# Oregon Fish Habitat Distribution Data Standard Bioscience Framework Implementation Team, Workgroup December 10, 2014 ODFW, Salem

Α	ge	n	d	а

10:00	Introductions		
10:05	Meeting Objectives		
10:10	Short History of OFHDDS Development and Database		
10:20	Overview of Procedures for Amending GIS Standards		
10:25	Review of Potential Revisions to the Standard		
	Schema Changes		
	Business Rules		
	<ul> <li>Definitions – any additions / refinements needed?</li> </ul>		
	<ul> <li>Other proposed changes?</li> </ul>		
11:45	Data Stewardship Plan – will include procedures for data stewardship and update.		
11:55	Wrap up, Assignments, Next Steps		
12:00	Close		

#### **Meeting Attendees**

Name	Agency	Location
Jon Bowers	ODFW	Salem
Tim Porter	ODFW	Salem
Joe Bernert	ORBIC	Salem
Bob Denouden	DAS-GEO	Salem
Shelly Moore	BLM	Salem
Mike Banach	PSMFC	Salem
Cedric Cooney	ODFW	Phone
Erin Gilbert	ODFW	Phone
Clara Dair	USFS	Phone
Malavika Bishop	DEQ	Phone
Aron Borok	DEQ	Phone
Randy Sounhein	DSL	Phone
David Hines	USFWS	Phone
Erin Butts	USFWS	Phone

Other agencies invited: NOAA Fisheries, ODOT, ODF, Cow Creek Tribe.

## **Meeting Objectives**

The primary meeting objectives were:

- 1) to provide an overview of the proposed amendments to the standard
- 2) to solicit input on other proposed amendments from the participating stakeholders
- 3) to discuss each of the proposed amendments at a cursory level
- 4) to identify any significant issues in need of being addressed for moving forward with the amendment process

## <u>History of Data / Standard Development</u>

An overview of the Oregon Fish Habitat Distribution Data (OFHDD) development history was provided, including the creation of the ODFW Fish Habitat Distribution Update Protocol document in 2005 and the endorsement / revision of the OFHDD standard in 2008 and 2011 respectively.

## **Amendment Procedures**

Due to the significance of proposed amendments to the minimum graphic elements of the standard, a determination was made that these constitute a *major* revision to the standard. The process for *major* amendments is spelled out in documentation on the DAS-GEO site and includes a 45 day comment period. If possible, the workgroup would like to complete this revision cycle by early to mid-March 2015 with the goal of concluding the comment period before the proposed amendments are presented at a standards forum roughly in early May.

## Overview / Discussion of Proposed Amendments

Other: Field Verification. BLM suggested that more detail was needed related to field verification of fish habitat (e.g. surveyor name, survey date, etc...). Some issues related to the granularity of the data were identified. For example, BLM only needs to know whether a fish species habitat / presence has been verified and does not care whether the Basis of a record is a protocol based survey or a non-protocol based survey, which are separate Basis categories in the current version of the standard.

Other: Alignment between ODF fish presence data and Oregon fish habitat distribution data. The group recognized there may be an opportunity to streamline business processes between these two separately maintained datasets.

Proposal: Replace Framework (LLID) based minimum graphic data elements with National Hydrography Dataset (NHD) graphic data elements. Discussion revolved around tradeoffs between added benefits of the NHD and the overhead for maintenance and updates. Since the NHD has been adopted as both a national and state hydrography data standard, despite concerns revolving around data maintenance, there was general agreement that the OFHDDS should be amended to align with the NHD. The minimum graphic elements related to the NHD were shared with the group. *No concrete decision regarding the adoption of the NHD was made.* One key issue that relates to the NHD is addressing the sustainability of digesting other agency's data and establishing processes to support that.

Permanent Identifier	Text	40	Barrier feature event record permanent ID (GUID).	
			Maintained by the Hydrography Event Management (HEM)	
			tools.	
ReachCode	Text	14	The ReachCode value for the NHD Flowline record that the	
			event record references. Maintained by the HEM tools.	
FMeasure	Double	8.3	The measure along the NHD Flowline record where the linear	
			event record begins. Maintained by the HEM tools.	
TMeasure	Double	8.3	The measure along the NHD Flowline record where the linear	
			event record ends. Maintained by the HEM tools.	
EventDate	Date	8	The date the event record was created or last modified.	
	100000	A	Maintained by the HEM tools.	
ReachSMDate	Date	8	The reach spatial modification date. Maintained by the HEM	
			tools.	
ReachResolution	Integer	4	The resolution of the NHD source data.	

Proposal: Add an attribute element for survey date. The BLM shared they track the date of field verification, plus the person who conducted the survey. For ODFW, the person is likely not an important piece of information, but rather the project name of survey protocol is more important to track related to field verification. The USFS has a requirement that all surveys be placed in the Natural Resource Information System (NRIS). When the same reach is surveyed multiple times, each survey must be maintained. The OFHDDS is primarily focused on maintaining the most recent survey information for any particular reach and (currently) does not attempt to maintain time series survey information. There is a need to create a business rule for utilizing the most recent survey information where reaches have been surveyed multiple times. The USFWS stores point observations of pacific lamprey and then link back to the habitat dataset. PSMFC suggested potentially separating observation-based data from the "extrapolated" data of which the OFHDDS is mostly based on. ORBIC manages point observation data with relationships to a reference system. They also suggested looking at the DEQ managed 303d data which takes extensive point observations of water quality and converts those into a linear representation. ODFW and DEQ staff will meet offline to follow up on what methods DEQ employs that may be relevant to the OFHDDS. In general, for the OFHDDS version 3.0 update, the workgroup agreed that the separation of these two data types was beyond the scope of the amendments that are intended to be addressed at this time.

Proposal: Add an attribute element to flag whether an OFHDDS record meets the criteria for native migratory fish. ODFW as well as other entities have the need to understand whether any particular OFHDDS record qualifies as a native migratory fish (ie. triggers fish passage statutes). Oregon administrative rules need to be reviewed to determine whether native fish that have been reintroduced would qualify as native migratory fish.

Proposal: Add one or more attributes to track the seasonality of habitat use. This proposal was described generally as it relates to supporting the development of temperature standards. Due to little time remaining in the meeting, little discussion occurred around the viability of amending the standard to support this business need.

Proposal: Add an attribute element to track historical habitat use. This proposal was described generally as it relates to supporting applications such as the designation of essential salmonid habitat, if at some point in the future that were to include historical habitat.

Proposal: Maintain LLID / whole stream route reference. With a short discussion, this proposal was dropped from consideration.

Proposal: Update the business rule for what constitutes Category I species habitat. Redband trout has been comprehensively mapped statewide and should now be included as Category I species habitat. There was no dissention with this decision.

Proposal: Add a business rule to clarify minimum habitat use thresholds for creation of records within the database. In cases where observations are made of species that may or may not be part of a viable population, a rule or set of rules need to be established to determine if / when new records are created.

Proposal: Add a business rule to clarify what information is necessary to implement a change to habitat use designations (e.g. change from migration to rearing). The current business rules focus on adding new records, but do not provide sufficient detail for modifying existing records, especially as it relates to habitat use changes.

Proposal: Modify Origin attribute domain description to be relative to Species Mgt. Unit, Distinct Population Segment or Evolutionary Significant Unit *instead* of subbasin. ODFW will discuss this change internally along with Joe Bernert from ORBIC and will strive to suggest updated language by the next meeting. There is also a need to clean up the Origin code and description language related to the NonNativeReintro category.

Proposal: Clarify rules for origin coding above historically impassable natural waterfalls where passage was provided via a fishway. This was only briefly discussed and may be at too fine a level of resolution to generate much interest.

Proposal: Clarify historical habitat framework language to better align with acceptable thresholds for intrinsic extent. Over the past several years it has been noted that intrinsic potential (and extent) for anadromous species appears to overestimate their historical habitat. The idea behind this proposal is that the thresholds for informing intrinsic extent could potentially be refined to more accurately reflect actual distribution. It's unclear whether this is even possible to achieve within the bounds of this update process.

Miscellaneous: The question was raised as to whether there are national or international standards relating to species observations. The observation data model (ODM) and NatureServe were mentioned as some examples to evaluate.

#### Data Stewardship Plan

Some discussion revolved around the question of what procedure related content is appropriate for inclusion directly in the standard and what is appropriate for inclusion within a data stewardship plan. Bob DenOuden will plan to follow up on this topic with Jon Bowers.

#### **Next Meeting**

A Doodle poll will be distributed to schedule the next meeting between January 12<sup>th</sup> and 23rd.