

## **Supplement 7.2. Metadata underlying data used in the Chapter 7 examples**

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This supplement provides metadata obtained from the Oregon Department of Fish and Wildlife (ODFW). Specifically, this supplement provides the ODFW Oregon Plan Habitat Metadata. See Supplement 7.1 for additional details.

metadata\_OP Habitat Reach Summary 98-08 STATNAT.txt  
 /Identification\_Information: /  
   /Citation: /  
     /Citation\_Information: /  
       /Originator: / ODFW  
       /Publication\_Date: / Unpublished Material  
       /Publication\_Time: / Unknown  
       /Title: / Oregon plan habitat reach summaries 1998-2007  
       /Edition: / 1  
   /Description: /  
     /Abstract: /  
       Aquatic habitat data are summarized at the reach (500-1000m length) scale. These sites represent points drawn from a probability sample using the Generalized Random Tessellation Stratification (GRTS) design. Field methods can be found at in Moore et al. 2007 at [http://oregonstate.edu/dept/ODFW/freshwater/inventory/methods\\_reports.htm](http://oregonstate.edu/dept/ODFW/freshwater/inventory/methods_reports.htm)  
     /Purpose: /  
       This dataset was developed to aid in monitoring and describing the status and trend in coastal coho salmon habitat under the Oregon Plan for Salmon and Watersheds.  
   /Time\_Period\_of\_Content: /  
     /Time\_Period\_Information: /  
       /Single\_Date/Time: /  
         /Calendar\_Date: / January 2008  
         /Time\_of\_Day: / unknown  
   /Currentness\_Reference: / ground condition  
   /Status: /  
     /Progress: / In work  
     /Maintenance\_and\_Update\_Frequency: / Annually  
   /Spatial\_Domain: /  
     /Bounding\_Coordinates: /  
       /West\_Bounding\_Coordinate: / -124.565935  
       /East\_Bounding\_Coordinate: / -120.963350  
       /North\_Bounding\_Coordinate: / 46.200890  
       /South\_Bounding\_Coordinate: / 41.954316  
   /Keywords: /  
     /Theme: /  
       /Theme\_Keyword\_Thesaurus: /  
         REQUIRED: Reference to a formally registered thesaurus or a similar authoritative source of theme keywords.  
       /Theme\_Keyword: /  
         Oregon Plan, instream habitat, reach scale, aquatic habitat, channel morphology, substrate, instream wood, riparian  
   /Access\_Constraints: / None  
   /Use\_Constraints: /

metadata\_OP Habitat Reach Summary 98-08 STATNAT.txt  
ODFW should be contacted and cited if any part of these data are used.

/Point\_of\_Contact: /

/Contact\_Information: /

/Contact\_Person\_Primary: /

/Contact\_Person: / Kim Jones

/Contact\_Organization: / ODFW

/Contact\_Position: /

Project Leader - Aquatic

Habitat Inventories

/Contact\_Address: /

/Address\_Type: / mailing and physical address

/Address: / 28655 Hwy. 34

/City: / Corvallis

/State\_or\_Province: / OR

/Postal\_Code: / 97333

/Country: / U. S. A.

/Contact\_Voice\_Telephone: / 541-757-4263 ext. 260

/Contact\_Facsimile\_Telephone: / 541-757-4102

/Contact\_Electronic\_Mail\_Address: / kim.jones@oregonstate.edu

/Hours\_of\_Service: / M-F, 8-5

/Native\_Data\_Set\_Environment: /

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 2;

ESRI ArcCatalog 9.1.0.780

/Cross\_Reference: /

/Citation\_Information: /

/Originator: / Kara Anlauf

/Publication\_Date: / Unpublished Material

/Publication\_Time: / Unknown

/Title: / Oregon Plan Habitat 1998-2007

-----  
/Data\_Quality\_Information: /

/Lineage: /

/Source\_Information: /

/Source\_Time\_Period\_of\_Content: /

/Source\_Currentness\_Reference: / ground condition

/Process\_Step: /

/Process\_Description: / Data collected in the field during  
June-September 1998-2007.

/Process\_Step: /

/Process\_Description: / Data summarized at the reach scale.

-----  
/Entity\_and\_Attribute\_Information: /

/Detailed\_Description: / NOTE: A habitat unit refers to the channel  
geomorphic unit defined by stream morphology

metadata\_OP Habitat Reach Summary 98-08 STATNAT.txt  
 characteristics (flow, substrate). These include (pools (broken into  
 scour or dammed), riffles, rapids, glides,  
 cascades, backwaters, alcoves, isolated pools, dry units and puddled  
 units). Also, Where pools are noted, this  
 includes all dammed and scour pools observed in the survey.

/Entity\_Type: /

/Entity\_Type\_Label: / OP98\_07

/Attribute: /

/Attribute\_Label: / GCG

/Attribute\_Definition: / Gene Conservation Group.

/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / ID\_NUM

/Attribute\_Definition: / Unique site id number across GCG.

/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / YEAR

/Attribute\_Definition: / Year survey was completed.

/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / TIERLEVEL

/Attribute\_Definition: /

pertains to Tier level for survey. Defines distribution of sampling as it  
 current coho salmon spawning and rearing distribution.

/Attribute\_Definition\_Source: / ODFW

/Attribute\_Domain\_Values: /

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / 2

/Enumerated\_Domain\_Value\_Definition: / Spawning only.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / 3

/Enumerated\_Domain\_Value\_Definition: / Rearing only.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / 4

Outside the current /Enumerated\_Domain\_Value\_Definition: / Habitat only.  
 distribution of coho salmon.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / 5

/Enumerated\_Domain\_Value\_Definition: / Spawning, rearing

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / 7

/Enumerated\_Domain\_Value\_Definition: / Rearing and  
 habitat

metadata\_OP Habitat Reach Summary 98-08 STATNAT.txt  
/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / 9  
/Enumerated\_Domain\_Value\_Definition: / Spawning,  
rearing, habitat

/Attribute: /

/Attribute\_Label: / S\_LEVEL  
/Attribute\_Definition: / S-level designating survey frequency.  
/Attribute\_Definition\_Source: / ODFW  
/Attribute\_Domain\_Values: /

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s0  
/Enumerated\_Domain\_Value\_Definition: / Annual  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every year.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s10  
/Enumerated\_Domain\_Value\_Definition: / Three year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every three years starting in 1999.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s20  
/Enumerated\_Domain\_Value\_Definition: / Three year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every three years starting in 2000.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s30  
/Enumerated\_Domain\_Value\_Definition: / Three year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every three years starting in 2001.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s11  
/Enumerated\_Domain\_Value\_Definition: / Nine year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every nine years starting in 1999.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s21  
/Enumerated\_Domain\_Value\_Definition: / Nine year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every nine years starting in 2000.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s31  
/Enumerated\_Domain\_Value\_Definition: / Nine year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every nine years starting in 2001.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s12

metadata\_OP Habitat Reach Summary 98-08 STATNAT.txt  
/Enumerated\_Domain\_Value\_Definition: / Nine year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every nine years starting in 2002.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s22  
/Enumerated\_Domain\_Value\_Definition: / Nine year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every nine years starting in 2003.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s32  
/Enumerated\_Domain\_Value\_Definition: / Nine year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every nine years starting in 2004.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s13  
/Enumerated\_Domain\_Value\_Definition: / Nine year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every nine years starting in 2004.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s23  
/Enumerated\_Domain\_Value\_Definition: / Nine year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every nine years starting in 2005.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s33  
/Enumerated\_Domain\_Value\_Definition: / Nine year  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed every nine years starting in 2006.

/Enumerated\_Domain: /

/Enumerated\_Domain\_Value: / s4X  
/Enumerated\_Domain\_Value\_Definition: / Once only  
/Enumerated\_Domain\_Value\_Definition\_Source: /  
Surveyed once only in the 27 year monitoring period.

/Attribute: /

/Attribute\_Label: / TARGET  
/Attribute\_Definition: / Designated as Target or Non-target.  
/Attribute\_Definition\_Source: / ODFW

/Codeset\_Domain: /

bounds of the  
/Enumerated\_Domain\_Value: / Target  
/Enumerated\_Domain\_Value\_Definition: / Within the defined  
current sampling distribution.

/Codeset\_Domain: /

bounds of the  
/Enumerated\_Domain\_Value: / Non-target  
/Enumerated\_Domain\_Value\_Definition: / Outside the defined  
current sampling distribution.

metadata\_OP Habitat Reach Summary 98-08 STATNAT.txt

/Attribute: /

/Attribute\_Label: / RESPONSE

/Attribute\_Definition: /

/Attribute\_Definition\_Source: / ODFW

/Codeset\_Domain: /

/Enumerated\_Domain\_Value: / Response

/Enumerated\_Domain\_Value\_Definition: / We obtained data from this survey.

/Codeset\_Domain: /

/Enumerated\_Domain\_Value: / Non-response

/Enumerated\_Domain\_Value\_Definition: / We did not obtain data from this survey.

/Attribute: /

/Attribute\_Label: / STATUS

/Attribute\_Definition: /

/Attribute\_Definition\_Source: / ODFW

/Codeset\_Domain: /

/Enumerated\_Domain\_Value: / Surveyed

/Enumerated\_Domain\_Value\_Definition: / This site was surveyed and the point was encompassed.

/Codeset\_Domain: /

/Enumerated\_Domain\_Value: / Not surveyed

/Enumerated\_Domain\_Value\_Definition: / This site was not surveyed.

/Attribute: /

/Attribute\_Label: / REASON

/Attribute\_Definition: / Reason site was non-target or not surveyed.

/Attribute\_Definition\_Source: / ODFW

/Codeset\_Domain: /

/Enumerated\_Domain\_Value: / Cover error, data lost, denied access, ditch, inaccessible, lake, marsh, N/A, no contact, no creek bed, too small, tidal, time, too big, unknown.

/Attribute: /

/Attribute\_Label: / FEAT\_NAME

/Attribute\_Definition: / Stream name from 1:100K topographic map.

/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / SURV\_DATE

/Attribute\_Definition: / Date surveyed was completed.

/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / PRI CHNLL

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    metadata_OP Habitat Reach Summary 98-08 STATNAT.txt
/Attribute_Definition: /
    Length of primary channel in meters. Defined as mainstem
    and does not include secondary channels, subunits, or
    tributaries.
/Attribute_Definition_Source: / ODFW

/Attribute: /

    /Attribute_Label: / SECCHNLL
/Attribute_Definition: / Length of secondary channels in meters.
/Attribute_Definition_Source: / ODFW

/Attribute: /

    /Attribute_Label: / PRI CHNAREA
/Attribute_Definition: / Area of primary channel (m2).
/Attribute_Definition_Source: / ODFW

/Attribute: /

    /Attribute_Label: / SECCHNAREA
/Attribute_Definition: / Area of secondary channel (m2).
/Attribute_Definition_Source: / ODFW

/Attribute: /

    /Attribute_Label: / PCTSCCHNLA
/Attribute_Definition: /
    Percent of the total area of the stream in the reach
    that is associated with secondary channels.
/Attribute_Definition_Source: / ODFW

/Attribute: /

    /Attribute_Label: / GRADI ENT
/Attribute_Definition: / Average of gradient (percent slope) for
reach.
/Attribute_Definition_Source: / ODFW

/Attribute: /

    /Attribute_Label: / VWI RCH
/Attribute_Definition: /
    Valley Width Index. The ratio of the active channel to
    the valley floor.
/Attribute_Definition_Source: / ODFW

/Attribute: /

    /Attribute_Label: / WI DTH
/Attribute_Definition: / Channel width in meters.
/Attribute_Definition_Source: / ODFW

/Attribute: /

    /Attribute_Label: / ACW
/Attribute_Definition: /
    Active or bankfull channel width in meters. This is the distance
across the channel
    at "bankfull" flow. Bankfull flow is defined as the level
    the stream flow attains every 1.5 years on average.
/Attribute_Definition_Source: / ODFW

/Attribute: /

    /Attribute_Label: / ACH

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metadata\_OP Habitat Reach Summary 98-08 STATNAT.txt  
 /Attribute\_Definition: / Active or bankfull channel height in meters.  
 /Attribute\_Definition\_Source: / ODFW  
 /Attribute: /  
 /Attribute\_Label: / NOPPOOLS  
 /Attribute\_Definition: / Combined count of scour and dammed pools within the reach.  
 /Attribute\_Definition\_Source: / ODFW  
 /Attribute: /  
 /Attribute\_Label: / PCTPOOLS  
 /Attribute\_Definition: / Combined percentage (by area) of scour and dammed pools in the reach.  
 /Attribute\_Definition\_Source: / ODFW  
 /Attribute: /  
 /Attribute\_Label: / PCTSCP00L  
 /Attribute\_Definition: / Percentage of habitat units in the reach that are scour pools.  
 /Attribute\_Definition\_Source: / ODFW  
 /Attribute: /  
 /Attribute\_Label: / PCTSWP00L  
 /Attribute\_Definition: / Percentage of habitat units in the reach that are slackwater pools.  
 /Attribute\_Definition\_Source: / ODFW  
 /Attribute: /  
 /Attribute\_Label: / SCRPOOLD  
 /Attribute\_Definition: / Average depth of scour pools in meters.  
 /Attribute\_Definition\_Source: / ODFW  
 /Attribute: /  
 /Attribute\_Label: / RIFFLEDEP  
 /Attribute\_Definition: / Average depth of riffles and rapids in meters. A blank cell indicates that no riffle or rapids were observed in the survey.  
 /Attribute\_Definition\_Source: / ODFW  
 /Attribute: /  
 /Attribute\_Label: / LRGBLDR  
 /Attribute\_Definition: / Count of large boulders (> or equal to 0.5m diam).  
 /Attribute\_Definition\_Source: / ODFW  
 /Attribute: /  
 /Attribute\_Label: / PCTSNDOR  
 /Attribute\_Definition: / Average percentage of the total wetted habitat unit area consisting of sand, silt, and organics in surface substrate of all units.  
 /Attribute\_Definition\_Source: / ODFW  
 /Attribute: /

/Attribute\_Label: / PCTGRAVEL  
/Attribute\_Definition: /  
Average percentage of the total wetted habitat unit area  
consisting of gravel  
in surface substrate of all units.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / PCTBEDROCK  
/Attribute\_Definition: /  
Average percentage of the total wetted habitat unit area  
consisting of  
bedrock in surface substrate of all units.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / POOL1P\_KM  
/Attribute\_Definition: /  
Number of pools greater than 1 meter in depth per kilometer of  
total  
stream length.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / CWPPOOL  
/Attribute\_Definition: /  
Pool frequency or channel widths per pool. Calculated by taking  
the total reach  
length and dividing by the total number of pools.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / PCTSHADE  
/Attribute\_Definition: /  
Amount of shade provided to a stream by riparian vegetation and  
topography  
(percentage of 180 degrees).  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / PCTEROSION  
/Attribute\_Definition: /  
Percentage reach length of channel units with banks classified  
as eroding.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / PCTUNDERC  
/Attribute\_Definition: / Undercut bank unit average as percent of  
unit length.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / LWDPIECE1  
/Attribute\_Definition: /  
Pieces of large woody debris (LWD) > or equal to 3 m in length  
and 0.15m in diameter  
per 100 meters of primary channel length.

metadata\_OP Habitat Reach Summary 98-08 STATNAT.txt  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / LWDVOL1  
/Attribute\_Definition: /  
Volume of LWD per 100 meters of primary channel length. Volume is  
calculated as the total wood volume  
 $((length * (pi * diameter / 2)^2) / 100)$  divided by 100 m and summarized by  
reach length.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / KEYLWD1  
/Attribute\_Definition: /  
Key pieces of LWD per 100m of primary channel length. A key piece  
is defined as woody debris >  
or equal to 12m in length and 0.60m in diameter.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / RESIDPD  
/Attribute\_Definition: / Average residual pool depth in meters.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / LRGBLDR1  
/Attribute\_Definition: / Large boulders (> or equal to 0.5m  
diameter)/100m total channel length.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / CON\_20PLUS  
/Attribute\_Definition: /  
The total number of conifers > or equal to 20in (50 cm) dbh  
(diameter at breast height) per 1,000ft of  
stream length.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / CON\_36PLUS  
/Attribute\_Definition: /  
The total number of conifers > or equal to 36in (90 cm) dbh  
(diameter at breast height) per 1,000ft of  
stream length.  
/Attribute\_Definition\_Source: / ODFW

/Attribute: /

/Attribute\_Label: / BVR\_DAM  
/Attribute\_Definition: / Beavers dams. Total count of beaver dams  
observed in each reach.  
/Attribute\_Definition\_Source: / ODFW

-----  
/Distribution\_Information: /

/Resource\_Description: / Downloadable Data  
/Standard\_Order\_Process: /

metadata\_OP Habitat Reach Summary 98-08 STATNAT.txt  
/Digital\_Form: /

/Digital\_Transfer\_Information: /

/Transfer\_Size: / 0.201

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/Metadata\_Reference\_Information: /

/Metadata\_Date: / 20080521

/Metadata\_Contact: /

/Contact\_Information: /

/Contact\_Organization\_Primary: /

/Contact\_Organization: / ODFW

/Contact\_Person: / Kim Jones

/Contact\_Address: /

/Address\_Type: / mailing and physical address

/Address: / 28655 Hwy. 34

/City: / Corvallis

/State\_or\_Province: / OR

/Postal\_Code: / 97330

/Contact\_Voice\_Telephone: / 541-754-4263 ext. 260

/Metadata\_Standard\_Name: / FGDC Content Standards for Digital  
Geospatial Metadata

/Metadata\_Standard\_Version: / FGDC-STD-001-1998

/Metadata\_Time\_Convention: / local time

/Metadata\_Extensions: /

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