual Resource Inventory should be reviewed as needed, or as changes to the landscape occur. Data quality reviews will occur at the field, district and state office levels with an annual compliance review to be conducted by the data steward. The data standard itself will also be reviewed annually or at the time of request by the users through the data steward.

National Dataset Update Cycle

No determination has been made with reference to a national dataset at this point. However, it is likely that the national dataset will be a subset of the full VRI implementation.

Records Retention

The entire geodatabase for Visual Resource Inventory will be archived on an annual basis, by October 15, for the previous fiscal year.
Note: Records issues will be handled according to official policy for Records Management.

DATA STANDARD IMPLEMENTATION DETAILS

SCENIC QUALITY RATING UNITS AND ASSOCIATED INVENTORY OBSERVATION POINTS

A. Visual Resource Inventory Observation Points (vri_iop_pt)

The point features used to define the inventory observation points are described in the following table. The Inventory Observation Points feature class shall be representative of those locations that are used to support the analysis of scenic quality. This feature class participates in a one-to-many relationship with the observation table for Scenic Quality Rating Units (vri_iop_sqr_u_tbl).

Each point must be associated with one or more polygons for scenic quality. Likewise, each polygon for scenic quality must be associated with one or more observation points. Additionally, the observation point may either be within or outside of the polygon being observed. These associations and the analysis from each observation point are located in the related tables.

This table includes attributes that are used to derive the unique identifier for each analysis location, and to document information pertinent to the inventory observation point. Additional attributes serve to store the required feature level metadata information, and document the origin and characteristic of each point.

Visual Resource Inventory Observation Points Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
IOP_ID	IOP Unique ID	Char(15)	YES			YES
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO
ADM_OFC_CD	Administrative Office Code	Char(6)	YES			NO
ADM_UNIT_CD	Administrative Unit Code	Char (8)	YES			NO
IOP_NR	Observation Point Number	Char(4)	YES			NO
IOP_NAME	IOP Location Name	Char(50)	NO			NO
ELEV_FT	Ground Elevation In Feet	Long Integer	YES			NO
IOP_RPRSNT	IOP Representation	Char(10)	YES	Route	VRI_DOM_IOP_RPRSNT	NO
IOP_MTHD	Methodology Used to Determine IOP	Char(255)	YES			NO
IOP_CMMNTS	Comments About the IOP	Char(255)	NO			NO
CREATE_DATE	Created Date	Date	YES	09/09/9999		NO
CREATE_BY	Created By Name	Char(30)	YES	UNK		NO
MODIFY_DATE	Modified Date	Date	YES	09/09/9999		NO
MODIFY_BY	Modified By Name	Char(30)	YES	UNK		NO

Visual Resource Inventory Observation Points Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
PT_SRC_TYPE	Point Source Type	Char(5)	YES	UNK		NO
PT_SRC_DESC	Point Source Description	Char(40)	NO			NO
ACCURACY_FT	Accuracy Measurement In Feet	Long Integer	YES	-1		NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
IOP_ID	Visual Resource Inventory Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity. Design Considerations: An 15 alpha-numeric digit unique identifier, the concatenation of: - the abbreviation “IOP” - ADMIN_ST, the Administrative State Code (2 characters) - ADM_OFC_CD, The Administrative Office Code (6 characters) - IOP_NR, a 4 digit sequential number The value for this field can be obtained using the Field Calculator in ArcMap. [IOP_ID] = “IOP” + [ADMIN_ST] + [ADM_OFC_CD] + [IOP_NR]

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 Design Considerations: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL<u>AK</u>030900). Attribute Domain Assignment: <i>DOM_ADMIN_ST</i>
ADM_OFC_CD	Office.BLM Organization Code	Logical Definition: BLM administrative office (which is subordinate to the state office) that has jurisdiction and/or management authority over lands within a geographic area. Design Considerations: This is a six digit code. In the FPPS Organization Codes, use the 6 characters after the State designators (e.g. LLAK<u>030900</u>).
ADM_UNIT_CD	Administrative Office + Office.BLM Organization Code	Logical Definition: The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. Design Considerations: This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL<u>AK030900</u>). Attribute Domain Assignment: <i>DOM_ADM_UNIT_CD</i>

GIS Name	Logical Name	Definition/Design Considerations
IOP_NR	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: A unique four digit sequential number. This number may be derived from the Object ID that is automatically generated by the GIS software, or the unique identifier generated by the GPS unit (among other methods). This number should be unique within all datasets for the particular office as coded in ADM_UNIT_CD. This attribute is used as part of the unique identifier for the point.
IOP_NAME	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Optional attribute. Name by which the observation point may be commonly known or identified. Examples could include: Route 66 MM236, Buffalo Herd Overlook, Knowles Canyon Overlook Campground, Rabbit Valley Staging Area, Loma Boat Launch, Dinosaur Ridge National Natural Landmark marker, Rifle Starbucks.
ELEV_FT	Point Form Dimension Measure	Logical Definition: The measure associated with each dimension of a Coordinate System. Note: This is part of the BLM Location Logical Data Model, but it is not shown on the VRI Logical Data Model for simplicity. Design Considerations: Measure of ground elevation in feet. Elevation is the distance of a point above a specified surface of constant <i>potential</i>; the distance is measured along the direction of gravity between the point and the surface (from USGS Geodesy Dictionary).
IOP_RPRSNT	Observation Point Representation Name	Logical Definition: The name that represents whether or not the observation was stationary or how the observer was moving along a line. Design Considerations: The type of feature that the point represents (i.e. stationary location represented by a point; a location along a route such as a road, a river, a trail; or a point along a boundary). Attribute Domain Assignment: VRI_DOM_IOP_RPRSNT Default: Route

GIS Name	Logical Name	Definition/Design Considerations
IOP_MTHD	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Description of the reasoning behind and the methodology used in determining the inventory observation point (i.e. why this particular location?). Examples could include, but are not limited to: location that is representative of the SQRU being inventoried was determined in the field and recorded using GPS coordinate and elevation measure, location is on a bluff with a commanding view into the adjacent SQRU which is being inventoried, GIS extraction of points from existing GIS dataset of recreational areas followed by field verification of coordinate with GPS, previously defined observation point, analyzed landscape using digital elevation model data to determine an observation point that represents the average elevation of the SQRU and that is centrally located in the SQRU.
IOP_CMMNTS	Scenic Quality Observation Point Comments Text	Logical Definition: The text that describes the specific location used for the observation or rating the unit. Design Considerations: Optional attribute. Narrative text that may be used to describe the inventory observation point, the landscape or built characteristics around the inventory observation point, any issues in gaining access to the location, directions to find the IOP, and any additional comments. Examples of the comments text could include: IOP is located approximately 300 feet from the scenic byway on an embankment, IOP is located generally on the western edge of an area popular for dispersed camping, IOP is located near a 4WD trail and may be difficult to reach following inclement weather.
CREATE_DATE	Location Effective Date	Logical Definition: The date which is the calendar year, month, and day when the position of the Location was produced. Design Considerations: As a new feature is added to the system its creation date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
CREATE_BY	Not applicable	Logical Definition: Not on the logical model. Design Considerations: The UserID (BLM login ID) of the person who created or imported the data into the BLM GIS system. This attribute will be deleted before providing the data to the public. Default: UNK

GIS Name	Logical Name	Definition/Design Considerations
MODIFY_ DATE	Location Modified Date	Logical Definition: The date which is the calendar year, month, and day when the position of the Location was last modified. Design Considerations: As a feature is edited or modified while in the system its modification date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
MODIFY_ BY	Not applicable	Logical Definition: Not on the logical model. Design Considerations: The UserID (BLM login ID) of the person who edited or modified data in the BLM GIS system will be collected and maintained. This attribute will be deleted before providing the data to the public. Default: UNK
PT_SRC_ TYPE	Location Source Type Name	Logical Definition The name that identifies the general category for the origin of the location coordinate, representing a compilation of the state adopted source codes. Design Considerations: The type of source used to determine coordinates for the point feature. This is a free-form text field. The user may enter whichever value is most appropriate to the data that provides information on the source of the point (e.g. GPS, GIS). Common abbreviations for coordinate source types may be found in the domain table (DOM_COORD_SOURCE_TYPE) for the COORD_SRC_TYPE attribute. Default: UNK
PT_SRC_ DESC	Location Source Description Specific Name	Logical Definition: The name that identifies a more specific description of the location (coordinate source). Design Considerations: <u>This is an optional attribute.</u> The user may leave this value “null” or enter another value appropriate to the data that more fully describes the source of the point feature. This attribute is not intended to be a substitute for the accuracy values that are found in the ‘Accuracy Measurement Table’.

GIS Name	Logical Name	Definition/Design Considerations												
ACCURACY_FT	Point Form Accuracy Measure	Logical Definition: The measure that describes how close, in Point Form Unit Of Measure Type Name the actual location is to the spatial depiction. Design Considerations: The Accuracy Measurement defines how close, in feet, the actual ground location is to the spatial depiction in GIS. This value would typically be determined by one of three methods: 1) the map accuracy value, if a USGS map was used to define the boundary; 2) the expected spatial accuracy achieved with GPS; or 3) the measurement of that accuracy as is noted in the <i>National Standard for Spatial Data Accuracy (NSSDA)</i>¹ which is a data usability standard issued by the Federal Geographic Data Committee (FGDC). Default: -1 A value of -1 indicates that the accuracy is unknown or that no reliable estimate can be made. Below is an example table of accuracy measurements. (A list of all values is not representable in a domain table.) <table><tr><th colspan="2">Accuracy Measurement Example Table</th></tr><tr><td>1</td><td>+/- 1 Feet</td></tr><tr><td>10</td><td>+/- 10 Feet</td></tr><tr><td>15</td><td>+/- 15 Feet</td></tr><tr><td>20</td><td>+/- 20 Feet</td></tr><tr><td>100</td><td>+/- 100 Feet</td></tr></table> ¹ Federal Geographic Data Committee. 1998. <u>Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy</u>, FGDC-STD-007.3-1998	Accuracy Measurement Example Table		1	+/- 1 Feet	10	+/- 10 Feet	15	+/- 15 Feet	20	+/- 20 Feet	100	+/- 100 Feet
Accuracy Measurement Example Table														
1	+/- 1 Feet													
10	+/- 10 Feet													
15	+/- 15 Feet													
20	+/- 20 Feet													
100	+/- 100 Feet													
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.												

B. Visual Resource Inventory Scenic Quality Rating Unit Polygon Arcs (vri_sqru_arc)

The arc features used to define the polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries, and document the origin and characteristics of each arc.

Visual Resource Inventory Scenic Quality Rating Unit Polygon Arcs Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
CREATE_DATE	Created Date	Date	YES	09/09/9999		NO
CREATE_BY	Created By Name	Char(30)	YES	UNK		NO
MODIFY_DATE	Modified Date	Date	YES	09/09/9999		NO
MODIFY_BY	Modified By Name	Char(30)	YES	UNK		NO
COORD_SRC_TYPE	Coordinate Source Type Code	Char(5)	YES	UNK	DOM_COORD_SOURCE_TYPE	NO
COORD_SRC2	Coordinate Source Code	Char(25)	NO			NO
DEF_FET_TYPE	Defining Feature Type Code	Char(15)	YES	UNK	DOM_DEF_FEATURE_TYPE	NO
DEF_FET2	Defining Feature Code	Char(30)	NO			NO
ACCURACY_FT	Accuracy Measurement In Feet	Long Integer	YES	-1		NO
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
CREATE_DATE	Location Effective Date	Logical Definition: The date which is the calendar year, month, and day when the position of the Location was produced. Design Considerations: As a new feature is added to the system its creation date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
CREATE_BY	Not applicable	Logical Definition: Not on the logical model. Design Considerations: The UserID (BLM login ID) of the person who created or imported the data into the BLM GIS system. This attribute will be deleted before providing the data to the public. Default: UNK

GIS Name	Logical Name	Definition/Design Considerations
MODIFY_DATE	Location Modified Date	Logical Definition: The date which is the calendar year, month, and day when the position of the Location was last modified. Design Considerations: As a feature is edited or modified while in the system its modification date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
MODIFY_BY	Not applicable	Logical Definition: Not on the logical model. Design Considerations: The UserID (BLM login ID) of the person who edited or modified data in the BLM GIS system will be collected and maintained. This attribute will be deleted before providing the data to the public. Default: UNK
COORD_SRC_TYPE	Location Source Type Name	Logical Definition The name that identifies the general category for the origin of the location coordinate, representing a compilation of the state adopted source codes. The domain contains those values that would most likely be used in the determination of source codes for the data set. Design Considerations: Attribute Domain Assignment: <i>DOM_COORD_SOURCE_TYPE</i> Default: UNK
COORD_SRC2	Location Source Description Specific Name	Logical Definition: The name that identifies a more specific description of the location (coordinate source). Design Considerations: <u>Suggested</u> values for codes appear in the domains appendix. The user may leave this value “null”, choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This list is not intended to be a substitute for the accuracy values that are found in the ‘Accuracy Measurement Table’. <u>This is an optional attribute.</u>
DEF_FET_TYPE	Defining Feature Type Name	Logical Definition: The name that identifies the high-level category for the actual physical or mapping characteristics (features) from which the arcs are derived. Design Considerations: Attribute Domain Assignment: <i>DOM_DEF_FEATURE_TYPE</i> Default: UNK

GIS Name	Logical Name	Definition/Design Considerations												
DEF_FET2	Defining Feature Description Name	Logical Definition: The name that identifies a more specific description of the feature from which the arcs are derived to create polygon boundaries. This information further describes the physical or mapping feature that makes up the polygon boundary. Design Considerations: <u>Suggested</u> code values appear in the domains appendix. The user may leave this value “null”, choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. <u>This is an optional attribute.</u>												
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition: The measure that describes how close, in Line Form Unit Of Measure Type Name the actual location is to the spatial depiction. Design Considerations: The Accuracy Measurement defines how close, in feet, the actual ground location is to the spatial depiction in GIS. This value would typically be determined by one of three methods: 1) the map accuracy value, if a USGS map was used to define the boundary; 2) the expected spatial accuracy achieved with GPS; or 3) the measurement of that accuracy as is noted in the <i>National Standard for Spatial Data Accuracy (NSSDA)</i>¹ which is a data usability standard issued by the Federal Geographic Data Committee (FGDC). Default: -1 A value of -1 indicates that the accuracy is unknown or that no reliable estimate can be made. Below is an example table of accuracy measurements. (A list of all values is not representable in a domain table.) <table><tr><th colspan="2">Accuracy Measurement Example Table</th></tr><tr><td>1</td><td>+/- 1 Feet</td></tr><tr><td>10</td><td>+/- 10 Feet</td></tr><tr><td>15</td><td>+/- 15 Feet</td></tr><tr><td>20</td><td>+/- 20 Feet</td></tr><tr><td>100</td><td>+/- 100 Feet</td></tr></table> ¹ Federal Geographic Data Committee. 1998. <u>Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy</u>, FGDC-STD-007.3-1998	Accuracy Measurement Example Table		1	+/- 1 Feet	10	+/- 10 Feet	15	+/- 15 Feet	20	+/- 20 Feet	100	+/- 100 Feet
Accuracy Measurement Example Table														
1	+/- 1 Feet													
10	+/- 10 Feet													
15	+/- 15 Feet													
20	+/- 20 Feet													
100	+/- 100 Feet													

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 Design Considerations: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL<u>AK</u>030900). Attribute Domain Assignment: <i>DOM_ADMIN_ST</i>
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

C. Visual Resource Inventory Scenic Quality Rating Unit Polygons (*vri_sqru_poly*)

The polygon features for the Visual Resource Inventory Scenic Quality Rating Units are defined below. There will be one polygon per scenic quality rating unit; however, this may be a multi-part feature. Additional attribute information is contained in related tables. Domains are used when appropriate. Several of the attributes in this feature class correspond to the information required on Form 8400-1 Scenic Quality Field Inventory, from the Manual H-8410-1 Visual Resource Inventory.

Visual Resource Inventory Scenic Quality Rating Unit Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
SQRU_ID	SQRU Unique ID	Char(13)	YES			YES
ADMIN_ST	Administrative State Code	Char(2)	YES		<i>DOM_ADMIN_ST</i>	NO
ADM_OFC_CD	Administrative Office Code	Char(6)	YES			NO
ADM_UNIT_CD	Administrative Unit Code	Char(8)	YES		<i>DOM_ADM_UNIT_CD</i>	NO
SQRU_NR	Scenic Quality Rating Unit Number	Char(3)	YES			NO
SQRU_NAME	SQRU Name	Char(50)	NO			NO
ADMIN_FO_NM	Administrative Field Office Name	Char(40)	YES			NO
SQRU_EVAL	Scenic Quality Evaluators	Char(120)	YES			NO
SQRU_ORIG_DT	SQRU Original Analysis Date	Date	YES	09/09/9999		NO
SQRU_MOD_DT	SQRU Last Modification Date	Date	NO			NO
SQ_TOT_SCR	Total Score for Scenic Quality	Double	YES	0.0	<i>VRI_DOM_SQ_TOT_SCR</i>	YES
SQ_CODE	Scenic Quality Rating Code	Char(1)	YES		<i>VRI_DOM_SQ_CODE</i>	YES
SQ_CODE_TX	Explanation of Rating Code	Char (255)	YES			NO
SQRU_NRTV1	Narrative for SQRU	Char (255)	YES			NO
SQRU_NRTV2	Narrative2 for SQRU	Char (255)	NO			NO
SQ_ANLZ_MTHD	Description of Analysis	Char (255)	YES			NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
SQRU_ID	Visual Resource Inventory Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity. Design Considerations: A 13 digit unique identifier which is the concatenation of: ▪ VRI Unit Type Name (prefix “SQ”) ▪ Administrative State Code (2 characters) ▪ The Administrative Office Code (6 characters) ▪ Rating Unit Number (3 digit sequential number) The value for this field can be obtained using the Field Calculator in ArcMap. [SQRU_ID] = “SQ” + [ADMIN_ST] + [ADM_OFC_CD] + [SQRU_NR]
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 Design Considerations: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL<u>AK</u>030900). Attribute Domain Assignment: <i>DOM_ADMIN_ST</i>
ADM_OFC_CD	Office.BLM Organization Code	Logical Definition: BLM Administrative office (which is subordinate to the state office) that has jurisdiction and/or management authority over lands within a geographic area. Design Considerations: This is a six digit code. In the FPPS Organization Codes, use the 6 characters after the State designators (e.g. LLAK<u>030900</u>).

GIS Name	Logical Name	Definition/Design Considerations
ADM_UNIT_CD	Administrative Office + Office.BLM Organization Code	Logical Definition: The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. Design Considerations: This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL<u>AK030900</u>). Attribute Domain Assignment: <i>DOM_ADM_UNIT_CD</i>
SQRU_NR	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: A 3 digit sequential number starting at 001 for a specific scenic quality rating unit that falls within the jurisdictional area of the office coded in ADM_UNIT_CD. This number may be derived from the Object ID that is automatically generated by the GIS software, or assigned by the district office (among other methods). This number should be unique within all datasets for the particular office as coded in ADM_UNIT_CD.
SQRU_NAME	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: The name by which the scenic quality rating unit may be commonly known or identified. This is an optional attribute. Examples could include values such as: Crystal River Ranch, Knowles Canyon , Roaring Fork Lower Valley, Dinosaur Ridge.
ADMIN_FO_NM	Organization Name	Logical Definition: The official name by which the organization is known. An organization may include businesses, agencies, or corporations, but not individual persons. Design Considerations: Optional attribute. Name of the BLM field office.
SQRU_EVAL	Entity: VISUAL RESOURCE INVENTORY LOCATION EVALUATOR	Logical Definition: The person or persons who evaluate the visual resource inventory. Design Considerations: Comma-delimited text field listing the evaluators who conduct the inventory, beginning with the principle point of contact. Names should be formatted using first initial followed by full last name with no spaces or punctuation (i.e. TBrown, JMcman).

GIS Name	Logical Name	Definition/Design Considerations
SQRU_ORIG_DT	Visual Resource Inventory Location Date	Logical Definition: The date on which a visual resource inventory location is assigned a value based on the type of inventory location it is. Design Considerations: Date on which the scenic quality rating unit was originally inventoried, assigned scores and given a rating. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
SQRU_MOD_DT	Visual Resource Inventory Location Date	Logical Definition: The date on which a visual resource inventory location is assigned a value based on the type of inventory location it is. Design Considerations: The date on which information about the inventory location was changed. The date will be in the format of MM/DD/YYYY. This is an optional attribute.
SQ_TOT_SCR	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Scenic Quality Total Score. The sum of the Scenic Quality Scores for all seven scenic quality factors. The individual factors may be assigned a score ranging from -4.0 to 5.0 in 0.5 increments. Attribute Domain Assignment: VRI_DOM_SQ_TOT_SCR Default: 0.0
SQ_CODE	Scenic Quality Rating Code	Logical Definition: The code for the scenic quality rating for the Visual Resource Inventory. Design Considerations: Scenic quality code assigned to a scenic quality rating unit based on the total score for all seven factors of scenic quality. Attribute Domain Assignment: DOM_SQ_CODE
SQ_CODE_TX	Scenic Quality Rating Explanation Text	Logical Definition: The text that explains the rating and score that is given to a scenic quality rating unit. Design Considerations: Text that explains, summarizes, or justifies the final Scenic Quality Rating Code (SQ_CODE) that was assigned to a specific scenic quality rating unit.
SQRU_NRTV1	Scenic Quality Location Narrative Text	Logical Definition: The text that describes the general character of the landscape as it relates to the immediate surroundings and to similar landscape features within the physiographic province. Design Considerations: Narrative text describing the scenic quality rating unit. Include information that is pertinent as to why the unit was defined as it was (i.e. why is this unit a unit?).

GIS Name	Logical Name	Definition/Design Considerations
SQRU_ NRTV2	Scenic Quality Location Narrative Text	Logical Definition: The text that describes the general character of the landscape as it relates to the immediate surroundings and to similar landscape features within the physiographic province. Design Considerations: Narrative text describing the scenic quality rating unit. Use this attribute for overflow text.
SQ_ ANLZ_ MTHD	Visual Resource Inventory Location Process Text	Logical Definition: The text that describes the processes or methodology used to conduct the analysis from one or more observation points Design Considerations: Description of the process and/or methodology used to conduct the analysis of a scenic quality rating unit from one or more inventory observation points. Examples could include: populated rating score sheet for each observation point and then used an average score for the scenic quality rating unit; determined the scores for scenic quality factors and populated the scenic feature attribute descriptions for the scenic quality rating unit after visiting each observation point, taking photos and noting any distinctive landscape characteristics; visited all observation points and used Point #304 for the score as it accurately represented the entire rating unit.
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

D. Visual Resource Inventory Observation Point – Observed Scenic Quality Rating Unit Table (vri_iop_sqr_u_tbl)

The one-to-many table for recording Scenic Quality Rating Unit information from an observation point is defined below. Each scenic quality rating unit polygon must have one or more associated inventory observation points. The associated observation points may fall either within or outside of the scenic quality rating unit. Each inventory observation point must have one or more rating units for scenic quality. The vri_iop_sqr_u_rel relationship class relates this table to the vri_iop_pt feature class. (The vri_sqr_u_iop_rel relationship class relates this table to the vri_sqr_u_poly feature class.) The user will have to populate the appropriate SQRU Unique IDs during the inventory process.

There will be one record for each unique observation point and rating unit polygon association. These records serve to document the observations that were taken during the process of analyzing the scenic quality rating unit.

Visual Resource Inventory Observation Points - Scenic Quality Rating Unit Factors Table Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
IOP_ID	IOP Unique ID	Char(15)	YES			YES
SQRU_ID	SQRU Unique ID	Char(13)	YES			YES
OBSRVR_FT	Observer Height in Feet Above Ground	Short Integer	YES	5		NO
DT_ANLZ	Date SQRU Analyzed	Date	YES			NO
TM24_ANLZ	24-hr Time SQRU Analyzed	Char(4)	YES	1300		NO
EVALUATORS	Evaluators	Char(120)	YES			NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
IOP_ID	Visual Resource Inventory Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity. Design Considerations: An 15 alpha-numeric digit unique identifier, concatenation of: - the abbreviation “IOP” - ADMIN_ST, The Administrative State Code (2 characters) - ADM_OFC_CD, The Administrative Office Code (6 characters) - IOP_NR, a 4 digit sequential number The value for this field will be derived from the vri_iop_pt feature participating in the relationship.
SQRU_ID	Visual Resource Inventory Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity. Design Considerations: A 13 digit unique identifier which is the concatenation of: - VRI Unit Type Name (prefix “SQ”) - ADMIN_ST, the Administrative State Code (2 characters) - ADM_OFC_CD, the Administrative Office Code (6 characters) - SQRU_NR, the Rating Unit Number (3 digit sequential number) The value for this field should match that of the SQRU polygon being evaluated from the observation point.
OBSRVR_FT	Scenic Quality Observation Point Relative Elevation Measure	Logical Definition: The measure of the average distance between the surface and the position from which the viewing takes place. Design Considerations: Height of observer, in feet, above the ground.
DT_ANLZ	Visual Inventory Location Date	Logical Definition: The date on which a visual resource inventory location is assigned a value based on the type of inventory location it is. Design Considerations: Date on which the analysis of a scenic quality rating unit was conducted from an inventory observation point.

GIS Name	Logical Name	Definition/Design Considerations
TM24_ANLZ	Scenic Quality Observation Point Time	Logical Definition: The time at which an individual does an observation standing at a point or moving along a line for scenic quality. Design Considerations: Time (hhmm) on the 24-hr clock that the analysis of a scenic quality rating unit was conducted from an inventory observation point. Default: 1300
EVALUATORS	Entity: VISUAL RESOURCE INVENTORY LOCATION EVALUATOR	Logical Definition: The person or persons who evaluate the visual resource inventory. Design Considerations: Comma-delimited text field listing the evaluators who conduct the inventory, beginning with the principle point of contact. Names should be formatted using first initial followed by full last name with no spaces or punctuation (i.e. TBrown, JMcman).
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

E. Visual Resource Inventory Scenic Quality Rating Unit Factor Scores Table (vri_sqr_u_factors_tbl)

This one-to-one table is related to the vri_sqr_u_poly feature class through the “SQRU_ID” attribute as defined in the sqr_u_factors_rel composite relationship class. A Scenic Quality polygon must have all seven factors associated with it, and must have a score for each factor. The scores recorded in this table shall be representative of the entire rating unit, and should be based upon the observations taken of the rating unit. This table corresponds to Manual H-8410-1 Visual Resource Inventory, Form 8400-1 Scenic Quality Field Inventory, Item #4 Score.

Visual Resource Inventory Scenic Quality Rating Unit Factor Scores Table Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
SQRU_ID	SQRU Unique ID	Char(13)	YES			YES
SQ_LFORM_SCR	SQ Landform Score	Double	YES	1.0	VRI_DOM_SQ_LFORM_SCR	NO
SQ_VEG_SCR	SQ Vegetation Score	Double	YES	1.0	VRI_DOM_SQ_VEG_SCR	NO
SQ_WATER_SCR	SQ Water Score	Double	YES	0.0	VRI_DOM_SQ_WATER_SCR	NO
SQ_COLOR_SCR	SQ Color Score	Double	YES	1.0	VRI_DOM_SQ_COLOR_SCR	NO
SQ_ADJNT_SCR	SQ Adjacent Scenery Score	Double	YES	0.0	VRI_DOM_SQ_ADJNT_SCR	NO
SQ_SCARC_SCR	SQ Scarcity Score	Double	YES	1.0	VRI_DOM_SQ_SCARC_SCR	NO
SQ_CULT_SCR	SQ Cultural Mod Score	Double	YES	0.0	VRI_DOM_SQ_CULT_SCR	NO
SQ_LFORM_TX	SQ Landform Explanation	Char (255)	NO			NO
SQ_VEG_TX	SQ Vegetation Explanation	Char (255)	NO			NO
SQ_WATER_TX	SQ Water Explanation	Char (255)	NO			NO
SQ_COLOR_TX	SQ Color Explanation	Char (255)	NO			NO
SQ_ADJNT_TX	SQ Adjacent Scenery Explanation	Char (255)	NO			NO
SQ_SCARC_TX	SQ Scarcity Explanation	Char (255)	NO			NO
SQ_CULT_TX	SQ Cultural Mod Explanation	Char (255)	NO			NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
SQRU_ID	Visual Resource Inventory Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity. Design Considerations: A 13 digit unique identifier which is the concatenation of: ▪ VRI Unit Type Name (prefix “SQ”) ▪ ADMIN_ST, the Administrative State Code (2 characters) ▪ ADM_OFC_CD, the Administrative Office Code (6 characters) ▪ SQRU_NR, the Rating Unit Number (3 digit sequential number) The value for this field will be derived from the vri_sqr_poly feature participating in the relationship between the feature class and this table.
SQ_LFORM_SCR	Scenic Quality Unit Factor Score Number	Logical Definition: The number which is the score that is given to a scenic quality factor for the scenic quality unit. Scores can be assigned at 0.5 increments. Design Considerations: The score for the Landform scenic quality factor. High of 5, low of 1, in 0.5 increments. Attribute Domain Assignment: VRI_DOM_SQ_LFORM_SCR Default: 1.0
SQ_VEG_SCR	Scenic Quality Unit Factor Score Number	Logical Definition: The number which is the score that is given to a scenic quality factor for the scenic quality unit. Scores can be assigned at 0.5 increments. Design Considerations: The score for the Vegetation scenic quality factor. High of 5, low of 1, in 0.5 increments. Attribute Domain Assignment: VRI_DOM_SQ_VEG_SCR Default: 1.0
SQ_WATER_SCR	Scenic Quality Unit Factor Score Number	Logical Definition: The number which is the score that is given to a scenic quality factor for the scenic quality unit. Scores can be assigned at 0.5 increments. Design Considerations: The score for the Water scenic quality factor. High of 5, low of 0, in 0.5 increments. Attribute Domain Assignment: VRI_DOM_SQ_WATER_SCR Default: 0.0

GIS Name	Logical Name	Definition/Design Considerations
SQ_COLOR_SCR	Scenic Quality Unit Factor Score Number	Logical Definition: The number which is the score that is given to a scenic quality factor for the scenic quality unit. Scores can be assigned at 0.5 increments. Design Considerations: The score for the Color scenic quality factor. High of 5, low of 1, in 0.5 increments. Attribute Domain Assignment: VRI_DOM_SQ_COLOR_SCR Default: 1.0
SQ_ADJNT_SCR	Scenic Quality Unit Factor Score Number	Logical Definition: The number which is the score that is given to a scenic quality factor for the scenic quality unit. Scores can be assigned at 0.5 increments. Design Considerations: The score for the Adjacent Scenery scenic quality factor. High of 5, low of 0, in 0.5 increments. Attribute Domain Assignment: VRI_DOM_SQ_ADJNT_SCR Default: 0.0
SQ_SCARC_SCR	Scenic Quality Unit Factor Score Number	Logical Definition: The number which is the score that is given to a scenic quality factor for the scenic quality unit. Scores can be assigned at 0.5 increments. Design Considerations: The score for the Scarcity scenic quality factor. High of 5, low of 1, in 0.5 increments. Attribute Domain Assignment: VRI_DOM_SQ_SCARC_SCR Default: 1.0
SQ_CULT_SCR	Scenic Quality Unit Factor Score Number	Logical Definition: The number which is the score that is given to a scenic quality factor for the scenic quality unit. Scores can be assigned at 0.5 increments. Design Considerations: The score for the Cultural Modifications scenic quality factor. High of 2, low of -4, in 0.5 increments. Attribute Domain Assignment: VRI_DOM_SQ_CULT_SCR Default: 0.0
SQ_LFORM_TX	Scenic Quality Unit Factor Score Explanation Text	Logical Definition: The text that explains the score that is given to a scenic quality factor for the scenic quality unit. Design Considerations: Optional text explaining the score for the Landform factor.
SQ_VEG_TX	Scenic Quality Unit Factor Score Explanation Text	Logical Definition: The text that explains the score that is given to a scenic quality factor for the scenic quality unit. Design Considerations: Optional text explaining the score for the Vegetation factor.

GIS Name	Logical Name	Definition/Design Considerations
SQ_WATER_TX	Scenic Quality Unit Factor Score Explanation Text	Logical Definition: The text that explains the score that is given to a scenic quality factor for the scenic quality unit. Design Considerations: Optional text explaining the score for the Water factor.
SQ_COLOR_TX	Scenic Quality Unit Factor Score Explanation Text	Logical Definition: The text that explains the score that is given to a scenic quality factor for the scenic quality unit. Design Considerations: Optional text explaining the score for the Color factor.
SQ_ADJNT_TX	Scenic Quality Unit Factor Score Explanation Text	Logical Definition: The text that explains the score that is given to a scenic quality factor for the scenic quality unit. Design Considerations: Optional text explaining the score for the Adjacent Scenery factor.
SQ_SCARC_TX	Scenic Quality Unit Factor Score Explanation Text	Logical Definition: The text that explains the score that is given to a scenic quality factor for the scenic quality unit. Design Considerations: Optional text explaining the score for the Scarcity factor.
SQ_CULT_TX	Scenic Quality Unit Factor Score Explanation Text	Logical Definition: The text that explains the score that is given to a scenic quality factor for the scenic quality unit. Design Considerations: Optional text explaining the score for the Cultural Modifications factor.
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

F. Visual Resource Inventory Scenic Quality Rating Unit Landscape Character Table (vri_sqru_landscape_tbl)

This one-to-one table is related to the vri_sqru_poly feature class through the “SQRU_ID” attribute as defined in the sqru_landscape_rel relationship class. A polygon must have a description for each landscape element feature(s) and characteristic attribute. “Not present” is an allowable value for those areas where a specific landscape element is missing. The information recorded in this table shall be representative of the entire rating unit, and should be based upon the observations taken of the rating unit. This table corresponds to Manual H-8410-1 Visual Resource Inventory, Form 8400-1 Scenic Quality Field Inventory, Item #2 Landscape Character.

Visual Resource Inventory Scenic Quality Rating Unit Factor Scores Table Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED ?
SQRU_ID	SQRU Unique ID	Char(13)	YES			YES
LFORM_FORM	Form Features of Landform/Water	Char (255)	YES			NO
LFORM_LINE	Line Features of Landform/Water	Char (255)	YES			NO
LFORM_COLOR	Color Features of Landform/Water	Char (255)	YES			NO
LFORM_TEXTURE	Textural Features of Landform/Water	Char (255)	YES			NO
VEG_FORM	Form Features of Vegetation	Char (255)	YES			NO
VEG_LINE	Line Features of Vegetation	Char (255)	YES			NO
VEG_COLOR	Color Features of Vegetation	Char (255)	YES			NO
VEG_TEXTURE	Textural Features of Vegetation	Char (255)	YES			NO
STRUCT_FORM	Form Features of Structures	Char (255)	YES			NO
STRUCT_LINE	Line Features of Structures	Char (255)	YES			NO
STRUCT_COLOR	Color Features of Structures	Char (255)	YES			NO
STRUCT_TEXTURE	Textural Features of Structures	Char (255)	YES			NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
SQRU_ID	Visual Resource Inventory Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity. Design Considerations: A 13 digit unique identifier which is the concatenation of: ▪ VRI Unit Type Name (prefix “SQ”) ▪ ADMIN_ST, the Administrative State Code (2 characters) ▪ ADM_OFC_CD, the Administrative Office Code (6 characters) ▪ SQRU_NR, the Rating Unit Number (3 digit sequential number) The value for this field will be derived from the vri_sqr_poly feature participating in the relationship between the feature class and this table.
LFORM_FORM	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic FORM of the landform and water elements present in the scenic quality rating unit.
LFORM_LINE	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic LINE of the landform and water elements present in the scenic quality rating unit.
LFORM_COLOR	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic COLOR of the landform and water elements present in the scenic quality rating unit.
LFORM_TEXTURE	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic TEXTURE of the landform and water elements present in the scenic quality rating unit.

GIS Name	Logical Name	Definition/Design Considerations
VEG_FORM	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic FORM of the vegetation elements present in the scenic quality rating unit.
VEG_LINE	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic LINE of the vegetation elements present in the scenic quality rating unit.
VEG_COLOR	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic COLOR of the vegetation elements present in the scenic quality rating unit.
VEG_TEXTURE	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic TEXTURE of the vegetation elements present in the scenic quality rating unit.
STRUCT_FORM	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic FORM of the man-made structural elements present in the scenic quality rating unit.
STRUCT_LINE	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic LINE of the man-made structural elements present in the scenic quality rating unit.

GIS Name	Logical Name	Definition/Design Considerations
STRUCT_COLOR	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic COLOR of the man-made structural elements present in the scenic quality rating unit.
STRUCT_TEXTURE	Scenic Quality Character Feature Landscape Text	Logical Definition: The text that describes additional comments about the scenic quality character associated with the feature. Design Considerations: Description of the characteristic TEXTURE of the man-made structural elements present in the scenic quality rating unit.
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

SENSITIVITY LEVEL RATING UNITS AND DISTANCE ZONES

G. Visual Resource Inventory Sensitivity Level Rating Unit Polygon Arcs (vri_slru_arc)

The arc features used to define the polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries, and document the origin and characteristics of each arc.

Visual Resource Inventory Sensitivity Level Rating Unit Polygon Arcs Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
CREATE_DATE	Created Date	Date	YES	09/09/9999		NO
CREATE_BY	Created By Name	Char(30)	YES	UNK		NO
MODIFY_DATE	Modified Date	Date	YES	09/09/9999		NO
MODIFY_BY	Modified By Name	Char(30)	YES	UNK		NO
COORD_SRC_TYPE	Coordinate Source Type Code	Char(5)	YES	UNK	DOM_COORD_SOURCE_TYPE	NO
COORD_SRC2	Coordinate Source Code	Char(25)	NO			NO
DEF_FET_TYPE	Defining Feature Type Code	Char(15)	YES	UNK	DOM_DEF_FEATURE_TYPE	NO
DEF_FET2	Defining Feature Code	Char(30)	NO			NO
ACCURACY_FT	Accuracy Measurement In Feet	Long Integer	YES	-1		NO
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
CREATE_DATE	Location Effective Date	Logical Definition: The date which is the calendar year, month, and day when the position of the Location was produced. Design Considerations: As a new feature is added to the system its creation date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999

GIS Name	Logical Name	Definition/Design Considerations
CREATE_BY	Not applicable	Logical Definition: Not on the logical model. Design Considerations: The UserID (BLM login ID) of the person who created or imported the data into the BLM GIS system. This attribute will be deleted before providing the data to the public. Default: UNK
MODIFY_DATE	Location Modified Date	Logical Definition: The date which is the calendar year, month, and day when the position of the Location was last modified. Design Considerations: As a feature is edited or modified while in the system its modification date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
MODIFY_BY	Not applicable	Logical Definition: Not on the logical model. Design Considerations: The UserID (BLM login ID) of the person who edited or modified data in the BLM GIS system will be collected and maintained. This attribute will be deleted before providing the data to the public. Default: UNK
COORD_SRC_TYPE	Location Source Type Name	Logical Definition The name that identifies the general category for the origin of the location coordinate, representing a compilation of the state adopted source codes. The domain contains those values that would most likely be used in the determination of source codes for the data set. Design Considerations: Attribute Domain Assignment: <i>DOM_COORD_SOURCE_TYPE</i> Default: UNK
COORD_SRC2	Location Source Description Specific Name	Logical Definition: The name that identifies a more specific description of the location (coordinate source). Design Considerations: <u>Suggested</u> values for codes appear in the domains appendix. The user may leave this value “null”, choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This list is not intended to be a substitute for the accuracy values that are found in the ‘Accuracy Measurement Table’. <u>This is an optional attribute.</u>

GIS Name	Logical Name	Definition/Design Considerations												
DEF_FET_TYPE	Defining Feature Type Name	Logical Definition: The name that identifies the high-level category for the actual physical or mapping characteristics (features) from which the arcs are derived. Design Considerations: Attribute Domain Assignment: <i>DOM_DEF_FEATURE_TYPE</i> Default: UNK												
DEF_FET2	Defining Feature Description Name	Logical Definition: The name that identifies a more specific description of the feature from which the arcs are derived to create polygon boundaries. This information further describes the physical or mapping feature that makes up the polygon boundary. Design Considerations: <u>Suggested</u> code values appear in the domains appendix. The user may leave this value “null”, choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. <u>This is an optional attribute.</u>												
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition: The measure that describes how close, in Line Form Unit Of Measure Type Name the actual location is to the spatial depiction. Design Considerations: The Accuracy Measurement defines how close, in feet, the actual ground location is to the spatial depiction in GIS. This value would typically be determined by one of three methods: 1) the map accuracy value, if a USGS map was used to define the boundary; 2) the expected spatial accuracy achieved with GPS; or 3) the measurement of that accuracy as is noted in the <i>National Standard for Spatial Data Accuracy (NSSDA)</i> ¹ which is a data usability standard issued by the Federal Geographic Data Committee (FGDC). Default: -1 A value of -1 indicates that the accuracy is unknown or that no reliable estimate can be made. Below is an example table of accuracy measurements. (A list of all values is not representable in a domain table.) <table><tr><th colspan="2">Accuracy Measurement Example Table</th></tr><tr><td>1</td><td>+/- 1 Feet</td></tr><tr><td>10</td><td>+/- 10 Feet</td></tr><tr><td>15</td><td>+/- 15 Feet</td></tr><tr><td>20</td><td>+/- 20 Feet</td></tr><tr><td>100</td><td>+/- 100 Feet</td></tr></table>	Accuracy Measurement Example Table		1	+/- 1 Feet	10	+/- 10 Feet	15	+/- 15 Feet	20	+/- 20 Feet	100	+/- 100 Feet
Accuracy Measurement Example Table														
1	+/- 1 Feet													
10	+/- 10 Feet													
15	+/- 15 Feet													
20	+/- 20 Feet													
100	+/- 100 Feet													

¹ Federal Geographic Data Committee. 1998. Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 Design Considerations: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL<u>AK</u>030900). Attribute Domain Assignment: <i>DOM_ADMIN_ST</i>
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

H. Visual Resource Inventory Sensitivity Level Rating Unit Polygons (*vri_slru_poly*)

The polygon features for the Visual Resource Inventory Sensitivity Level Rating Units are defined below. Generally, there will be one polygon per sensitivity level rating unit; however, this polygon may be a multi-part feature.

The final polygons for sensitivity may be derived from multiple input datasets and/or intermediate data products. These input and intermediate data products should be maintained as they are part of the inventory record. For example, there may be one dataset for road corridor related sensitivity, another for recreational site related sensitivity, and yet another for special areas or significant viewsheds. These different input datasets may have coincident polygons that occupy the same space, while having different respective sensitivities (e.g. moderate sensitivity associated with the recreational site lies within the high sensitivity viewshed corridor of the roadway, which overlaps with an adjacent viewshed). These polygons may be combined through a GIS operation (such as union) in order to show the overriding sensitivity level while still maintaining the shape of all original polygons.

Note: The boundaries and/or ratings of the final sensitivity level polygons may need to be refined over time as the result of the following: better information or new data, changes in land use or special area designation, or population growth and cultural influences. The inputs and intermediate data products will aid in maintaining and documenting the lineage of this feature class.

Additional attribute information is contained in related tables. Domains are used when appropriate. Several of the attributes in this feature class correspond to the information required on Form 8400-6 Sensitivity Level Rating Sheet, from the Manual H-8410-1 Visual Resource Inventory.

Visual Resource Inventory Sensitivity Level Rating Unit Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
SLRU_ID	SLRU Unique ID	Char(13)	YES			YES
ADMIN_ST	Administrative State Code	Char(2)	YES		<i>DOM_ADMIN_ST</i>	NO
ADM_OFC_CD	Administrative Office Code	Char(6)	YES			NO
ADM_UNIT_CD	Administrative Unit Code	Char (8)	YES		<i>DOM_ADM_UNIT_CD</i>	NO
SLRU_NR	Sensitivity Level Rating Unit Number	Char(3)	YES			NO
ADMIN_FO_NM	Administrative Field Office Name	Char(40)	YES			NO
SLRU_EVAL	Sensitivity Level Evaluators	Char(120)	YES			NO
SLRU_ORIG_DT	SLRU Original Analysis Date	Date	YES	09/09/9999		NO
SLRU_MOD_DT	SLRU Last Modification Date	Date	NO			NO

Visual Resource Inventory Sensitivity Level Rating Unit Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
SL_OVRL_RT	Overall Rating	Char(8)	YES		VRI_DOM_SL_RATING	YES
SL_OVRL_TX	Explanation of Overall Rating	Char(255)	YES			NO
SLRU_NRTV	Narrative for SLRU	Char (255)	NO			NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
SLRU_ID	Visual Resource Inventory Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity. Design Considerations: A 13 digit unique identifier which is the concatenation of: ▪ VRI Unit Type Name (prefix “SL”) ▪ Administrative State Code (2 characters) ▪ The Administrative Office Code (6 characters) ▪ Rating Unit Number (3 digit sequential number) The value for this field can be obtained using the Field Calculator in ArcMap. [SLRU_ID] = “SL” + [ADMIN_ST] + [ADM_OFC_CD] + [SLRU_NR]

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 Design Considerations: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL<u>AK</u>030900). Attribute Domain Assignment: <i>DOM_ADMIN_ST</i>
ADM_OFC_CD	Office.BLM Organization Code	Logical Definition: BLM Administrative office (which is subordinate to the state office) that has jurisdiction and/or management authority over lands within a geographic area. Design Considerations: This is a six digit code. In the FPPS Organization Codes, use the 6 characters after the State designators (e.g. LLAK<u>030900</u>).
ADM_UNIT_CD	Administrative Office + Office.BLM Organization Code	Logical Definition: The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. Design Considerations: This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL<u>AK030900</u>). Attribute Domain Assignment: <i>DOM_ADM_UNIT_CD</i>

GIS Name	Logical Name	Definition/Design Considerations
SLRU_NR	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: A 3 digit sequential number starting at 001 for a specific sensitivity level rating unit that falls within the jurisdictional area of the office coded in ADM_UNIT_CD. This number may be derived from the Object ID that is automatically generated by the GIS software, or assigned by the district office (among other methods). This number should be unique within all datasets for the particular office as coded in ADM_UNIT_CD.
ADMIN_FO_NM	Organization Name	Logical Definition: The official name by which the organization is known. An organization may include businesses, agencies, or corporations, but not individual persons. Design Considerations: Name of the BLM field office.
SLRU_EVAL	Entity: VISUAL RESOURCE INVENTORY LOCATION EVALUATOR	Logical Definition: The person or persons who evaluate the visual resource inventory. Design Considerations: Comma-delimited text field listing the evaluators who conduct the inventory, beginning with the principle point of contact. Names should be formatted using first initial followed by full last name with no spaces or punctuation (i.e. TBrown, JMcmann).
SLRU_ORIG_DT	Visual Resource Inventory Location Date	Logical Definition: The date on which a visual resource inventory location is assigned a value based on the type of inventory location it is. Design Considerations: Date on which the sensitivity level rating unit was originally inventoried and given a rating. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
SLRU_MOD_DT	Visual Resource Inventory Location Date	Logical Definition: The date on which a visual resource inventory location is assigned a value based on the type of inventory location it is. Design Considerations: Date on which the last modification was made to the inventory or rating of the sensitivity level rating unit. The date will be in the format of MM/DD/YYYY. This is an optional attribute.

GIS Name	Logical Name	Definition/Design Considerations
SL_OVRL_RT	Visual Sensitivity Level Name	Logical Definition: The name associated with the level of concern the public has for scenic quality. Design Considerations: Sensitivity Level Overall Rating derived from all five sensitivity level factors. The name associated with the overall level of concern for maintaining scenic quality. Attribute Domain Assignment: VRI_DOM_SL_RATING.
SL_OVRL_TX	Visual Sensitivity Level Explanation Text	Logical Definition: The text that explains the level that is given to a Visual Sensitivity Unit. Design Considerations: Text explaining the sensitivity level overall rating for a given sensitivity level rating unit.
SLRU_NRTV	Visual Sensitivity Location Narrative Text	Logical Definition: The text that describes the general character of the landscape as it relates to sensitivity. Design Considerations: Narrative text or comments describing a given sensitivity level rating unit. Examples could include: Route 66 viewshed to 5 miles, SLRU represents the area where dispersed camping and hunting is popular, travel corridor to reach National Monument, SLRU is intersection of several viewsheds and travel corridor, etc.
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

I. Visual Resource Inventory Sensitivity Level Ratings Table (vri_slru_ratings_tbl)

The vri_slru_ratings_tbl table is related to the vri_slru_poly feature class through the “SLRU_ID” attribute as defined in the slru_ratings_rel composite relationship class. A Sensitivity Level polygon must have ratings associated with it expressing the level of concern for maintaining scenic quality according to users, the amount of use, the public interest, the use of adjacent areas, special areas and other factors. The information recorded in this table shall be representative of the entire rating unit. This table corresponds to the information required on Form 8400-6 Sensitivity Level Rating Sheet, from the Manual H-8410-1 Visual Resource Inventory.

Visual Resource Inventory Sensitivity Level Ratings Table Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
SLRU_ID	SLRU Unique ID	Char(13)	YES			YES
SL_USERS_RT	Users Sensitivity Level Rating	Char(8)	YES		VRI_DOM_SL_RATING	NO
SL_USERS_TX	Explanation of Users Rating	Char(255)	YES			NO
SL_AREAUSE_RT	Area Amount of Use Rating	Char(8)	YES		VRI_DOM_SL_RATING	NO
SL_AREAUSE_TX	Explanation of Area Use Rating	Char(255)	YES			NO
SL_PUBLIC_RT	Public Interest Rating	Char(8)	YES		VRI_DOM_SL_RATING	NO
SL_PUBLIC_TX	Explanation of Public Rating	Char(255)	YES			NO
SL_ADJNT_RT	Adjacent Use Rating	Char(8)	YES		VRI_DOM_SL_RATING	NO
SL_ADJNT_TX	Explanation of Adjacent Use Rating	Char(255)	YES			NO
SL_SPCL_RT	Special Area Rating	Char(8)	YES		VRI_DOM_SLNA_RATING	NO
SL_SPCL_TX	Explanation of Special Area Rating	Char(255)	YES			NO
SL_OTHR_RT	Other Sensitivity Factor Rating	Char(8)	NO		VRI_DOM_SLNA_RATING	NO
SL_OTHR_TX	Explanation of Other Factors	Char(255)	NO			NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
SLRU_ID	Visual Resource Inventory Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity. Design Considerations: A 13 digit unique identifier which is the concatenation of: ▪ VRI Unit Type Name (prefix “SL”) ▪ Administrative State Code (2 characters) ▪ The Administrative Office Code (6 characters) ▪ Rating Unit Number (3 digit sequential number) The value for this field will be derived from the vri_slru_poly feature that is participating in the relationship between the feature class and this table.
SL_USERS_RT	Visual Sensitivity Level Name	Logical Definition: The name associated with the level of concern the public has for the visual quality of an area. Design Considerations: The rating assigned for the visual sensitivity associated with the USERS of the area. The level of concern that most of the users have for maintaining visual quality. Attribute Domain Assignment: VRI_DOM_SL_RATING
SL_USERS_TX	Visual Sensitivity Unit Factor Level Justification Text	Logical Definition: The text that provides the rationale for why a sensitivity level was assigned to a specific factor. Design Considerations: Explanation and/or justification for the sensitivity level rating assigned for the USERS. Include information on the types of users; whether the users are local, regional or national; and how these affect the sensitivity of the area. Types of users could include, but are not limited to: recreational (hikers, mountain bikers, OHV, hunting, fishing), commercial (timber, mining, energy, movie production), tourism related (motorists, boaters, cultural/historical/natural site visitors).

GIS Name	Logical Name	Definition/Design Considerations
SL_ AREAUSE_RT	Visual Sensitivity Level Name	Logical Definition: The name associated with the level of concern the public has for the visual quality of an area. Design Considerations: The rating assigned for the visual sensitivity associated with the AMOUNT OF USE sensitivity factor. The maintenance of visual quality generally becomes more important as the level of use increases. Consider the amount of use relative to the types of users and the type of area. An area with mineral extraction may have a higher sensitivity rating because of high levels of local and regional use; whereas an area with little commercial activity may be less sensitive because of lower overall levels of use. Attribute Domain Assignment: VRI_DOM_SL_RATING
SL_AREAUSE_ TX	Visual Sensitivity Unit Factor Level Justification Text	Logical Definition: The text that explains the level that is given to a Visual Sensitivity Unit. Design Considerations: Explanation and/or justification for the sensitivity level rating assigned for the AMOUNT OF USE. Information that could be included here include the type of area; the amount of use; the level of development, and whether the development is dispersed or not; and the incidence and intensity of both commercial activities and recreational activities.
SL_PUBLIC_RT	Visual Sensitivity Level Name	Logical Definition: The name associated with the level of concern the public has for the visual quality of an area. Design Considerations: The rating assigned for the visual sensitivity associated with the PUBLIC INTEREST sensitivity factor. How much of a public issue is the maintenance of visual quality. Attribute Domain Assignment: VRI_DOM_SL_RATING
SL_PUBLIC_ TX	Visual Sensitivity Unit Factor Level Justification Text	Logical Definition: The text that explains the level that is given to a Visual Sensitivity Unit. Design Considerations: Explanation and/or justification for the sensitivity level rating assigned to the PUBLIC INTEREST sensitivity factor.

GIS Name	Logical Name	Definition/Design Considerations
SL_ADJNT_RT	Visual Sensitivity Level Name	Logical Definition: The name associated with the level of concern the public has for the visual quality of an area. Design Considerations: The rating assigned for the visual sensitivity associated with the ADJACENT USE sensitivity factor, in order to sustain adjacent land use objectives. Attribute Domain Assignment: VRI_DOM_SL_RATING.
SL_ADJNT_TX	Visual Sensitivity Unit Factor Level Justification Text	Logical Definition: The text that explains the level that is given to a Visual Sensitivity Unit. Design Considerations: Explanation and/or justification for the sensitivity level rating assigned to the ADJACENT USE sensitivity factor. Include information on what the adjacent land use objectives are, if possible.
SL_SPCL_RT	Visual Sensitivity Level Name	Logical Definition: The name associated with the level of concern the public has for the visual quality of an area. Design Considerations: The rating assigned for the visual sensitivity associated with the SPECIAL AREA sensitivity factor, in order to sustain special area management objectives. If this factor is not applicable to the area being evaluated for sensitivity, then choose “NA” from the domain. Attribute Domain Assignment: VRI_DOM_SLNA_RATING
SL_SPCL_TX	Visual Sensitivity Unit Factor Level Justification Text	Logical Definition: The text that explains the level that is given to a Visual Sensitivity Unit. Design Considerations: Explanation and/or justification for the sensitivity level rating assigned to the SPECIAL AREA sensitivity factor.
SL_OTHR_RT	Visual Sensitivity Level Name	Logical Definition: The name associated with the level of concern the public has for the visual quality of an area. Design Considerations: Optional Attribute. The rating assigned for OTHER sensitivity level factors described in the “SL_OTHR_TX” attribute. If there are no OTHER factors, then this attribute may be left “null” or populated with “NA” from the domain. Attribute Domain Assignment: VRI_DOM_SLNA_RATING

GIS Name	Logical Name	Definition/Design Considerations
SL_OTHR_TX	Visual Sensitivity Unit Factor Level Justification Text	Logical Definition: The text that explains the level that is given to a Visual Sensitivity Unit. Design Considerations: Optional text describing OTHER factors affecting the sensitivity level, and the explanation/justification for the sensitivity level rating that was assigned due to these other factors.
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

J. Visual Resource Inventory Visual Distance Zone Polygon Arcs (*vri_vdz_arc*)

The arc features used to define the polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries, and document the origin and characteristics of each arc.

Visual Resource Inventory Visual Distance Zone Polygon Arcs Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
CREATE_DATE	Created Date	Date	YES	09/09/9999		NO
CREATE_BY	Created By Name	Char(30)	YES	UNK		NO
MODIFY_DATE	Modified Date	Date	YES	09/09/9999		NO
MODIFY_BY	Modified By Name	Char(30)	YES	UNK		NO
COORD_SRC_TYPE	Coordinate Source Type Code	Char(5)	YES	UNK	<i>DOM_COORD_SOURCE_TYPE</i>	NO
COORD_SRC2	Coordinate Source Code	Char(25)	NO			NO
DEF_FET_TYPE	Defining Feature Type Code	Char(15)	YES	UNK	<i>DOM_DEF_FEATURE_TYPE</i>	NO
DEF_FET2	Defining Feature Code	Char(30)	NO			NO
ACCURACY_FT	Accuracy Measurement In Feet	Long Integer	YES	-1		NO
ADMIN_ST	Administrative State Code	Char(2)	YES		<i>DOM_ADMIN_ST</i>	NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
CREATE_DATE	Location Effective Date	Logical Definition: The date which is the calendar year, month, and day when the position of the Location was produced. Design Considerations: As a new feature is added to the system its creation date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999

GIS Name	Logical Name	Definition/Design Considerations
CREATE_BY	Not applicable	Logical Definition: Not on the logical model. Design Considerations: The UserID (BLM login ID) of the person who created or imported the data into the BLM GIS system. This attribute will be deleted before providing the data to the public. Default: UNK
MODIFY_DATE	Location Modified Date	Logical Definition: The date which is the calendar year, month, and day when the position of the Location was last modified. Design Considerations: As a feature is edited or modified while in the system its modification date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
MODIFY_BY	Not applicable	Logical Definition: Not on the logical model. Design Considerations: The UserID (BLM login ID) of the person who edited or modified data in the BLM GIS system will be collected and maintained. This attribute will be deleted before providing the data to the public. Default: UNK
COORD_SRC_TYPE	Location Source Type Name	Logical Definition The name that identifies the general category for the origin of the location coordinate, representing a compilation of the state adopted source codes. The domain contains those values that would most likely be used in the determination of source codes for the data set. Design Considerations: Attribute Domain Assignment: <i>DOM_COORD_SOURCE_TYPE</i> Default: UNK
COORD_SRC2	Location Source Description Specific Name	Logical Definition: The name that identifies a more specific description of the location (coordinate source). Design Considerations: <u>Suggested</u> values for codes appear in the domains appendix. The user may leave this value “null”, choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This list is not intended to be a substitute for the accuracy values that are found in the ‘Accuracy Measurement Table’. <u>This is an optional attribute.</u>

GIS Name	Logical Name	Definition/Design Considerations												
DEF_FET_TYPE	Defining Feature Type Name	Logical Definition: The name that identifies the high-level category for the actual physical or mapping characteristics (features) from which the arcs are derived. Design Considerations: Attribute Domain Assignment: <i>DOM_DEF_FEATURE_TYPE</i> Default: UNK												
DEF_FET2	Defining Feature Description Name	Logical Definition: The name that identifies a more specific description of the feature from which the arcs are derived to create polygon boundaries. This information further describes the physical or mapping feature that makes up the polygon boundary. Design Considerations: <u>Suggested</u> code values appear in the domains appendix. The user may leave this value “null”, choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. <u>This is an optional attribute.</u>												
ACCURACY_FT	Line Form Accuracy Measure	Logical Definition: The measure that describes how close, in Line Form Unit Of Measure Type Name the actual location is to the spatial depiction. Design Considerations: The Accuracy Measurement defines how close, in feet, the actual ground location is to the spatial depiction in GIS. This value would typically be determined by one of three methods: 1) the map accuracy value, if a USGS map was used to define the boundary; 2) the expected spatial accuracy achieved with GPS; or 3) the measurement of that accuracy as is noted in the <i>National Standard for Spatial Data Accuracy (NSSDA)</i> ¹ which is a data usability standard issued by the Federal Geographic Data Committee (FGDC). Default: -1 A value of -1 indicates that the accuracy is unknown or that no reliable estimate can be made. Below is an example table of accuracy measurements. (A list of all values is not representable in a domain table.) <table><tr><th colspan="2">Accuracy Measurement Example Table</th></tr><tr><td>1</td><td>+/- 1 Feet</td></tr><tr><td>10</td><td>+/- 10 Feet</td></tr><tr><td>15</td><td>+/- 15 Feet</td></tr><tr><td>20</td><td>+/- 20 Feet</td></tr><tr><td>100</td><td>+/- 100 Feet</td></tr></table> ¹ Federal Geographic Data Committee. 1998. <u>Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy</u>. FGDC-STD-007.3-1998	Accuracy Measurement Example Table		1	+/- 1 Feet	10	+/- 10 Feet	15	+/- 15 Feet	20	+/- 20 Feet	100	+/- 100 Feet
Accuracy Measurement Example Table														
1	+/- 1 Feet													
10	+/- 10 Feet													
15	+/- 15 Feet													
20	+/- 20 Feet													
100	+/- 100 Feet													

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 Design Considerations: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL<u>AK</u>030900). Attribute Domain Assignment: <i>DOM_ADMIN_ST</i>
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

K. Visual Resource Inventory Visual Distance Zone Polygons (vri_vdz_poly)

The polygon features for Visual Distance Zones are defined below. There will be one polygon per distance zone. Domain values are used when appropriate. The visual distance zones may be used in delineating the visual sensitivity rating units; however, these two feature classes will not participate in a relationship class within the data standard.

Visual Resource Inventory Visual Distance Zone Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
VDZ_ID	VDZ Unique ID	Char(13)	YES			YES
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO
ADM_OFC_CD	Administrative Office Code	Char(6)	YES			NO
ADM_UNIT_CD	Administrative Unit Code	Char (8)	YES		DOM_ADM_UNIT_CD	NO
VDZ_NR	Distance Zone Number	Char(3)	YES			NO
ADMIN_FO_NM	Administrative Field Office Name	Char(40)	YES			NO
VDZ_EVAL	Distance Zone Evaluators	Char(120)	YES			NO
VDZ_ORIG_DT	Date Distance Zones Originally Determined	Date	YES	09/09/9999		NO
VDZ_MOD_DT	Date Distance Zones Modified	Date	NO			NO
VDZ_CODE	Visual Distance Zone Code	Char (3)	YES		VRI_DOM_VDZ_CODE	NO
VDZ_MTHD	Methodology Used to Classify VDZ	Char(255)	YES			NO
VDZ_NRTV	Narrative Text about the VDZ	Char(255)	NO			NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
VDZ_ID	Visual Resource Inventory Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity. Design Considerations: A 13 digit unique identifier which is the concatenation of: ▪ VRI Unit Type Name (prefix “DZ”) ▪ Administrative State Code (2 characters) ▪ The Administrative Office Code (6 characters) ▪ Rating Unit Number (3 digit sequential number) The value for this field can be obtained using the Field Calculator in ArcMap. [VDZ_ID] = “DZ” + [ADMIN_ST] + [ADM_OFC_CD] + [VDZ_NR]
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 Design Considerations: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL<u>AK</u>030900). Attribute Domain Assignment: <i>DOM_ADMIN_ST</i>
ADM_OFC_CD	Office.BLM Organization Code	Logical Definition: BLM Administrative office (which is subordinate to the state office) that has jurisdiction and/or management authority over lands within a geographic area. Design Considerations: This is a six digit code. In the FPPS Organization Codes, use the 6 characters after the State designators (e.g. LLAK<u>030900</u>).

GIS Name	Logical Name	Definition/Design Considerations
ADM_UNIT_CD	Administrative Office + Office.BLM Organization Code	Logical Definition: The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. Design Considerations: This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL<u>AK030900</u>). Attribute Domain Assignment: <i>DOM_ADM_UNIT_CD</i>
VDZ_NR	Not Applicable	Logical Definition: Not in the logical model. Design Considerations: A 3 digit sequential number starting at 001 for a specific distance zone that falls within the jurisdictional area of the office coded in ADM_UNIT_CD. This number may be derived from the Object ID that is automatically generated by the GIS software, or assigned by the district office (among other methods). This number should be unique within all datasets for the particular office as coded in ADM_UNIT_CD.
ADMIN_FO_NM	Organization Name	Logical Definition: The official name by which the organization is known. An organization may include businesses, agencies, or corporations, but not individual persons. Design Considerations: Name of the BLM field office.
VDZ_EVAL	Entity: VISUAL RESOURCE INVENTORY LOCATION EVALUATOR	Logical Definition: The person or persons who evaluate the visual resource inventory. Design Considerations: Comma-delimited text field listing the evaluators who conduct the inventory, beginning with the principle point of contact. Names should be formatted using first initial followed by full last name with no spaces or punctuation (i.e. TBrown, JMcmann).

GIS Name	Logical Name	Definition/Design Considerations
VDZ_ORIG_DT	Visual Resource Inventory Location Date	Logical Definition: The date on which a visual resource inventory location is assigned a value based on the type of inventory location it is. Design Considerations: Date on which the visual distance zone was originally outlined and given a classification. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
VDZ_MOD_DT	Visual Resource Inventory Location Date	Logical Definition: The date on which a visual resource inventory location is assigned a value based on the type of inventory location it is. Design Considerations: Date on which the last modification was made to the outline or classification of the visual distance zone. The date will be in the format of MM/DD/YYYY. This is an optional attribute.
VDZ_CODE	Visual Distance Zone Code	Logical Definition: The code for the landscape distance zone based on relative visibility from travel routes or observation points. Design Considerations: Attribute Domain Assignment: VRI_DOM_VDZ_CODE
VDZ_MTHD	Visual Distance Zone Location Determination Text	Logical Definition: The text that describes the methods and or processes used to determine the area of the distance zone. Design Considerations: Methodology used to determine the visual distance zone presented by the polygon. Examples could include: GIS buffer analysis of roadway, field observation, GIS buffer operation followed by field observation and adjustments, viewshed analysis using DEM/TIN, previously defined distance zones, manual delineation of distance zones and viewsheds, etc.
VDZ_NRTV	Visual Distance Zone Location Narrative Text	Logical Definition: The text describing additional information about the distance zone. Comments could include information about the natural or built environment that affects the distance zone, any visual obstructions, or other conditions. Design Considerations: Optional attribute. Narrative text describing additional information about the distance zone.

GIS Name	Logical Name	Definition/Design Considerations
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

VISUAL RESOURCE INVENTORY CLASSES

L. Visual Resource Inventory Classes Polygons (*vri_class_poly*)

Visual Resource Inventory class polygons are derived from the feature classes for scenic quality, visual sensitivity level and distance zones; therefore, there are no separately defined bounding arcs. Inventories are informational and do not constitute a management class. Any inventory data should be labeled as “informational only” when shared or distributed. Additionally, once a visual resource inventory polygon has been delineated and assigned an inventory class; the class assignment and boundary can only be changed through the visual resource inventory process. Please refer to the Data Standard Report for additional business rules. Please refer to Manual H-8410-1 Visual Resource Inventory for information on determining visual resource inventory classes.

Visual Resource Inventory Classes Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
VRI_AREA_ID	Inventory Class Area Unique ID	Char(15)	YES			YES
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO
ADM_OFC_CD	Administrative Office Code	Char(6)	YES			NO
ADM_UNIT_CD	Administrative Unit Code	Char (8)	YES		DOM_ADM_UNIT_CD	NO
VRI_AREA_NR	VRI Area Number	Char(4)	YES			NO
ADMIN_FO_NM	Administrative Field Office Name	Char(40)	YES			NO
VRI_EVAL	VRI Class Evaluators	Char(120)	YES			NO
VRI_CONTACT	VRI Current Contact	Char(30)	YES			NO
VRI_ORIG_DT	VRI Class Original Assignment Date	Date	YES	09/09/9999		NO
VRI_MOD_DT	VRI Class Last Modification Date	Date	NO			NO
VRI_CLASS_CODE	VRI Class Code	Char (3)	YES		VRI_DOM_CLASS_CODE	YES
VRI_CLASS_TX	Explanation for Class Assignment	Char (255)	NO			NO
BLM_ACRE	BLM Acreage	Double	YES			YES
SQ_CODE	Scenic Quality Rating Code	Char(1)	YES		VRI_DOM_SQ_CODE	YES
SL_OVRL_RT	Sensitivity Level Overall Rating	Char(8)	YES		VRI_DOM_SL_RATING	YES
VDZ_CODE	Visual Distance Zone Code	Char(3)	YES		VRI_DOM_VDZ_CODE	YES
VRI_REHAB_IND	Rehabilitation Indicator	Char(3)	NO	NO	DOM_YES_NO	NO
VRI_SPCL_IND	Special Area Indicator	Char(3)	NO	NO	DOM_YES_NO	NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
VRI_AREA_ID	Visual Resource Inventory Location Identifier	Logical Definition: The designed primary key that will uniquely identify a single occurrence of the entity. Design Considerations: A 15 digit unique identifier which is the concatenation of: ▪ VRI Unit Type Name (prefix “VRI”) ▪ Administrative State Code (2 characters) ▪ The Administrative Office Code (6 characters) ▪ VRI Area Number (4 digit sequential number) The value for this field can be obtained using the Field Calculator in ArcMap. [VRI_AREA_ID] = “VRI” + [ADMIN_ST] + [ADM_OFC_CD] + [VRI_AREA_NR]
ADMIN_ST	State Alphabetic Code	Logical Definition: An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 Design Considerations: An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL<u>AK</u>030900). Attribute Domain Assignment: <i>DOM_ADMIN_ST</i>
ADM_OFC_CD	Office.BLM Organization Code	Logical Definition: BLM Administrative office (which is subordinate to the state office) that has jurisdiction and/or management authority over lands within a geographic area. Design Considerations: This is a six digit code. In the FPPS Organization Codes, use the 6 characters after the State designators (e.g. LLAK<u>030900</u>).

GIS Name	Logical Name	Definition/Design Considerations
ADM_UNIT_CD	Administrative Office + Office.BLM Organization Code	Logical Definition: The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. Design Considerations: This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL<u>AK030900</u>). Attribute Domain Assignment: <i>DOM_ADM_UNIT_CD</i>
VRI_AREA_NR	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: A 4 digit sequential number starting at 001 for the polygons representing the different Visual Resource Inventory Class Areas that fall within the jurisdictional area of the office coded in ADM_UNIT_CD. This number may be derived from the Object ID that is automatically generated by the GIS software, or assigned by the district office (among other methods). This number should be unique within all datasets for the particular office as coded in ADM_UNIT_CD.
ADMIN_FO_NM	Organization Name	Logical Definition: The official name by which the organization is known. An organization may include businesses, agencies, or corporations, but not individual persons. Design Considerations: Name of the BLM field office.
VRI_EVAL	Entity: VISUAL RESOURCE INVENTORY LOCATION EVALUATOR	Logical Definition: The person or persons who evaluate the visual resource inventory. Design Considerations: Comma-delimited text field listing the evaluators who conduct the inventory, beginning with the principle point of contact. Names should be formatted using first initial followed by full last name with no spaces or punctuation (i.e. TBrown, JMcmann).
VRI_CONTACT	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: The name of the BLM person who is the current contact for information regarding the visual resource inventory. The name should be formatted using the first initial followed by the full last name with no space.

GIS Name	Logical Name	Definition/Design Considerations
VRI_ORIG_DT	Visual Resource Inventory Class Area Date	Logical Definition: The date on which the inventory class was assigned to an area based on the scenic quality, sensitivity level and distance zone. Design Considerations: The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
VRI_MOD_DT	Visual Resource Inventory Class Area Date	Logical Definition: The date on which the inventory class was assigned to an area based on the scenic quality, sensitivity level and distance zone. Design Considerations: Date on which the inventory class was last modified, or where a change was made to the outline of the visual resource inventory class area. The date will be in the format of MM/DD/YYYY. This is an optional attribute.
VRI_CLASS_CODE	Visual Resource Inventory Class Code	Logical Definition: The code for the category that is assigned to a BLM administered area based on its scenic quality, sensitivity and visual distance zone. Design Considerations: This is for the Inventory Class, and does not constitute a Management Class. Attribute Domain Assignment: VRI_DOM_CLASS_CODE
VRI_CLASS_TX	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Optional Attribute. Text explaining why a specific visual resource inventory class was assigned. Use this attribute to explain, or comment on, where class assignment does not follow the matrix, to describe why a small polygon was retained, etc.
BLM_ACRE	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: The acres within the polygon that are under BLM jurisdiction. (The BLM acres should be equal to or less than the calculated GIS acres for the polygon. To calculate the GIS acres: Project the data into a standard projection such as the ESRI default Albers equal-area projection for the continental United States, "US Albers NAD 1983." (Make sure the area measure of your data is square meters, as opposed to square feet.) Then use the field calculator in ArcMap with the expression: [GIS_ACRES] = [SHAPE_Area] * 0.0002471044. Please note that the figure used in this calculation is the factor for converting the US Survey Foot value from the length of a meter, as opposed to the International Standard for converting meters and feet).

GIS Name	Logical Name	Definition/Design Considerations
SQ_CODE	Scenic Quality Rating Code	Logical Definition: The code for the scenic quality rating for the Visual Resource Inventory. Design Considerations: Scenic quality code assigned to a scenic quality rating unit based on the total score for all seven factors of scenic quality. Attribute Domain Assignment: VRI_DOM_SQ_CODE NOTE: The SQ_CODE attribute value in this feature class should match the SQ_CODE attribute value for the coincident area from the vri_sqru_poly feature class.
SL_OVRL_RT	Visual Sensitivity Level Name	Logical Definition: The name associated with the level of concern the public has for scenic quality. Design Considerations: Sensitivity Level Overall Rating derived from all five sensitivity level factors. The name associated with the overall level of concern for maintaining scenic quality. Attribute Domain Assignment: VRI_DOM_SL_RATING NOTE: The SL_OVRL_RT attribute value in this feature class should match the SL_OVRL_RT attribute value for the coincident area from the vri_slru_poly feature class.
VDZ_CODE	Visual Distance Zone Code	Logical Definition: The code for the landscape distance zone based on relative visibility from travel routes or observation points. Design Considerations: Attribute Domain Assignment: VRI_DOM_VDZ_CODE NOTE: The VDZ_CODE attribute value in this feature class should match the VDZ_CODE attribute value for the coincident area from the vri_vdz_poly feature class.
VRI_REHAB_IND	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Indicator that the area was identified as needing rehabilitation during the visual resource inventory process. Attribute Domain Assignment: DOM_YES_NO Default: NO

GIS Name	Logical Name	Definition/Design Considerations
VRI_SPCL_IND	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Indicator that the area was identified during the visual resource inventory as possessing unique landscape and/or visual quality characteristics. This indicator should be used for an area that may or may not currently have special status, but that would benefit from special consideration in the management plan (for example, Visual ACEC, Outstanding Natural Area, or similar). Attribute Domain Assignment: DOM_YES_NO Default: NO
GlobalID	Not Applicable	Logical Definition: Not on the logical model. Design Considerations: Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only. It is not used as a unique identifier for relationships between feature classes/tables.

APPENDIX A: DOMAIN VALUES

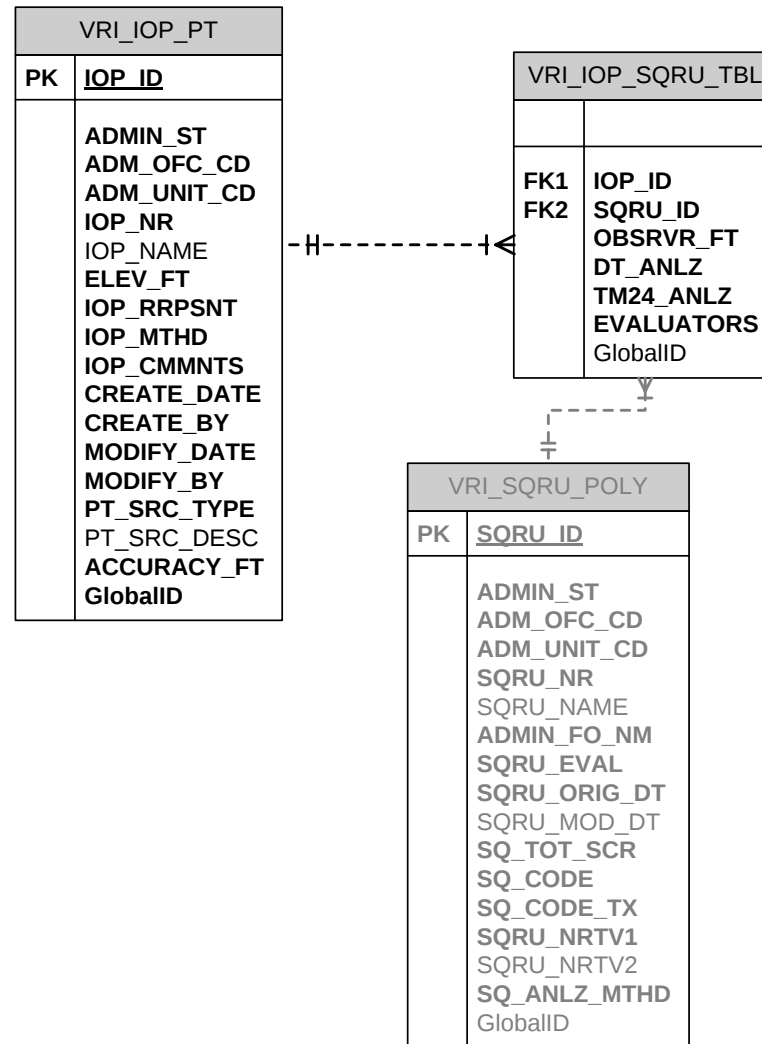
Domain values are maintained separately from the data standard. This is due to values being more likely to have an addition or change that would not affect the data standard. Domain values cannot be added to attributes specific to the standard (except thru the data standardization maintenance step). A state can extend the data standard with a new attribute which can have a state specific domain list. However, all attributes that are required as part of the standard must have a value from the data standard domain list. Any additional attributes and their associated domain values must be documented with metadata by that office.

To see domains specific to Visual Resource Inventory, please see the document named Visual Resource Inventory Domains.

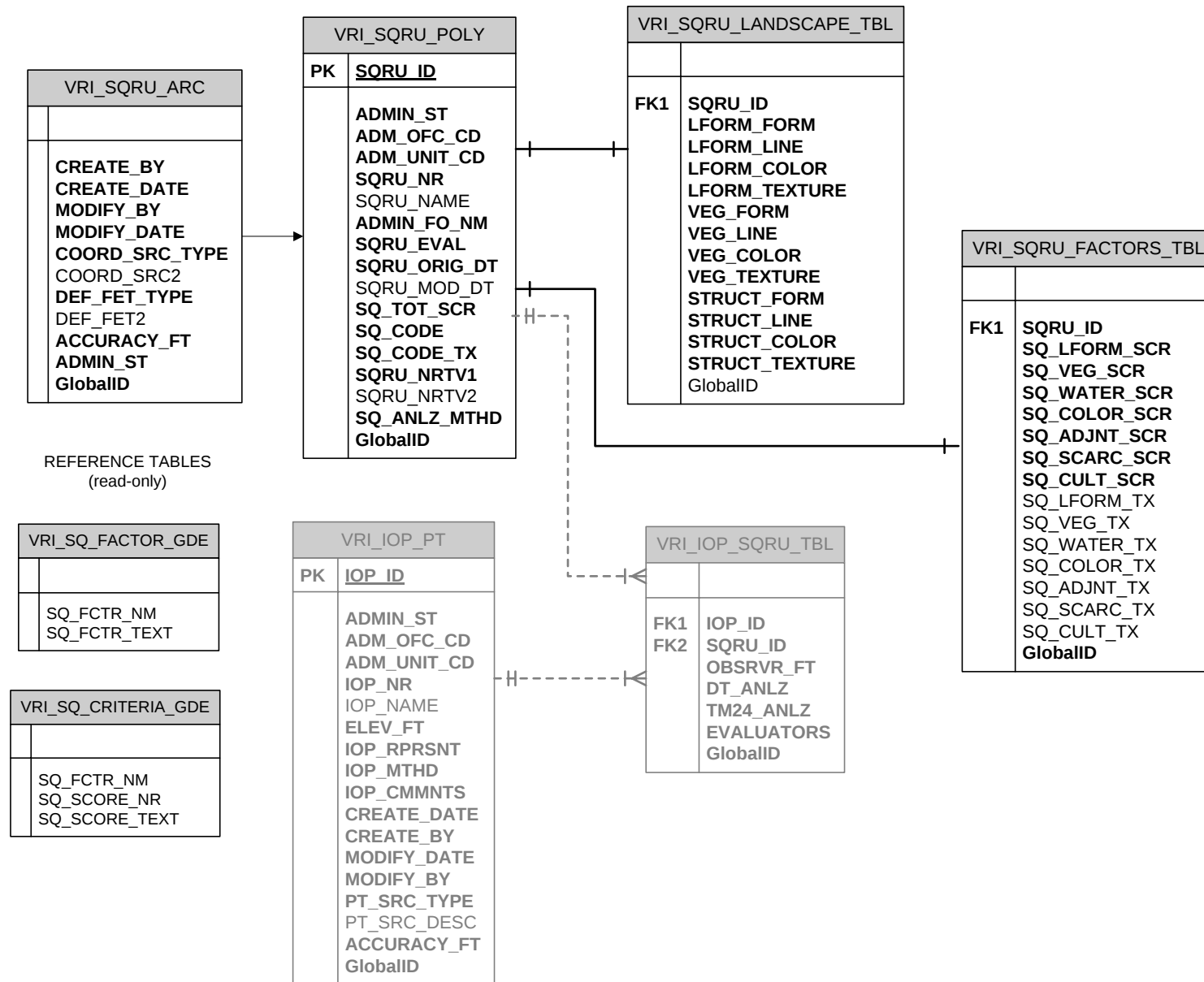
For Feature Level Metadata Domains, please see the documentation in the [Domain Information](http://teamspace/sites/blmnds/dom_topol/default.aspx), located at http://teamspace/sites/blmnds/dom_topol/default.aspx.

APPENDIX B: PHYSICAL DIAGRAMS

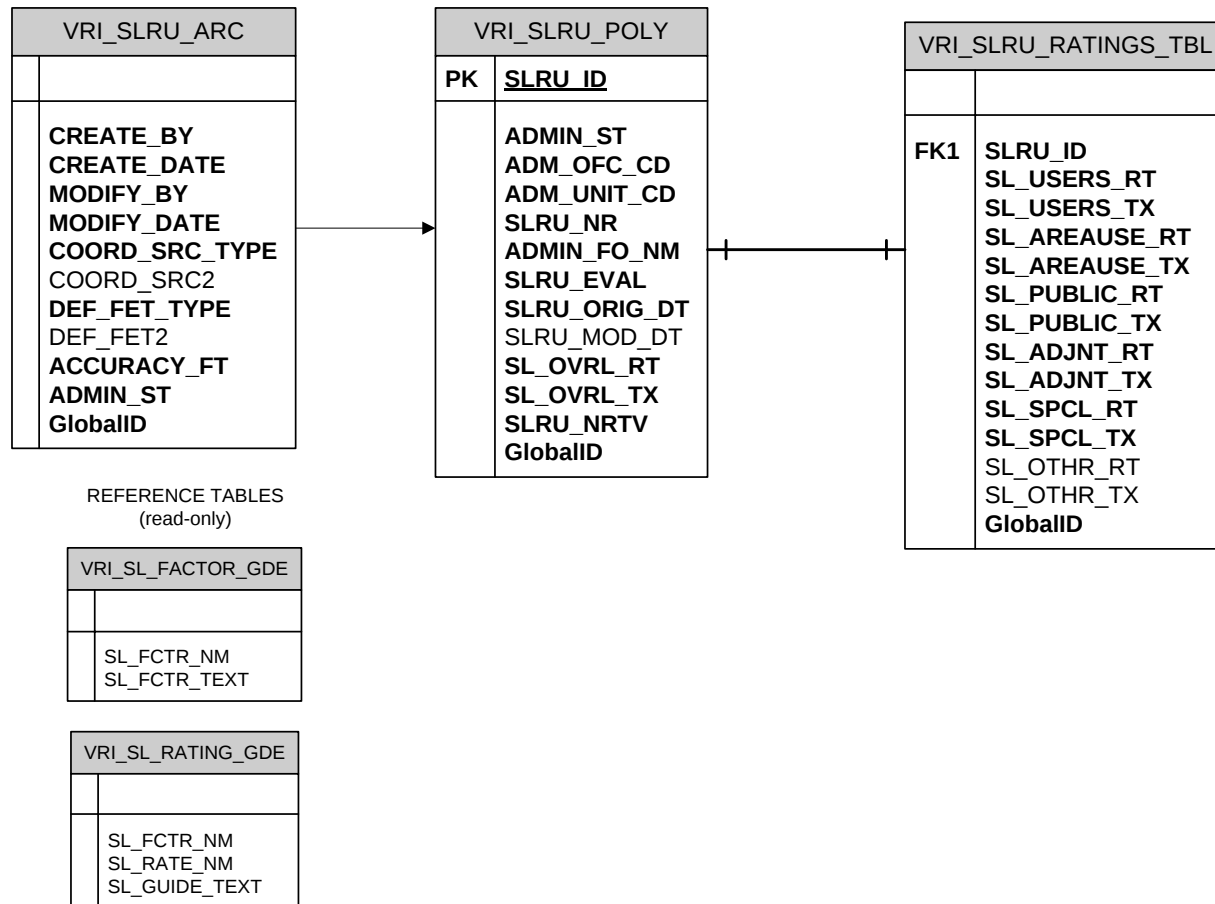
Visual Resource Inventory Observation Points – Feature Class & Related Table for Observations of Scenic Quality

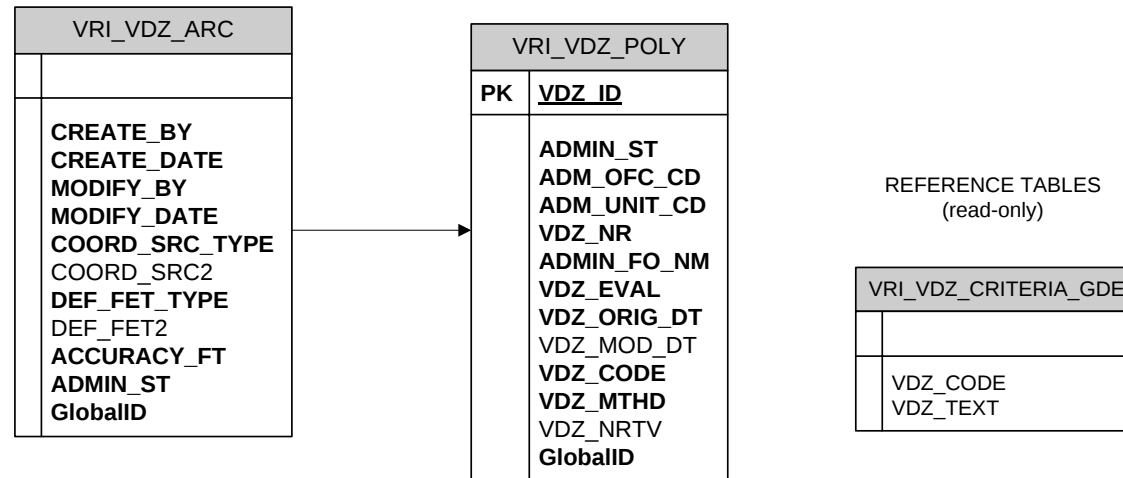


Visual Resource Inventory Scenic Quality - Feature Classes, Related Tables & Reference Guides



Visual Resource Inventory Sensitivity Level - Feature Classes, Related Tables & Reference Guides



Visual Resource Inventory Visual Distance Zone - Feature Classes & Reference Guides

Visual Resource Inventory Class - Feature Class & Reference Guides

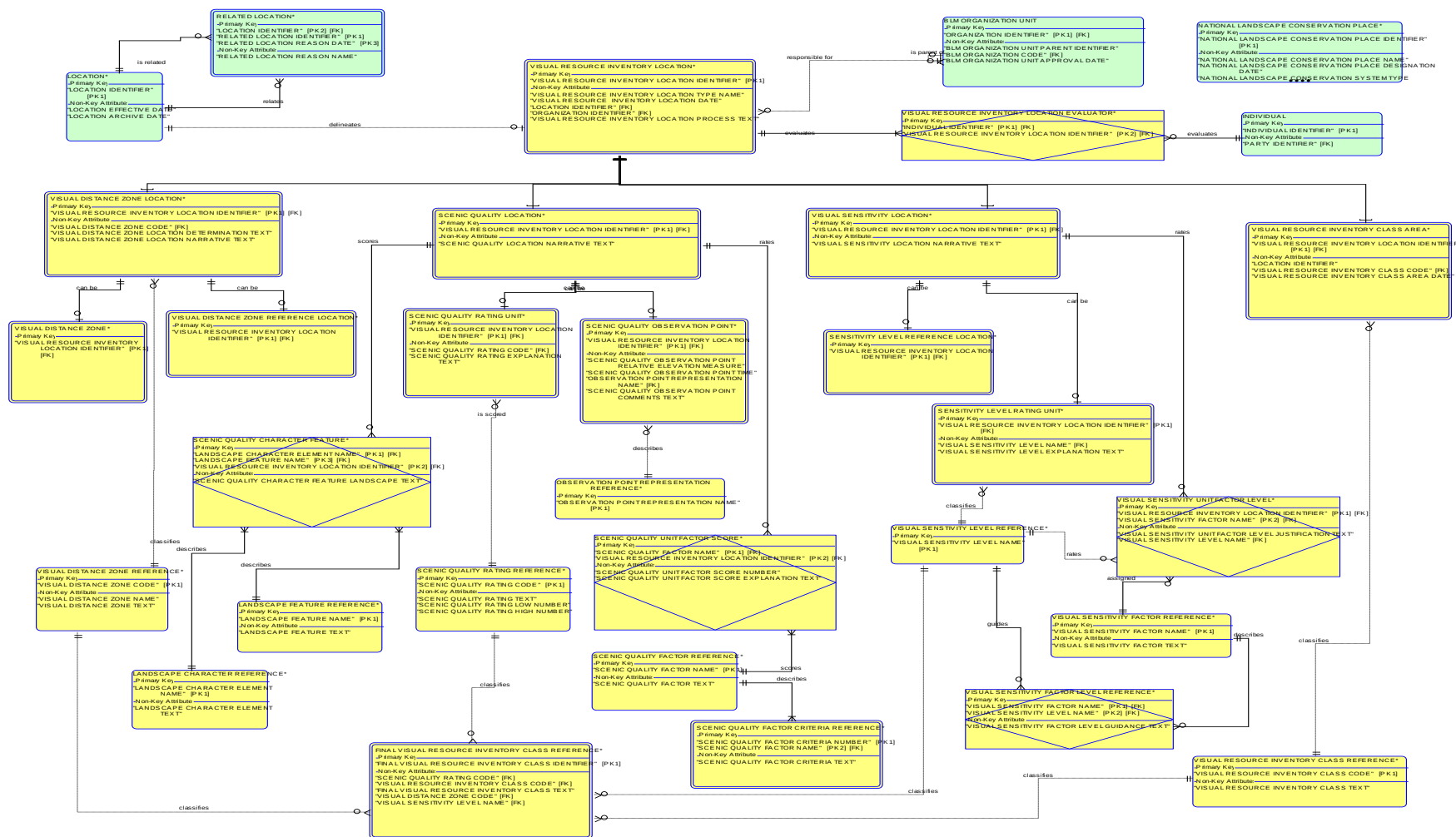
VRI_CLASS_POLY	
PK	<u>VRI_AREA_ID</u>
	ADMIN_ST ADM_OFC_CD ADM_UNIT_CD VRI_AREA_NR ADMIN_FO_NM VRI_EVAL VRI_CONTACT VRI_ORIG_DT VRI_MOD_DT VRI_CLASS_CODE VRI_CLASS_TX BLM_ACRES SQ_CODE SL_OVRL_RT VDZ_CODE VRI_REHAB_IND VRI_SPCL_IND GlobalID

REFERENCE TABLES
(read-only)

vri_class_asgn_gde	
	VRI_SQ_CODE VRI_SL_OVRL_RT VRI_VDZ_CODE VRI_CLASS_TEXT

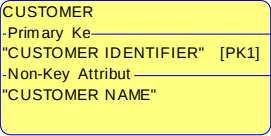
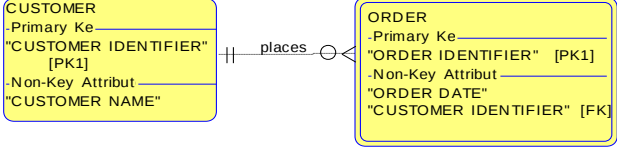
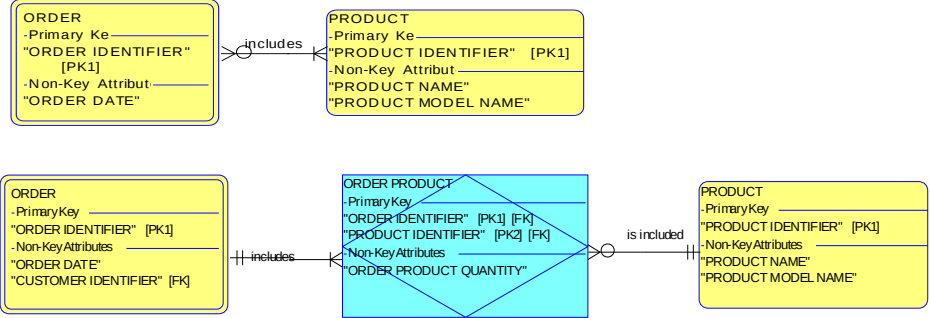
APPENDIX C: LOGICAL DATA MODEL

The entities in green are not part of this standard and do not need to be reviewed. They are provided to show context and provide relationships to other data only. To improve viewing, zoom to 200%; to print a larger version, use the 11"x17" model on the same webpage as this document."



Legend: See Appendix D

APPENDIX D: READING A LOGICAL DATA MODEL

 CUSTOMER - Primary Key: "CUSTOMER IDENTIFIER" [PK1] - Non-Key Attribute: "CUSTOMER NAME"	ENTITY - The noun or object on something of relevance to the business - Shown as a box, with the name (singular in capital letters at the top, example below: ORDER) ATTRIBUTES - The adjective which is the data or information about an entity; describes an entity (ORDER NUMBER, ORDER DATE) - Has only one valid value for an occurrence of an entity at any given time. The same value of an attribute may describe more than one entity occurrence - PK = Primary Key – uniquely identifies an occurrence of an entity (one customer may have same name as another customer, so CUSTOMER IDENTIFIER is unique for a customer) - FK = Foreign Key – the primary key of the parent entity is a Foreign key in the child entity - The Word Identifier indicates that this will be a designed key, its format is not known, but the modeling tool required a format and size. The actual content and size of the identifier will be determined during design.
 The line includes optionality (minimum occurrences, inner symbol) and cardinality (maximum occurrences, symbol next to entity) = one 0 = zero < or > = many	RELATIONSHIP - The verb which shows an association between entities and represents business rules - Represented by a line between two entities with active verb or verb phase (all small letters) - Reading : Left to right (A CUSTOMER places zero to many ORDERS) and right to left (An ORDER is placed by one and only one CUSTOMER) - Because a Customer can have many Orders, the Customer is considered the Parent Entity and the Order is considered the Child Entity). So the way you read it is normally from the Parent Entity to the Child Entity
 The top diagram shows an 'includes' relationship between ORDER and PRODUCT. The bottom diagram shows an 'includes' relationship between ORDER and an associative entity 'ORDER PRODUCT' (diamond), which is then 'is included' by PRODUCT.	MANY-TO-MANY - In a logical data model, many to many relationships are resolved. In the example to the left an ORDER includes one to many PRODUCTS and a PRODUCT can be in zero or many ORDERS. ASSOCIATIVE ENTITY - resolves the many to many - with the diamond symbol

APPENDIX E: ATTRIBUTE METADATA TERMINOLOGY

The following matrix describes the metadata for the Data Standards Implementation Details.

Attribute Metadata Field	Metadata Definition	Example
<i>GIS Name</i>	<i>The abbreviated name of the field as it appears in the database.</i>	<i>RCVR_TYPE</i>
<i>Alias</i>	<i>An alternative name that is more descriptive and user-friendly than the Logical or GIS Field Name.</i>	<i>GPS RECEIVER TYPE</i>
<i>Data Format</i>	<i>Specific type of data allowed/# of characters or numbers/Precision & Scale.</i>	<i>Char(15)</i>
<i>Required?</i>	<i>If an attribute does or does not have to have a value. If “YES”, the attribute is required, if “NO”, the attribute is optional.</i>	<i>NO</i>
<i>Default Value</i>	<i>Value that will apply if no other value is specified; included in domain value list.</i>	<i>N/A</i>
<i>Domain Name</i>	<i>Name of the table for that attribute, containing the Code, Description, and Definition for each value in the table.</i>	<i>DOM_RCVR_TYPE</i>
<i>Derived?</i>	<i>If the attribute value is derived from the value of one or more other attribute values (YES) otherwise, (NO) the value is not derived. The description of how the attribute is derived will be included in the Definition/Design Consideration.</i>	<i>NO</i>
<i>Logical Attribute Name</i>	<i>The business name of the attribute which includes the entity name, and representation term.</i>	<i>Global Positioning System Receiver Type Name</i>