

**Oregon Fish Passage Barrier Data Standard
Bioscience Framework Implementation Team Workgroup
Meeting Summary
May 22, 2007**

Attendance List

| | | | | |
|-----------------------|----------------|--|--------------------------|--------|
| Jon Bowers | ODFW | | David Graves | CRITFC |
| Cedric Cooney | ODFW | | Bob Harmon | WRD |
| Stephen Cruise | Washington Co. | | Gail McEwen | OCP |
| Al Doelker | BLM | | Bobbi Riggers | OWEB |
| Tom Erkert (by phone) | USFS | | Mindi Shearer (by phone) | NOAA |
| Wade Fergus | ODOT | | Tom Stahl | ODFW |

Introductions

Gail McEwen asked if anyone had corrections or additions to the April meeting summary. No corrections or additions were proposed.

Review of Data Characteristics (p. 8, Version 0.3)

The group reviewed Section 3.0, Data Characteristics, of Version 0.3 of the Fish Passage Barrier Data Standard to discuss any questions or concerns that came up during the testing process.

3.1 Minimum Graphic Data Elements (p. 8-9, Version 0.3)

fpbLong (Longitude) and fpbLat (Latitude)

Jon Bowers clarified that the “8.4” field width meant eight places total (including the decimal), with four places after the decimal. The group agreed that four places after the decimal (which is accurate within 26 feet) is accurate enough to locate a feature in the field, and is within the error tolerance of a 1:24,000 data set.

David Graves noted that the description of latitude and longitude says “datum documented in metadata”. Jon Bowers clarified that data may be submitted using any projection system so long as the projection and the datum are documented in the metadata.

Tom Erkert noted that the guidance on using lines versus polygons is subjective, and asked if any additional guidance will be provided. Jon Bowers mentioned that points are the minimum required graphic elements. Lines and polygons are optional, and may be provided in addition to points. Jon said that details about how to manage line and polygon data and make this data accessible would need to be worked out in the future.

3.2 Minimum Attribute or Non-Graphic Data Elements (p. 9, Version 0.3)

fpbRevDate. No changes.

fbpOrigID. Tom Erkert commented that the 15 character field width for this element is too short to accommodate the computer generated identification numbers used by the Forest Service, which are up to 34 characters long. The group agreed to increase the field width to 40 characters.

The group discussed the fact that some databases (such as ODOT and OWEB data bases) do not use feature identification numbers, but instead they use site identification numbers. Jon Bowers stated that, in cases such as this, the Framework Data Steward will work cooperatively with Data Originators to ensure assignment of unique Originator feature ID's. Where only one set of coordinates exist for two or more features at a site, the same location would be used for each feature. This will result in multiple points at a single location within the Framework dataset.

In response to a concern expressed by Tom Stahl, the group agreed to amend the abbreviation for this element to "fbpOFeatID" to clarify that this element is a unique identifier for a feature.

fbpOSiteID. The group agreed to increase the field width to 40 characters to accommodate the identification numbers used by the Forest Service.

In response to a question by David Graves, Jon Bowers stated that if a site has only one feature the site id and the feature id may be the same. The group agreed that Jon should add a sentence to the business rule for "Fish Passage Barrier Originator Feature Identifier" (fbpOrigID) on page 20 of the standard to clarify this point.

The group discussed ways to improve consistency of "item names" for the data elements. Jon Bowers stated that his objective was to have item names that: 1) use no more than 10 characters and 2) are as intelligent as possible. The group agreed to use the following abbreviations in the item names:

- Fy for fishway
- Md for method
- Nm for name
- D for description
- Ev for evaluation
- Ty for type

The group also agreed that all item names should begin with "fbp". Jon Bowers will amend the following item names in Section 3.4, Optional Attribute or Non-graphic Data Elements so that they begin with fbp: LocMthdOD, FtypeOD, EvlMthOFAD, EvlMthOPAD, FwayTypOD, LownTypOD.

At this point, the group moved into a discussion on Fish Passage Barrier Subtypes (see notes below).

fbpLocMthd The group accepted the location collection / generation methods codes listed in Attachment C.

fbpLocAccu In response to a comment by Bobbi Riggers, Jon Bowers reminded the group that there is no minimum standard for accuracy at this point. However, Jon mentioned that a minimum standard for accuracy should be considered in the future.

Jon Bowers mentioned that, as a general rule, "9999" will be used to record "unknown" values.

fbpLocdate At a suggestion by Cedric Cooney, the group agreed that a business rule should be developed to instruct database users to record date information in text format, using "0's" to record any part of the date that is unknown. For example:

| | |
|----------|------------------------------------|
| 00000000 | Date completely unknown |
| 19630000 | Year known, month and date unknown |
| 19630800 | Month and year known, date unknown |
| 19630801 | Month, date and year known |

fpbFType Jon Bowers mentioned that the Oregon Department of Forestry is concerned about identifying “debris jams” as a fish passage barrier feature type. ODF is concerned that large woody debris placed for stream restoration purposes might be considered a “debris jam”.

The group agreed that debris jams did not need to be tracked as a separate feature type because they are not that numerous. However, Tom Stahl and others noted that “debris jam” is a category used by StreamNet, and that there should be some way for the database to record information about debris jams. The group agreed to the following approach:

- The reference to “debris jam” will be deleted from Section 1.4, Applicability and Intended Use of Standard and also from Section 2.1, Scope and Content of the Standard.
- Jon Bowers will develop a definition of “debris jam” based on two factors: 1) blockage of fish passage; and 2) persistence (debris jams that are expected to last three years or longer).
- The data dictionary will instruct database users to record debris jams in the “Other features” category.

Based on suggestions by Jon Bowers and Tom Stahl, the group agreed that Section 2.1 should also be amended to:

- Clarify that the scope of the standard does not include dikes, levees, or berms.
- Clarify that the scope of the standard does not include insufficient flow or any other water quality or quantity related barriers in a natural channel that are not associated with a feature.
- Amend the first sentence (section 1.4) to read “including but not limited to dams,.....” (addition underlined).

fpbFName The group agreed to increase the field width for this element from 30 characters to 50 characters. David Graves commented that the description referenced the “feature name from GNIS”. However, not all features have GNIS names. The group agreed that a business rule should be developed to direct database contributors to use GNIS names where they exist.

The group also agreed that it is important to be able to distinguish GNIS names from non-GNIS names so that a database record does not get changed to replace a GNIS name with a non-GNIS name. The group rejected the idea of requiring GNIS identification numbers in the database because some people do not have ready access to GNIS identification numbers. Instead, the group decided to add an optional element “Feature Name Source”. This element would have two codes to indicate the source of the feature name: 1) GNIS and 2) Other. The group decided that a description field for “Other” was not necessary.

fpbRmvDate The group agreed that dates will be recorded as described in the discussion of fpbLocdate above.

fpbMltFeat Approved as written.

fpbStatus The group discussed the issue of “passage relativity” (whether passage evaluations relate to all fish or just native migratory fish). Stephen Cruise commented that Washington County’s passage evaluations are based only on native migratory fish. Jon Bowers pointed out that the definition of “fish” in Appendix A of the data standard includes all fish, not just native migratory fish. Jon said that if a data

contributor uses native migratory fish to assess fish passage, they should explain that in their metadata. Tom Stahl pointed out that the question of passage relativity would be addressed during the assessment phase.

fpbStaEvDt The group agreed that dates will be recorded as described in the discussion of fpbLocdate above. In response to a question from Al Doelker, Jon Bowers clarified that the evaluation date (the last date someone looked at fish passage at a feature) could be the same as the location date (the last date someone recorded the location of the feature).

fpbEvalMth The group agreed to the codes for passage status evaluation method in Appendix C on p. 17 of Version 0.3 of the standard. Where passage status code is unknown, the status evaluation method should be “not applicable” or NA. Unknown will remain a choice for the status evaluation method as it is possible a status has been assigned, but the method for determining that status is unknown.

fpbFwaySta Jon Bowers pointed out that the fishway status codes (Appendix C, p. 18) contain codes for “NeedsMaint” (meets criteria, needs maintenance and repair) and “NeedsMainNonCrit” (Needs maintenance and repair and does not meet current criteria). However, it may not be possible to tell whether a fishway that needs maintenance and repair meets current criteria. Tom Stahl pointed out that the same issue exists with the FuncOkay (functioning) and FuncNonCrit (Functioning, does not meet current criteria).

The group agreed to modify the description of the FuncOkay and NeedsMaint codes. Each code description will indicate that either criteria are met or it is not known whether criteria are met. If it is known that the criteria are NOT met, then the two ...NonCrit codes will be used.

Proposed Fish Passage Barrier Feature Subtypes

The group reviewed two documents containing proposals for fish passage barrier subtypes: 1) a “Proposed Fish Passage Barrier Feature Type – Subtypes” document e-mailed on May 15 and 2) a draft revised Appendix C distributed at the meeting by Jon Bowers. Jon reminded the group that subtype codes are optional elements.

Culverts

Tom Erkert noted that the proposed culvert subtypes contain a mixture of culvert material and culvert shape. Tom recommended that the list of culvert subtypes be simplified, and be based only on culvert shape. Tom felt that detail on culvert material was unnecessary.

The group agreed on the following culvert subtypes:

- Open arch
- Open box
- Pipe arch
- Full box
- Round
- Other
- Unknown

Wade Fergus will get input from other ODOT staff on these subcategories and get back to Jon Bowers.

Dams

Bob Harmon mentioned that WRD maintains information on dams that are higher than 10 feet and store more than 9.2 acre feet. Bob mentioned that the NID (National Inventory of Dams) identification number is useful because it provides access to information on over 60 attributes of dams. Jon Bowers and Bob Harmon recommended using the NID identification number as the “Originator Feature ID” number for dams. The group agreed with this recommendation.

Jon Bowers also proposed adding the following subtypes for dams: “DamPermanent” and “DamSeasonal”. In response to a question by Mindi Shearer, Jon clarified that a “permanent” dam is a dam that is in place throughout the year. A “seasonal” dam is a dam that is in place for part of the year. An example of a seasonal dam would be a splashboard dam that blocks fish passage only when the splashboards are in place.

The group agreed to add include “DamPermanent” and “DamSeasonal” as subtypes.

Tidegates

The group agreed on the following subtypes:

- Mechanically controlled. At Tom Stahl’s suggestion, the group agreed that a business rule should be developed to require that all mechanically controlled tidegates be included in this subtype.
- Side-hinged aluminum
- Top-hinged iron steel
- Top-hinged wood
- Other. The group agreed that a description field should be provided.
- Unknown.

The group also agreed that the descriptions of the “side-hinged aluminum”, “top-hinged iron steel”, “top-hinged”, and “other” subtypes should state that these subtypes are not mechanically controlled.

Ford

The group agreed on the following subtypes:

- Concrete
- Asphalt
- Native material
- Off-site rock
- Other
- Unknown

3.3 Optional Graphic Data Elements (p. 9-10, Version 0.3)

Jon Bowers mentioned a comment he received from Mike Banach about using lines to identify fishways. Mike Banasch commented that lines should only be used to represent features. Since fishways are only an attribute of a feature, they should not be represented by lines. In response to this comment, Jon deleted the language in the standard that referred to using lines to identify fishways. The group agreed to this change.

3.4 Optional Attribute or Non-graphic Data Elements (p. 10, Version 0.3)

The group focused their discussion on the following issues:

- Ownership elements (fpbOwn through fpbOwnONam, on p. 10 of Version 0.3 of the Standard). In response to a question raised by Jon Bowers, the group reaffirmed their earlier decision to have these seven elements relating to ownership.
- Data dictionary. Jon Bowers mentioned that the group had previously discussed incorporating the data dictionary into Section 3.0, Data Characteristics. Jon's preference at this point would be to keep the data dictionary separate. The group agreed to this.
- fpbCrdDesc (location description). In response to a comment by David Graves, the group agreed to expand the width for this element from 50 to 250 characters. Jon Bowers will verify that the shape file allows for this.
- fpbHeight, fpbLength, fpbWidth. The group agreed to increase the field width for height from "3" to "4" characters. The group also agreed to amend the field width for each of these three items to include a decimal point. Jon Bowers will make other necessary amendments to allow lengths greater than 1000 feet and slopes greater than 9.9 to be recorded.

Next Steps

Jon Bowers will revise the standard to reflect the decisions at this meeting and will submit the standard to Gail Ewart by Friday, May 25. Jon will send all workgroup members a copy of the revised standard. Any further comments from workgroup members will need to follow the procedures that are spelled out when the document is posted to the Geospatial Enterprise Office web site for review.

Gail Ewart will submit the revised standard to the larger GIS community for review the week of May 28th..

The Forum will review the standard on June 27. Jon will prepare a PowerPoint presentation, using the format previously outlined by Gail Ewart. Group members should contact Jon if they want to see the presentation or have input on the presentation.

This is the last meeting of the workgroup. If the larger GIS community raises significant concerns about the standard during the 30 day review, Jon may want to reconvene the group by conference call to discuss the concerns. The workgroup may also be reconvened in the future to revisit or revise the standard.

"Seed money" to start compiling data may be available from OGIC later this summer.

Jon Bowers thanked the group members for participating in this effort.