FISH PASSAGE BARRIERS

SPATIAL DATA STANDARD

DOCUMENT REVISIONS

Revision	Date	Author	Description	Affected Pages
1.0	5/16/2017	Dana Baker-Allum, Scott Lightcap, Shelley Moore, Micah Babinski	1st released version.	All

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1. GENERAL INFORMATION

Dataset (Theme) Name: Fish Passage Barriers
Dataset (Tables): FPB_TBL

1.1 ROLES AND RESPONSIBILITIES

Roles	Responsibilities
State Data Stewards	The State Data Steward, Scott Lightcap, at 541-464-3325, is responsible for approving data standards and business rules, developing Quality Assurance/Quality Control procedures, identifying potential privacy issues, and ensuring that data is managed as a corporate resource. The State Data Steward coordinates with field office data stewards, the state data administrator, Geographic Information System (GIS) coordinators, and national data stewards. The State Data Steward also reviews geospatial metadata for completeness and quality.
GIS Technical Lead	The GIS Technical Lead, Shelley Moore, at 503-808-6566, works with data stewards to convert business needs into GIS applications, derive data requirements and participates in the development of data standards. The GIS Technical Lead coordinates with system administrators and GIS coordinators to manage the GIS databases. The GIS Technical Lead works with data editors to make sure data is being input into the enterprise Spatial Database Engine (SDE) database consistently and in accordance with the established data standard. The GIS Technical Lead provides technical assistance and advice on GIS analysis, query and display of the dataset.
State Data Administrator	The State Data Administrator, Eric Hiebenthal, at 503-808-6565, provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator ensures that defined processes for development of data standards and metadata are followed, and that they are consistent and complete. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator also coordinates with data stewards and GIS coordinators to respond to national spatial data requests.
State Records Administrator	The State Records Administrator, Tamara Yingling, at 503-808-6450, assists the State Data Steward to identify any privacy issues related to spatial data. The State Records Administrator also provides direction and guidance on data release and fees. The State Records Administrator also ensures that data has been classified under the proper records retention schedule and determines appropriate Freedom of Information Act category.

Table 1 Role and Responsibilities

1.2 FOIA CATEGORY

Public

1.3 RECORDS RETENTION SCHEDULE

The DRS/GRS/BLM Combined Records Schedule under Schedule 20/52a3 (Electronic Records/Geographic Information Systems) lists this theme as one of the system-centric themes that are significant for the Bureau of Land Management's (BLM) mission that must be permanently retained.

> "PERMANENT. Cutoff at the end of each Fiscal Year (FY), or, when significant changes and additions have been made, before and after the change. Use BLM 20/52a. Transfer to the National Archives every three years after cutoff. Under the instruction in 36 CFR 1235.44-50, or whichever guidance is in place at the time of the transfer. Submissions are full datasets and are in addition to, not replacements, of earlier submissions."

According to the DRS/GRS/BLM Records Schedules, Schedule 20 Item 52a3, the NOC is responsible for transfer to NARA.

Oregon/Washington (OR/WA) BLM Guidebook for Management of Geospatial Data (v1) Section 15.2 - Corporate Data Online Archives prescribes:

> "Vector annual archives are retained online for 12 years. Each year, data that has reached 12 years old is copied off-line, to be retained until no longer needed (determined by data stewards and program leads), with format and readability maintained in a five (5) year "tech refresh" update cycle."

1.4 SECURITY/ACCESS/SENSITIVITY

The FPB set of themes do not require any additional security other than that provided by the General Support System (the hardware/software infrastructure of the OR/WA BLM).

This dataset is not sensitive and there are no restrictions on access to this data either from within the BLM or external to the BLM. This dataset falls under the standard Records Access Category 1A-Public Data.

There are no privacy issues or concerns associated with this dataset.

1.5 KEYWORDS

Keywords that can be used to locate this dataset include:

BLM Thesaurus: Hydrology, Wildlife, Disturbance
International Organization for Standardization (ISO) Thesaurus: biota, environment, inlandWaters, structure

Additional keywords: Fish Passage, Fish Barriers

1.6 SUBJECT FUNCTION CODES

BLM Subject Function codes that can be used to describe this dataset include:
1283 – Data Administration
6720 – Aquatic Resource Management
6762 – Stream Management

2. DATASET OVERVIEW

2.1 DESCRIPTION

The FPB dataset represents basic information about existing and potential human-caused barriers to fish passage in watercourses, e.g., dams, culverts, bridges, tide gates, and weirs. In addition to basic information about barriers, the dataset provides general passage status. This standard does not address natural features that are barriers to fish passage, e.g., falls, cascades, gradient barriers, and large woody debris placed for stream restoration purposes. Natural features will be addressed in a future version of the data standard or in a separate dataset. This standard does not include dikes, levees, berms, or water quality/quantity-related barriers that are not associated with in-stream features.

2.2 USAGE

This dataset is used for depicting road stream crossings on fish bearing streams. It is also used to identify fish passage restoration needs and to assess fish passage restoration actions.

2.3 SPONSOR/AFFECTED PARTIES

The sponsor for this data set is the Deputy State Director, Resource, Lands, Minerals, and Fire.

2.4 RELATIONSHIP TO OTHER DATASETS, DATABASES or FILES

The FPB dataset is related to the OR/WA Structures dataset. FPB inherits its spatial location and core attributes from Structures. There is a 1:1 relationship between the Structures feature class and the FPB table (i.e. a structure point may have zero or 1 related FPB records).

FPB is aligned to the State of Oregon FPB Standard Version 1.1 (2010). This data standard is available at http://www.oregon.gov/geo/standards/Fish%20Passage%20Barrier%20Standard,%20v%201.1%20(pdf).pdf.

Note: there are six fields that appear in the Oregon FPB Standard that do not appear in the OR/WA BLM FPB table. This is because there are corresponding fields in the Structures feature class that meets those data needs. Those fields are:

- FPB Location Accuracy (fpbLocAccu) crosswalks to the Structures ACCURACY_FT field.
- FPB Feature Type (fpbFtrTy) crosswalks to the Structures STRCT_PT_TYPE field.
- FPB Feature Name (fpbFtrNm) crosswalks to the Structures STRCT_NAME field.
- FPB Reach Code (ReachCode) crosswalks to the Structures NHD_REACHCODE field.
- FPB Origin Year (fpbOrYr) crosswalks to the Structures COMPLT_DT field.
- FPB Owner (fpbOwn) crosswalks to the Structures FAC_ADMIN field.

Data will be shared annually with the Oregon Department of Fish and Wildlife. When data is shared, points will be located on NHD Hydrography as events, and route and measure information will be appended to the dataset.

2.5 DATA CATEGORY/ARCHITECTURE LINK

These data themes are a portion of the Oregon Data Framework (ODF). The ODF utilizes the concept of inheritance to define specific instances of data. All OR/WA resource-related data are divided into three general categories: Activities, Resources, and Boundaries. These general categories are broken into subcategories that inherit spatial characteristics and attributes from their parent category. These subcategories may be further broken into more specific groups until the basic data set that cannot be further subdivided. Those basic data sets inherit all characteristics of all groups/categories above them. The basic data sets are where physical data gets populated (those groups/categories above them do not contain actual data, but set parameters that all data of that type must follow). See the ODF Overview (**Figure 2**) for a simplified schematic showing the overall organization and entity inheritance. The FPB entities are highlighted. For additional information about the ODF, contact:

Eric Hiebenthal
OR/WA State Data Administrator
Bureau of Land Management
P.O. Box 2965
Portland, OR 97208
503-808-6565

In the ODF, FPB is considered an activity and categorized as follows:

ODF
- Activities
  - Facility
    - Structure
      - FPB_TBL

Figure 1 provides a graphic representation of the entities and hierarchical relationships.

2.6 RELATIONSHIP TO THE DEPARTMENT OF THE INTERIOR ENTERPRISE ARCHITECTURE - DATA RESOURCE MODEL

The Department of the Interior (DOI) Enterprise Architecture contains a component called the Data Resource Model. This model addresses the concepts of data sharing, data description, and data context. This data standard provides information needed to address each of those areas. Data sharing is addressed through complete documentation and simple data structures which make sharing easier. Data description is addressed through the section on Attribute Descriptions. Data context is addressed through the data organization and structure portions of this document. In addition, the DOI Data Resource Model categorizes data by use of standardized Data Subject Areas and Information Classes. For this data set, the Data Subject Area and Information Class are:

- Data Subject Area: Geospatial
- Information Class: Location

2.7 FPB DATA ORGANIZATION / STRUCTURE

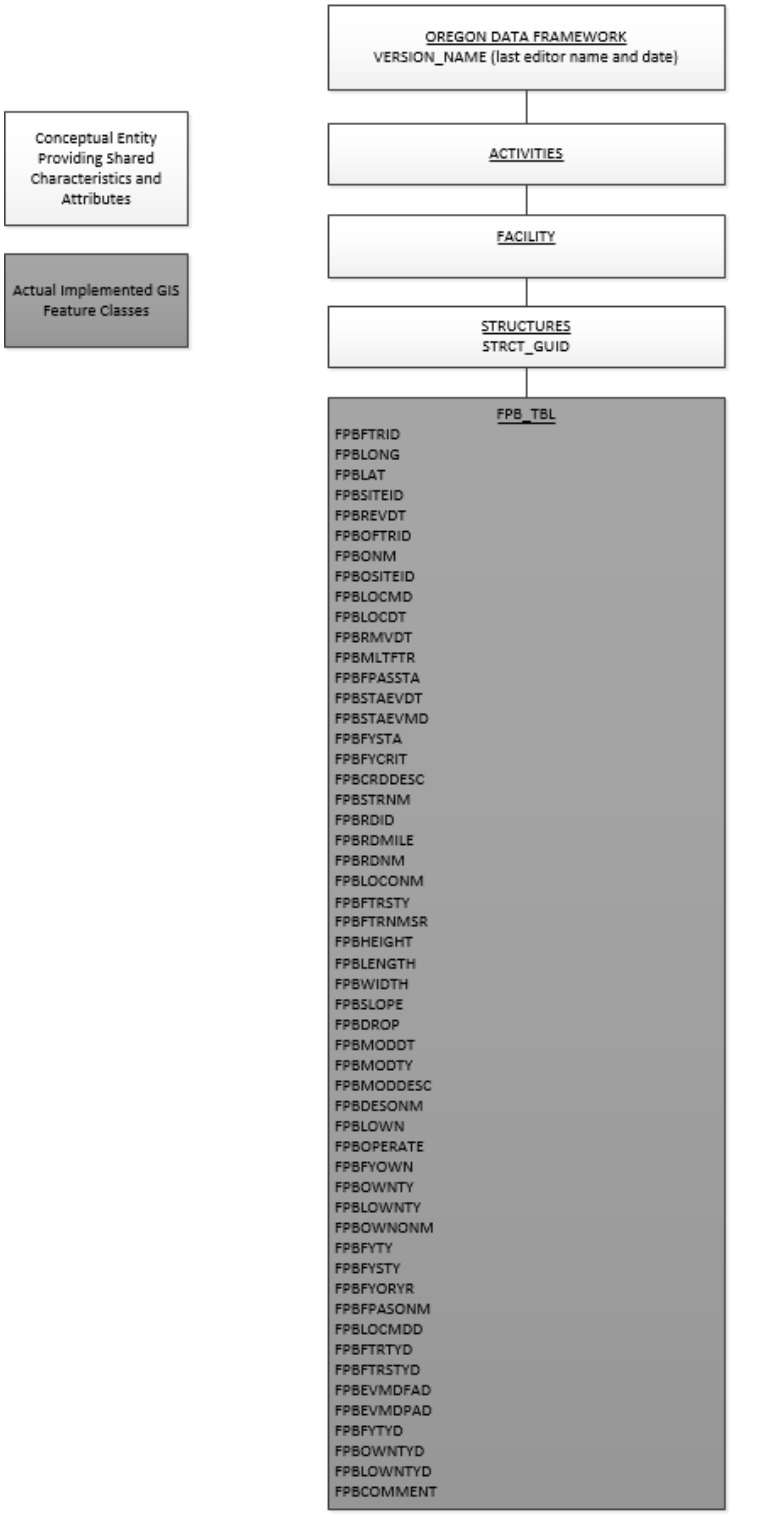

Figure 1 Data Organization Structure

3. DATA MANAGEMENT PROTOCOLS

3.1 ACCURACY REQUIREMENTS

Since structures have a physical existence on the ground, it is possible to map their locations with a high degree of accuracy. Accuracy is, however, variable because of a wide variety of sources. The claimed +/- range is captured in the attribute ACCURACY_FT. Over time, the accuracy will continue to improve as structure locations are noted using the Global Positioning System (GPS) or carefully mapped.] Features should snapped to a stream and a road, if the feature exists at a stream/road intersection. The ACCURACY_FT field should capture the accuracy of the GPS coordinates, if coordinates were captured, and not the accuracy of the point in the GIS.

3.2 COLLECTION, INPUT, AND MAINTENANCE PROTOCOLS

FPB will be created, as needed, by natural resource and GIS staff using GIS software. Trained editors will use the BLM SDE Version Management extension to automatically load the correct editable layers to the user's map document and perform a wide range of valuable background processes to improve data integrity. The version check-in process leverages the Data Reviewer extension for ArcGIS.

Only editors approved by the data stewards and BLM GIS staff will edit fish passage barriers. Fish passage barriers need not be created where fish are not present or historically present on the stream. FPB records should only be created for structures that are a barrier to fish passage and should not be created for all culverts.

An important aspect of FPB is that they maintain coincidence with GTRN roads and NHD reaches. The existing NHD_REACHCODE and FAMSKEY attributes in the ODF Structures feature classes should be populated wherever possible. This information will aid the QAQC processes designed for FPB by OR/WA BLM staff.

The ArcGIS software allows photos to be attached to the input coordinates. The photos are stored as geodatabase "attachments", which utilize a "relate table" that is linked to the spatial record. This table is managed by the ArcGIS software, not by GIS editors directly. Users access the photos in ArcGIS with the "identify" tool. If the photo is extracted for use outside of ArcGIS, the network location of the photo can be stored in the FILEPATH attribute.

OR/WA BLM staff should report errors to the thematic leads as well as the GIS, Data Admin, and Resource Science Data staff whenever they are detected.

3.3 UPDATE FREQUENCY AND ARCHIVAL PROTOCOLS

Data is updated as needed, but at least annually. Data will be captured once a year during the corporate database annual archive, which occurs at the end of the calendar year.

3.4 STATEWIDE MONITORING

Each year, the Resource Science Data team of the BLM Division of Resources Planning, Use, and Protection meets with the state data stewards for every corporate geospatial theme to conduct an annual review of the data. During the annual review, geospatial staff present the state data stewards with a report detailing QAQC results performed on the data. The QAQC checks include:

- All attribute values conform to the range or coded-value domains to which they are applied

- All attributes marked as required in the data standard have values
- Multipart polygons, if they are forbidden by the data standard
- Duplicate features which have the same geometry and attributes
- Overlapping features, if forbidden by the data standard
- Invalid geometry (such as self-intersections)
- Slivers
- Other checks, as necessary (can be customized according to the data standard)

In addition to this report, geospatial staff conduct a qualitative needs assessment with the data steward to identify any unmet needs or problems with the current status of the data. At the conclusion of the review, the team records the data steward's approval of the datasets reviewed. This approval is then added to the corporate metadata.

In addition to the annual data QAQC process described above, a separate process will be developed to identify features that are not coincident with NHD Hydrography and GTRN. This process will be run on a schedule to be determined in the future.

4. FISH PASSAGE BARRIERS SCHEMA (simplified)

Attributes are listed in the order in which they appear in the geodatabase feature class. The order is indicative of the importance of the attribute for theme definition and use. There are no aliases unless specifically noted. The domains used in this data standard can be found in Appendix A. These are the domains at the time the data standard was approved. Domains can be changed without a reissue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site: http://www.blm.gov/or/datamanagement/index.php

For domains not listed at that site contact:

Eric Hiebenthal
OR/WA State Data Administrator
Bureau of Land Management
P.O. Box 2965
Portland, OR 97208
503-808-6565

4.1 FPB_TBL (Fish Passage Barriers Table)

Attribute Name	Data Type	Length	Default	Required?	Domain
STRCT_GUID	Guid			Yes	
FPBFTRID	Long Integer	9		No	
FPBLONG	Double	8,4		Yes	
FPBLAT	Double	6,4		Yes	
FPBSITEID	Long Integer	9		No	
FPBREVDT	String	8		Yes	
FPBOFTRID	String	40		Yes	
FPBONM	String	30		Yes	dom_fpbONm
FPBOSITEID	String	40		Yes	
FPBLOCMD	String	15		Yes	dom_fpbLocMd
FPBLOCDT	String	8		Yes	
FPBRMVDT	String	8		Conditional	
FPBMLTFTR	String	7		Yes	dom_fpbFlag
FPBFPASSTA	String	8		Yes	dom_fpbFPasSta
FPBSTAEVDT	String	8		Yes	
FPBSTAEVMD	String	20		Yes	dom_fpbStaEvMd
FPBFYSTA	String	20		Yes	dom_fpbFySta
FPBFYCRIT	String	7		Yes	dom_fpbFlag
FPBCRDDESC	String	254		No	
FPBSTRNM	String	50		No	
FPBRDID	String	13		No	
FPBRDMILE	Double	7,3		No	
FPBRDNM	String	50		No	
FPBLOCONM	String	30		No	
FPBFTRSTY	String	30		No	dom_fpbFtrSTy
FPBFTRNMSR	String	5		No	

FPBHEIGHT	Double	4,1		No	
FPBLENGTH	Double	5,1		No	
FPBWIDTH	Double	5,1		No	
FPBSLOPE	Double	3,1		No	
FPBDROP	Double	3,1		No	
FPBMODDT	String	8		No	
FPBMODTY	String	10		No	dom_fpbModTy
FPBMODDESC	String	254		No	
FPBDESONM	String	30		No	
FPBLOWN	String	60		No	
FPBOPERATE	String	60		No	
FPBFYOWN	String	60		No	
FPBOWNTY	String	15		No	dom_fpbOwnTy
FPBLOWNTY	String	15		No	dom_fpbOwnTy
FPBOWNONM	String	30		No	
FPBFYTY	String	15		No	dom_fpbFyTy
FPBFYSTY	String	20		No	dom_fpbFySTy
FPBFYORYR	String	4		No	
FPBFPASONM	String	30		No	
FPBLOCMDD	String	100		No	
FPBFTRTYD	String	100		No	
FPBFTRSTYD	String	100		No	
FPBEVMDFAD	String	100		No	
FPBEVMDPAD	String	100		No	
FPBFYTYD	String	100		No	
FPBOWNTYD	String	100		No	
FPBLOWNTYD	String	100		No	
FPBCOMMENT	String	254		No	
VERSION_NAME*	String	50	InitialLoad	Yes	

*Values automatically generated

5. PROJECTION AND SPATIAL EXTENT

All feature classes and feature datasets are in Geographic, North American Datum 83. Units are decimal degrees. Spatial extent (area of coverage) includes all lands managed by the BLM OR/WA, bordered on the North by Latitude 49.5, on the South by Latitude 41.5, on the East by Longitude -116 and on the West by Longitude -125.

6. SPATIAL ENTITY CHARACTERISTICS

There are no spatial entities described in this data standard.

7. ATTRIBUTE CHARACTERISTICS AND DEFINITION **(In alphabetical order)**

7.1 FPBCOMMENT

Geodatabase Name	FPBCOMMENT
BLM Structured Name	Fish_Passage_Barrier_Comment_Text
Alias Name	Comments
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Additional, relevant information about the FPB feature, passage conditions, modifications, etc. that supplements the existing required and optional attribute elements.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "Inadequate passage, blocks juvenile salmon.", "Location of culvert uncertain - likely on side trib to W Fk Cow Cr (ODFW QA review) Inadequate passage, blocks juvenile salmon."
Data Type	String (254)

7.2 FPBCRDDESC

Geodatabase Name	FPBCRDDESC
BLM Structured Name	Fish_Passage_Barrier_Coordinate_Description_Text
Alias Name	Coord Desc
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Identifies exact location to which coordinates refer (e.g., centerline of road-stream crossing for a culvert).

Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: "Approximate location of barrier feature."
Data Type	String (254)

7.3 FPBDESONM

Geodatabase Name	FPBDESONM
BLM Structured Name	Fish_Passage_Barrier_Description_Data_Source_Originator_Name_Text
Alias Name	Desc Src Originator Name
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Name of description data source originator/entity (if different from identification data originator). Description data include the following attribute elements: fpbFtrTy, fpbFtrSTy, fpbFtrNm, fpbRmvDt, fpbMltFtr, fpbHeight, fpbLength, fpbWidth, fpbSlope, fpbDrop, fpbOrYr, fpbModDt and fpbFtrTyD. Data originators have the option of submitting separate source information for the location, description, ownership and fish passage-related elements of a FPBfeature. If all elements of the record come from the same source (FPB originator name), then each of these four "other" originator fields can be populated with a value = "same".
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "MPRA Salem District BLM", "same"
Data Type	String (30)

7.4 FPBDROP

Geodatabase Name	FPBDROP
BLM Structured Name	Fish_Passage_Barrier_Drop_Number
Alias Name	Drop
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Distance from culvert outlet to the water surface of the pool below (feet, 1 decimal).
Required/Optional	Optional

Domain (Valid Values)	No Domain. Examples: 1.6, 8.5
Data Type	Double (3,1)

7.5 FPBEVMDFAD

Geodatabase Name	FPBEVMDFAD
BLM Structured Name	Fish_Passage_Barrier_Status_Full_Evaluation_Method_Description_Text
Alias Name	Status Full Eval Mth Desc
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Fish passage status evaluation method – description for "other full assessment".
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "ODFW Barrier Status Criteria", "ODFW Evaluation Method"
Data Type	String (100)

7.6 FPBEVMDPAD

Geodatabase Name	FPBEVMDPAD
BLM Structured Name	Fish_Passage_Barrier_Status_Partial_Evaluation_Method_Description_Text
Alias	Status Partial Eval Mth Desc
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Fish passage status evaluation method – description for "other partial assessment".
Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: "Professional judgement"
Data Type	String (100)

7.7 FPBFPASONM

Geodatabase Name	FPBFPASONM
BLM Structured Name	Fish_Passage_Barrier_Data_Source_Originator_Name_Text
Alias Name	Fish Pass Data Source

Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Name of Fish Passage data source originator/entity (if different from identification data originator). Passage data include the following attribute elements: fpbFPasSta, fpbStaEvDt, fpbStaEvMd,fpbFySta, fpbFyTy, fpbFySTy, fpbFyOrYr, fpbEvMdFAD, fpbEvMdPAD and fpbFyTyD. Data originators have the option of submitting separate source information for the location, description, ownership and fish passage-related elements of a FPB feature. If all elements of the record come from the same source (FPB originator name), then each of these four "other" originator fields can be populated with a value = "same".
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "Siuslaw Watershed Council", "same"
Data Type	String (30)

7.8 FPBFPASSTA

Geodatabase Name	FPBFPASSTA
BLM Structured Name	Fish_Passage_Barrier_Fish_Passage_Status_Code
Alias Name	Passage Status +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Status of Fish Passage at the FPB feature. Tracks passage status general to all species present and is not intended to store species-specific passage status information.
Required/Optional	Required
Domain (Valid Values)	dom_fpbFPasSta
Data Type	String (8)

7.9 FPBFTRID

Geodatabase Name	FPBFTRID
BLM Structured Name	Fish_Passage_Barrier_Feature_Identifier
Alias Name	Ftr Id
Inheritance	Inherited from Oregon Fish Passage Barriers

Feature Class Use/Entity Table	FPB_TBL
Definition	Framework unique identifier for the FPB feature (generated by the Horizontal Steward – Oregon Department of Fish and Wildlife). FPB features that obstruct or potentially obstruct fish passage will have unique identifiers assigned to them. Features such as fishways, which are designed to facilitate passage at an obstruction, will NOT have a separate passage identifier (fpbFtrID) value assigned. Fishways will be tracked via an attribute that is associated with a specific FPB feature.
Required/Optional	Optional
Domain (Valid Values)	No Domain.
Data Type	Long Integer

7.10 FPBFTRNMSR

Geodatabase Name	FPBFTRNMSR
BLM Structured Name	Fish_Passage_Barrier_Feature_Name_Source_Text
Alias Name	Ftr Name Src
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature name source (GNIS or other).
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: “other”
Data Type	String (5)

7.11 FPBFTRSTY

Geodatabase Name	FPBFTRSTY
BLM Structured Name	Fish_Passage_Barrier_Feature_SubType_Code
Alias Name	
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature subtype. Captures additional detail for the following feature types: dams, culverts, tide gates and fords.

	Tide gate codes are not mutually exclusive. If a tide gate is mechanically controlled, assign that code first, otherwise choose from the remaining categories.
Required/Optional	Optional
Domain (Valid Values)	dom_fpbFtrSTy
Data Type	String (30)

7.12 FPBFTRSTYD

Geodatabase Name	FPBFTRSTYD
BLM Structured Name	Fish_Passage_Barrier_Feature_Subtype_Description_Text
Alias Name	Ftr Subtype Desc
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature subtype – description for "other".
Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: "Oval"
Data Type	String (100)

7.13 FPBFTRTYD

Geodatabase Name	FPBFTRTYD
BLM Structured Name	Fish_Passage_Barrier_Feature_Type_Description_Text
Alias Name	Ftr Type Desc
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature type – description for "other".
Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: "Low water crossing"
Data Type	String (100)

7.14 FPBFYCRIT

Geodatabase Name	FPBFYCRIT

BLM Structured Name	Fish_Passage_Barrier_Fishway_Passage_Criteria_Code
Alias Name	Fishway Passage? +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Description of whether fishway meets fish passage criteria.
Required/Optional	Required
Domain (Valid Values)	dom_fpbFlag
Data Type	String (7)

7.15 FPBFYORYR

Geodatabase Name	FPBFYORYR
BLM Structured Name	Fish_Passage_Barrier_Origin_Year_Text
Alias Name	Origin Year
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	The year the fishway was built or installed (origin year).
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "1962", "2008"
Data Type	String (4)

7.16 FPBFYOWN

Geodatabase Name	FPBFYOWN
BLM Structured Name	Fish_Passage_Barrier_Fishway_Owner_Text
Alias Name	Fishway Owner
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Owner of the fishway.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "USFS", "The Nature Conservancy"

Data Type	String (60)

7.17 FPBFYSTA

Geodatabase Name	FPBFYSTA
BLM Structured Name	Fish_Passage_Barrier_Fishway_Status_Code
Alias Name	Fishway Status +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Fishway status. When fishway status is coded as "none", then the fishway type (fpbFyTy) and fishway subtype (fpbFySTy) should be coded as null.
Required/Optional	Required
Domain (Valid Values)	dom_fpbFySta
Data Type	String (20)

7.18 FPBFYSTY

Geodatabase Name	FPBFYSTY
BLM Structured Name	Fish_Passage_Barrier_Fishway_Subtype_Code
Alias Name	Fishway Subtype
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Fishway subtype. Fishways should only be associated with a culvert if there is an additional built structure for fish passage purposes (e.g., fish ladder, full-spanning weirs, or a roughened channel) that is not within or under the culvert barrel.
Required/Optional	Optional
Domain (Valid Values)	dom_fpbFySTy
Data Type	String (20)

7.19 FPBFYTY

Geodatabase Name	FPBFYTY

BLM Structured Name	Fish_Passage_Barrier_Fishway_Type_Code
Alias Name	Fishway Type
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Fishway type. Note: culverts alone, even if they provide fish passage, are not considered fishways. Fishways should only be associated with a culvert if there is an additional built structure for fish passage purposes (e.g., fish ladder, full-spanning weirs, or a roughened channel) that is not within or under the culvert barrel.
Required/Optional	Optional
Domain (Valid Values)	dom_fpbFyTy
Data Type	String (15)

7.20 FPBFYTYD

Geodatabase Name	FPBFYTYD
BLM Structured Name	Fish_Passage_Barrier_Fishway_Type_Description_Text
Alias Name	Fishway Type Desc
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Fishway type – description for “other”.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: “Unspecified ladder”, “Concrete jump pools”
Data Type	String (100)

7.21 FPBHEIGHT

Geodatabase Name	FPBHEIGHT
BLM Structured Name	Fish_Passage_Barrier_Height_Number
Alias Name	Height
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL

Definition	FPB feature height (feet, 1 decimal).
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: 1.5, 2.5
Data Type	Double (4,1)

7.22 FPBLAT

Geodatabase Name	FPBLAT
BLM Structured Name	Fish_Passage_Barrier_Latitude_Number
Alias Name	Lat +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Latitudinal planar component of point location on earth's surface, in a known projection system (documented in metadata).
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: 44.9743, 44.207
Data Type	Double (6,4)

7.23 FPBLENGTH

Geodatabase Name	FPBLENGTH
BLM Structured Name	Fish_Passage_Barrier_Length_Number
Alias Name	Length
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature length (feet, 1 decimal). This distance is the measure between the furthest upstream and furthest downstream parts of the feature. Most commonly it is measured for culverts but could also apply to other feature types.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: 20, 27
Data Type	Double (5,1)

7.24 FPBLOCDT

Geodatabase Name	FPBLOCDT
BLM Structured Name	Fish_Passage_Barrier_Location_Date_Text
Alias Name	Loc Date +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Most recent date of location data collection (YYYYMMDD). Data originators should populate date elements as completely as possible; however, partial date information will be accepted. If the month and year are known, use zeros to populate the day portion of the date element. If only the year is known, use zeros to populate the month and day portion of the date element. If the date is unknown, use zeros to populate the entire element (e.g. 20011200, 20010000, 00000000).
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: "20130401", "00000000"
Data Type	String (8)

7.25 FPBLOCMD

Geodatabase Name	FPBLOCMD
BLM Structured Name	Fish_Passage_Location_Method
Alias Name	Loc Method +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Method used to collect or generate location information.
Required/Optional	Required
Domain (Valid Values)	dom_fpbLocMd
Data Type	String (15)

7.26 FPBLOCMDD

Geodatabase Name	FPBLOCMDD
BLM Structured Name	Fish_Passage_Barrier_Location_Method_Description_Text
Alias Name	Loc Method Desc

Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature location collection method – description for "other".
Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: "Digitally derived (GIS road and stream intersections) with (resource grade) Field – GPS"
Data Type	String (100)

7.27 FPBLOCONM

Geodatabase Name	FPBLOCONM
BLM Structured Name	Fish_Passage_Barrier_Location_Data_Source_Originator
Alias Name	Loc Src Originator
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Name of location data source originator/entity (if different from identification data originator). Location data include the following attribute elements: fpbLong, fpbLat, fpbLocMthd, fpbLocAccu, fpbLocDt, fpbCrdDesc, fpbStrID, fpbStrMeas, fpbStrNm, fpbRdID, fpbRdMeas, fpbRdNm and fpbLocMdD. Data originators have the option of submitting separate source information for the location, description, ownership and fish passage-related elements of a FPB feature. If all elements of the record come from the same source (FPB originator name), then each of these four "other" originator fields can be populated with a value = "same".
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "same", "BLM"
Data Type	String (30)

7.28 FPBLONG

Geodatabase Name	FPBLONG
BLM Structured Name	Fish_Passage_Barrier_Longitude_Number
Alias Name	Long +
Inheritance	Inherited from Oregon Fish Passage Barriers

Feature Class Use/Entity Table	FPB_TBL
Definition	Longitudinal planar component of point location on earth's surface, in a known projection system (documented in metadata).
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: -123.513, -123.4271
Data Type	Double (8,4)

7.29 FPBLOWN

Geodatabase Name	FPBLOWN
BLM Structured Name	Fish_Passage_Barrier_Landowner_Text
Alias Name	Land Owner
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Owner of the land where the FPB feature is located.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "USBLM", "Private"
Data Type	String (60)

7.30 FPBLOWNTY

Geodatabase Name	FPBLOWNTY
BLM Structured Name	Fish_Passage_Barrier_Feature_Landowner_Type_Code
Alias Name	Landowner Type
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature landowner type.
Required/Optional	Optional
Domain (Valid Values)	dom_fpbOwnTy
Data Type	String (15)

7.31 FPBLOWNTYD

Geodatabase Name	FPBLOWNTYD

BLM Structured Name	Fish_Passage_Barrier_Feature_Landowner_Type_Description
Alias Name	Landowner Type Desc
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature landowner type – description for “other”.
Required/Optional	Optional
Domain (Valid Values)	No Domain.
Data Type	String (100)

7.32 FPBMLTFTR

Geodatabase Name	FPBMLTFTR
BLM Structured Name	Fish_Passage_Barrier_Multiple_Features_Code
Alias Name	Multiple Features? +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Flag for whether multiple FPB features exist at the site (yes/no/unknown). This is typically used to identify the existence of multiple culvert barrels at a single road–stream crossing.
Required/Optional	Required
Domain (Valid Values)	dom_fpbFlag
Data Type	String (7)

7.33 FPBMODDESC

Geodatabase Name	FPBMODDESC
BLM Structured Name	Fish_Passage_Barrier_Feature_Modification_Description_Text
Alias Name	Mod Desc
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Detailed description of the FPB feature modification.
Required/Optional	Optional

Domain (Valid Values)	No Domain. Examples: "boulder placement", "culvert improvement"
Data Type	String (254)

7.34 FPBMODDT

Geodatabase Name	FPBMODDT
BLM Structured Name	Fish_Passage_Barrier_Feature_Modification_Date_Text
Alias Name	Mod Date
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature modification date (YYYYMMDD). Note: passage modifications will be tracked via previous records that are stored in the database. Data originators should populate date elements as completely as possible; however, partial date information will be accepted. If the month and year are known, use zeros to populate the day portion of the date element. If only the year is known, use zeros to populate the month and day portion of the date element. If the date is unknown, use zeros to populate the entire element (e.g. 20011200, 20010000, 00000000).
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "19980900", "20140205"
Data Type	String (8)

7.35 FPBMODTY

Geodatabase Name	FPBMODTY
BLM Structured Name	Fish_Passage_Barrier_Feature_Modification_Type_Code
Alias Name	Mod Type
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Type of modification made to the FPB feature to improve fish passage.
Required/Optional	Optional
Domain (Valid Values)	dom_fpbModTy
Data Type	String (10)

7.36 FPBOFTRID

Geodatabase Name	FPBOFTRID
BLM Structured Name	Fish_Passage_Barrier_Originator_Feature_Identifier
Alias Name	Originator Ftr ID +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Unique ID for each FPB feature at a site, generated by the source originator / entity that provides the data. If the data originator identifies a site as having multiple features, it will be required to uniquely identify each of the FPB features at the site using the fpbOFtrID. If the site does not have multiple features, the fpbOSiteID and the fpbOFtrID may be the same.
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: "BLMEug2485", "BLMMed22372122168-B"
Data Type	String (40)

7.37 FPBONM

Geodatabase Name	FPBONM
BLM Structured Name	Fish_Passage_Barrier_Originator_Name_Text
Alias Name	Originator Name +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Name of source originator/entity that provides the data.
Required/Optional	Required
Domain (Valid Values)	dom_fpbONm
Data Type	String (30)

7.38 FPBOPERATE

Geodatabase Name	FPBOPERATE
BLM Structured Name	Fish_Passage_Barrier_Feature_Operator

Alias Name	Operator
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Operator of the FPB feature.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: "Oregon Department of Fish & Wildlife"
Data Type	String (60)

7.39 FPBOSITEID

Geodatabase Name	FPBOSITEID
BLM Structured Name	Fish_Passage_Barrier_Owner_Site_Identifier
Alias Name	Owner Site ID +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Unique ID for each FPB site, generated by the data originator
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: "BLMRos50", "5091"
Data Type	String (40)

7.40 FPBOWNONM

Geodatabase Name	FPBOWNONM
BLM Structured Name	Fish_Passage_Barrier_Ownership_Data_Originator_Name_Text
Alias Name	Ownership Originator Name
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Name of ownership data source originator/entity (if different from identification data originator). Ownership data include the following attribute elements: fpbOwn, fpbLOwn, fpbOperate, fpbFyOwn, fpbOwnTy, fpbLOwnTyp and fpbLOwnTyD. Data originators have the option of submitting separate source information for the location, description, ownership and fish passage-related elements of

	a FPB feature. If all elements of the record come from the same source (FPB originator name), then each of these four "other" originator fields can be populated with a value = "same".
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "MPRA Salem District BLM", "USFS"
Data Type	String (30)

7.41 FPBOWNTY

Geodatabase Name	FPBOWNTY
BLM Structured Name	Fish_Passage_Barrier_Feature_Owner_Type_Code
Alias Name	Owner Type
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature owner type.
Required/Optional	Optional
Domain (Valid Values)	dom_fpbOwnTy
Data Type	String (15)

7.42 FPBOWNTYD

Geodatabase Name	FPBOWNTYD
BLM Structured Name	Fish_Passage_Barrier_Feature_Owner_Type_Description_Text
Alias Name	Owner Type Desc
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature owner type – description for "other".
Required/Optional	Optional
Domain (Valid Values)	No Domain.
Data Type	String (100)

7.43 FPBRDID

Geodatabase Name	FPBRDID

BLM Structured Name	Fish_Passage_Barrier_Road_Identifier_Text
Alias Name	Road ID
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Road route identifier (Framework – OR Road Centerline).
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: 21, 21-4-20
Data Type	String (13)

7.44 FPBRDMILE

Geodatabase Name	FPBRDMILE
BLM Structured Name	Fish_Passage_Barrier_Road_Mile_Number
Alias Name	Road Mile
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Field measurement of road mile point (miles to 3 decimal places).
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: 3.879, 27.779
Data Type	Double (7,3)

7.45 FPBRDNM

Geodatabase Name	FPBRDNM
BLM Structured Name	Fish_Passage_Barrier_Road_Name
Alias Name	Road Name
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Road name from GNIS.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: “Snail Canyon Road”, “Beals Creek Road”

Data Type	String (50)

7.46 FPBREVDT

Geodatabase Name	FPBREVDT
BLM Structured Name	Fish_Passage_Barrier_Revision_Date_Text
Alias Name	Revision Date +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Date of data entry into or revision of the Framework dataset (YYYYMMDD). This will be populated as a complete date. Any change to the record would necessitate an update to the FPB data revision date (fpbRevDt) field. This field is only included in the publication dataset and is calculated from the version posted date.
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: "20140124", "20090729"
Data Type	String (8)

7.47 FPBRMVDT

Geodatabase Name	FPBRMVDT
BLM Structured Name	Fish_Passage_Barrier_Removed_Date_Text
Alias Name	Removed Date
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Date that FPB feature was removed (required only if removed). Note: FPB features that are removed will be tracked via previous records that are stored in the database. Data originators should populate date elements as completely as possible; however, partial date information will be accepted. If the month and year are known, use zeros to populate the day portion of the date element. If only the year is known, use zeros to populate the month and day portion of the date element. If the date is unknown, use zeros to populate the entire element (e.g. 20011200, 20010000, 00000000).

Required/Optional	Conditional
Domain (Valid Values)	No Domain. Examples: "20140124", "20090729"
Data Type	String (8)

7.48 FPBSITEID

Geodatabase Name	FPBSITEID
BLM Structured Name	Fish_Passage_Barrier_Site_Identifier
Alias Name	Site ID
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Framework unique identifier for the FPB site (generated by Framework data steward). Multiple, associated FPB features may constitute a single site. Each site must contain at least one FPB feature.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: 3, 4, 5
Data Type	Long Integer (9)

7.49 FPBSLOPE

Geodatabase Name	FPBSLOPE
BLM Structured Name	Fish_Passage_Barrier_Slope_Number
Alias Name	Slope
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature slope (percent, 1 decimal).
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: 1.5, 2
Data Type	Double (3,1)

7.50 FPBSTAEVDT

Geodatabase Name	FPBSTAEVDT
BLM Structured Name	Fish_Passage_Barrier_Status_Evaluation_Date_Text

Alias Name	Status Eval Date +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Date Fish Passage status was last evaluated. Data originators should populate date elements as completely as possible; however, partial date information will be accepted. If the month and year are known, use zeros to populate the day portion of the date element. If only the year is known, use zeros to populate the month and day portion of the date element. If the date is unknown, use zeros to populate the entire element (e.g. 20011200, 20010000, 00000000).
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: "19980900", "00000000", "20050000"
Data Type	String (8)

7.51 FPBSTAEVMD

Geodatabase Name	FPBSTAEVMD
BLM Structured Name	Fish_Passage_Barrier_Status_Evaluation_Method_Code
Alias Name	Status Eval Mthd +
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	Fish Passage status evaluation method. Where passage status (fpbFPasSta) = "Unknown", populate the fpbStaEvMd element as "NA".
Required/Optional	Required
Domain (Valid Values)	dom_fpbStaEvMd
Data Type	String (20)

7.52 FPBSTRNM

Geodatabase Name	FPBSTRNM
BLM Structured Name	Fish_Passage_Barrier_Stream_Name_Text
Alias Name	Stream Name
Inheritance	Inherited from Oregon Fish Passage Barriers

Feature Class Use/Entity Table	FPB_TBL
Definition	Stream name from GNIS.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "Hamilton Creek", "HAMBLOCK CREEK"
Data Type	String (50)

7.53 FPBWIDTH

Geodatabase Name	FPBWIDTH
BLM Structured Name	Fish_Passage_Barrier_Width_Number
Alias Name	Width
Inheritance	Inherited from Oregon Fish Passage Barriers
Feature Class Use/Entity Table	FPB_TBL
Definition	FPB feature width (feet, 1 decimal). This distance is the measure between stream banks. This includes dam crest length.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: 2, 2.5
Data Type	Double (5,1)

7.54 STRCT_GUID

Geodatabase Name	STRCT_GUID
BLM Structured Name	Fish_Passage_Barrier_Structure_Identifier
Inheritance	Inherited from entity STRUCTURES
Feature Class Use/Entity Table	FPB_TBL
Definition	Unique number identifier for the structure entity.
Required/Optional	Required
Domain (Valid Values)	No Domain.
Data Type	GUID

7.55 VERSION_NAME

Geodatabase Name	VERSION_NAME

BLM Structured Name	Geodatabase_Version_Text
Inheritance	Inherited from Entity ODF
Feature Class Use/Entity Table	All feature classes
Definition	Name of the corporate geodatabase version previously used to edit the record. InitialLoad = feature has not been edited in ArcSDE. Format: username.XXX-mmddyy-hhmmss = version name of last edit (hours might be a single digit; leading zeros are trimmed for hours only). XXX=theme abbreviation. Example: sfrazier.FIRE_POLY-121210-111034 Only appears in the transactional (edit) version. Public version (which is also the version used internally for mapping or analysis) does not contain this attribute.
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain
Data Type	String (50)

8. LAYER FILES (PUBLICATION VIEWS)

8.1 GENERAL

Master corporate feature classes/datasets maintained in the edit database (currently orsoedit) are "published" to the user database (currently orsovctr) in several ways:

- Copied completely with no changes (replicated).
- Copied with no changes except to omit one or more feature classes from a feature dataset.
- Minor changes made (e.g., clip, dissolve, union with ownership) in order to make the data easier to use. Feature classes that have been changed are indicated by "PUB" in their name. They are created through scripts that can be automatically executed and are easily rebuilt from the master (orsoedit) data whenever necessary.

Layer files are not new data requiring storage and maintenance but point to existing data. They have appropriate selection and symbolization for correct use and display of the data. They provide the guidance for data published on the web. Layer files are created by simple, documented processes, and can be deleted and recreated at any time.

8.2 SPECIFIC TO THIS DATASET

A publication dataset will be created for FPB that meets these requirements:

- Data from the FPB table will be joined to the Structures feature classes.
- Only Structure points that have a corresponding FPB record will be included in the publication dataset.
- An internal publication dataset will include Fish Passage Data from ODFW.
- An external publication dataset will only include BLM Fish Passage records.
- Proposed FPB will not be provided to the public.
- Natural features will be included in the publication dataset at some point in the future.

9. EDITING PROCEDURES

9.1 MANAGING OVERLAP (GENERAL GUIDANCE)

Refer to the ODF Structures data standard for managing overlap guidance for Structure points.

9.2 POLY/ARC TOPOLOGY (BOUNDARY GROUP DATASETS)

Refer to the ODF Structures data standard for topology guidance for Structure points.

9.3 EDITING QUALITY CONTROL

Refer to the ODF Structures data standard for editing quality control guidance for Structure points.

9.4 VERTICAL INTEGRATION

Refer to the ODF Structures data standard for vertical integration guidance for Structure points.

9.5 THEME SPECIFIC GUIDANCE

FPB should be snapped to GTRN roads and NHD Hydrography where possible, and should represent FPB structures that occur on streams where fish are present or historically present. Features in this theme may be moved to enforce coincidence with reference datasets. The original coordinates stored at the time of feature collection are stored in the FPB_LONG and FPB_LAT attributes.

10. OREGON/WASHINGTON DATA FRAMEWORK OVERVIEW

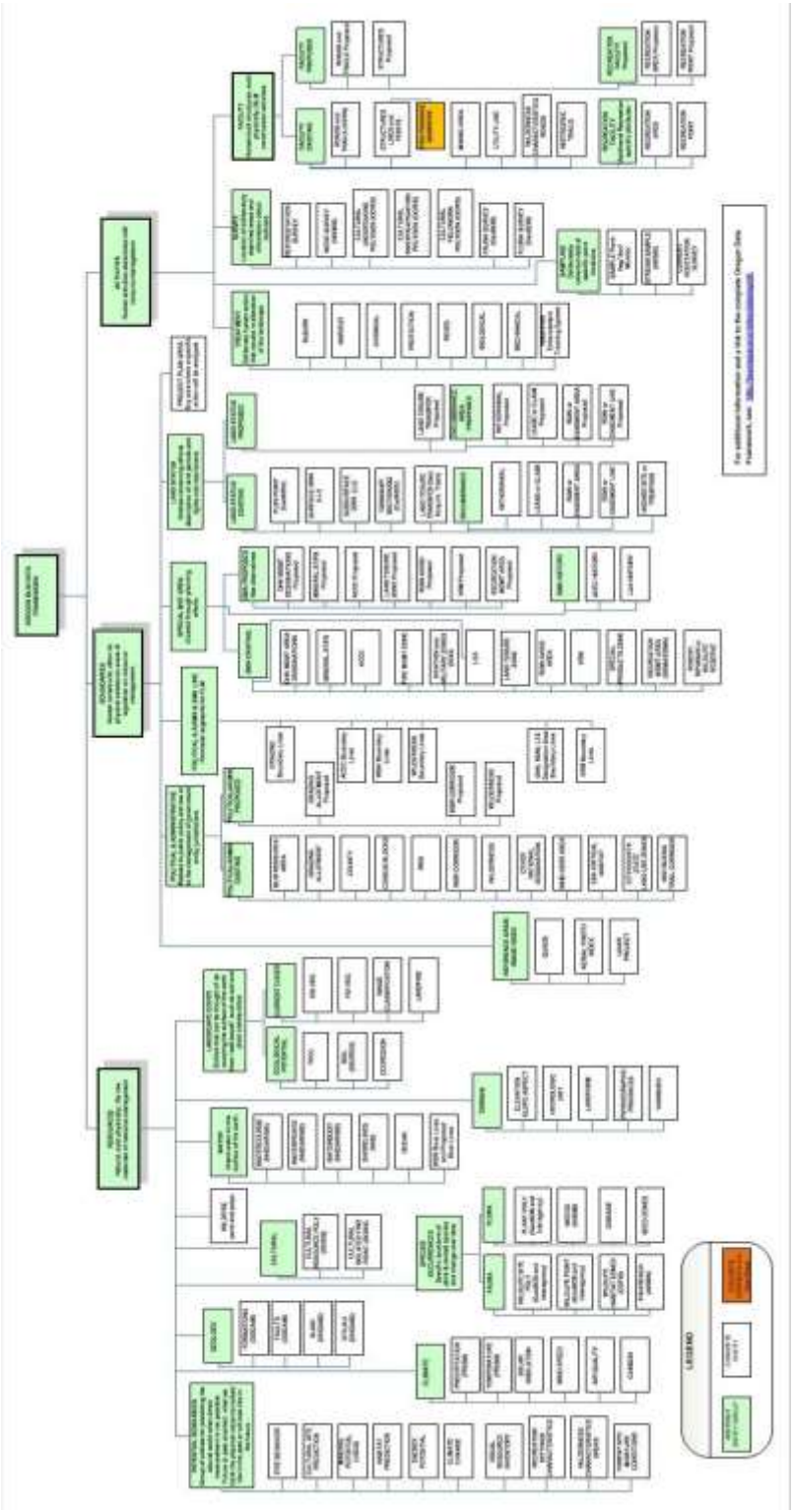

Figure 2 Oregon Data Framework Overview

11. ABBREVIATIONS AND ACRONYMS USED

(does not include abbreviations/acronyms used as codes for particular data attributes or domain values)

Abbreviations	Descriptions
ARC	GIS line feature
BLM	Bureau of Land Management, U.S. Department of the Interior
DOI	Department of the Interior
FOIA	Freedom of Information Act
FPB	Fish Passage Barrier
GIS	Geographic Information System
GPS	Global Positioning System
GTRN	Ground Transportation GIS dataset
NAD	North American Datum
NARA	National Archives and Records Administration
NHD	National Hydrography Dataset
POLY	GIS polygon feature
PUB	Publication
ODF	Oregon Data Framework
ODFW	Oregon Department of Fish and Wildlife
OR/WA	Oregon/Washington BLM Administrative State
USFS	United States Forest Service, U.S. Department of Agriculture
USGS	United States Geological Survey, U.S. Department of the Interior
SDE	Spatial Database Engine
WEB	Worldwide Web (internet)

Table 2 Abbreviations/Acronyms Used

APPENDIX A: DOMAINS (VALID VALUES)

These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site: http://www.blm.gov/or/datamanagement/index.php

For domains not listed at that site contact:

Eric Hiebenthal
OR/WA State Data Administrator
Bureau of Land Management
P.O. Box 2965
Portland, OR 97208
503-808-6565

A.1 dom_fpbFlag

(FPB flag code)

yes	yes
no	no
unknown	unknown

A.2 dom_fpbFPasSta

(Passage status code)

Blocked	Not passable
Partial	Partially passable – a barrier to at least some fish at some time.
Passable	Completely passable
UnkAnad	Unknown passage, within the range of anadromy
Unknown	Unknown

A.3 dom_fpbFtrSTy

(FPB feature secondary type code)

DamPermanent	Dam that is permanent throughout the year.
DamSeasonal	Dam that is in place for only part of the year.
OpenArch	Culvert, Open arch
OpenBox	Culvert, Open box
Round	Culvert, Round
PipeArch	Culvert, Pipe arch
Full Box	Culvert, Full Box
SideHingedAluminum	TideGate, Side-hinged orientation, aluminum material, not mechanically controlled
TopHingedIronSteel	TideGate, Top-hinged orientation, iron or steel material, not mechanically controlled

TopHingedWood	TideGate, Top-hinged orientation, wood material, not mechanically controlled
MechanicallyControlled	TideGate, Mechanically controlled.
Concrete	Ford, Concrete
Asphalt	Ford, Asphalt
NativeMaterial	Ford, On-site, native material
Off-site rock	Ford, Off-site rock
Other	Other
Unknown	Unknown

A.4 dom_fpbFySta

(Fishway status code)

FuncOkay	Functioning, passes fish
NeedsMaint	Not properly functioning, needs repair or maintenance
Abandoned	Abandoned fishway - no longer needed (e.g. fishway at natural falls)
None	No fishway
NoneMitigation	No fishway – mitigation provided
NoneExempt	No fishway – negligible current benefit
NoneConflict	Fishway not wanted – conflicts with other native fish management needs
Unknown	Unknown

A.5 dom_fpbFySTy

(Fishway secondary type code)

PoolVertSlot	Vertical slot
PoolAndWeir	Pool and weir
PoolWeirOrifice	Weir and orifice
PoolSecChan	Engineered secondary channel
PoolOther	Pool -other
BChuteAKSteep	Alaska Steeppass
BChuteDenil	Denil
BChuteSecChan	Engineered secondary channel
BChuteOther	Baffled chute - other
HybridPoolChute	Pool and chute
HybridSecChan	Engineered secondary channel
HybridOther	Hybrid - other
FlSpanRockWeir	Rock weirs
FlSpanLogWeir	Log weirs
FlSpanConcreteWeir	Concrete weirs
FlSpanOtherWeir	Full spanning - other weirs
FlSpanRoughChan	Roughened channel
FlSpanHybridChan	Hybrid channel
FlSpanOtherChan	Full spanning - other channel
TrapPass	Trap and pass – includes mechanical lifts / locks.

TrapHaul	Trap and haul

A.6 dom_fpbFyTy

(Fishway type code)

Pool	Pool style fishways have a series of distinct pools in which the energy of the flow entering each one is entirely dissipated prior to flowing to the next.
BaffledChute	Chutes or flumes with roughness, designed to reduce velocity, allowing fish passage.
Hybrid	Combination of multiple fishway types.
FullSpanning	A fishway that crosses the entire stream channel.
Trap	Structures that direct the stream flow to attract upstream migrants into holding
Other	Other known fishway type
Unknown	Unknown fishway type

A.7 dom_fpbLocMd

(FPB feature location collection method)

FieldGPS	Field – GPS
FieldQuad	Field – Record location on 7.5’ quad map
FieldOther	Field – other
DigDerive	Digitally derived (e.g. located on-screen using DOQ or DRG)
ExtInv	External inventory (e.g. National Inventory of Dams, GNIS)
ProfJudge	Located on map via professional judgement (first-hand knowledge of
Other	Other
Unknown	Unknown

A.8 dom_fpbModTy

(FPB modification type)

Baffles	Baffles - feature added to a culvert to increase the hydraulic roughness
StreamSim	A channel that simulates characteristics of the adjacent natural stream
Weirs	Weirs - feature built across a stream to raise its level
Other	Other
Unknown	Unknown

A.9 dom_fpbONm

(Originator Name)

USBLM-OR-Burns	USBLM-OR-Burns	
USBLM-OR-CoosBay	USBLM-OR-CoosBay	
USBLM-OR-Lakeview	USBLM-OR-Lakeview	
USBLM-OR-Medford	USBLM-OR-Medford	
USBLM-OR-NWOregon	USBLM-OR-NWOregon	
USBLM-OR-Prineville	USBLM-OR-Prineville	

USBLM-OR-Roseburg	USBLM-OR-Roseburg	
USBLM-OR-Vale	USBLM-OR-Vale	

A.10 dom_fpbOwnTy

(Owner type and Landowner type)

Federal	Federal
State	State
Tribal	Tribal
Private	Private
PubUtility	Public Utility
PubSpDistrict	Special district - water control, irrigation, drainage
County	County
City	City
Other	Other

A.11 dom_fpbStaEvMd

(Passage status evaluation method)

USFSBLMFullAssess	USFS / BLM full passage assessment (e.g. FishXing)
OtherFullAssess	Other full passage assessment
USFSBLMPartialAssess	USFS / BLM partial passage assessment (coarse screen filter)
OtherPartialAssess	Other partial passage assessment (including professional judgement)
ByDesign	By evaluation of design plans
Unknown	Unknown
NA	Not applicable