Data Dictionary for CNH IDU Attributes

July 17, 2011

The polygons of this coverage are called Integrated Decision Units, IDUs.
Field names for the Eugene study area attributes are in parentheses.

AREA

Description
Area of polygon

Values or codes
Square meters

Source
Automatically generated

PERIMETER

Description
Length of polygon perimeter

Values or codes
Meters

Source
Automatically generated

LIDUS5# (**EIDU4#**)

Description
Attribute file one based record number

Values or codes
Integer

Source
Automatically generated

LIDUS5-ID (**EIDU4-ID**)

Description
Attribute file zero based polygon number

Values or codes
Integer

Source
Automatically generated

SLOPEAV

Description
The area weighted average topographic slope.

Values or codes
Percent slope.

Source
Derived from the PNW-ERC 30m SLOPEPI grid.

ASPECT

Description
The area weighted dominant topographic aspect classification.

Values or codes

1	Flat
2	0 – 45 degrees
3	46 – 90 degrees
4	91 – 135 degrees
5	136 - 180 degrees
6	181 – 225 degrees
7	226 – 270 degrees
8	271 – 315 degrees
9	316 – 360 degrees

Source
Derived from the PNW-ERC 30m ASPCTI grid.

CURSI

Description
Site Index

Values or codes
Site index codes are an ordinal scale, here treated as a continuous measure. When multiple values occur in the area of a single IDU, they are averaged on area weighted basis.

Source
Site index for Douglas-fir based on King's (1966) curve with a 50-yr base age. Site index was estimated from the properties of soil polygons mapped by the Natural Resource Conservation Service. For details about site index contact Peter Gould (pgould@fs.fed.us) or Connie Harrington (charrington@fs.fed.us)

SOILACCC

Description
Soil agricultural capability class, non-irrigated

Values or codes

Definitions

Land capability classification is a system of grouping soils primarily on the basis of their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time.

Capability class is the broadest category in the land capability classification system. Class codes I (1), II (2), III (3), IV (4), V (5), VI (6), VII (7), and VIII (8) are used to represent both irrigated and nonirrigated land capability classes.

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or require very careful management, or both.

Class 5 soils have little or no hazard of erosion but have other limitations, impractical to remove, that limit their use mainly to pasture, range, forestland, or wildlife food and cover.

Class 6 soils have severe limitations that make them generally unsuited to cultivation and that limit their use mainly to pasture, range, forestland, or wildlife food and cover.

Class 7 soils have very severe limitations that make them unsuited to cultivation and that restrict their use mainly to grazing, forestland, or wildlife.

Class 8 soils and miscellaneous areas have limitations that preclude their use for commercial plant production and limit their use to recreation, wildlife, or water supply or for esthetic purposes.

The letters associated with the capability class represent the capability subclass which describes the main limitation or hazard associated with the soil.

'e' - soils for which the susceptibility to erosion is the dominant problem or hazard affecting their use. Erosion susceptibility and past erosion damage are the major soil factors that affect soils in this subclass.

'w' - soils for which excess water is the dominant hazard or limitation affecting their use. Poor soil drainage, wetness, a high water table, and overflow are the factors that affect soils in this subclass.

's' - soils that have soil limitations within the rooting zone, such as shallowness of the rooting zone, stones, low moisture-holding capacity, low fertility that is difficult to correct, and salinity or sodium content.

'c' - soils for which the climate (the temperature or lack of moisture) is the major hazard or limitation affecting their use.

‘x’ - unknown

Source
Derived from the SCLNIRR field of the PNW-ERC WRBSOILS map, the area

weighted dominant class is calculated. SCLNIRR was derived from the NRCS soils SSURGO and STATSGO coverages, documentation available at: http://soils.usda.gov/technical/handbook/contents/part622.html

SEPSUITPC

Description

Fraction of IDU area with soils suitable for septic systems.

Values or codes

Decimal fraction.

Source

Derived from OKSEPTIC, a 30m grid of septic suitability developed for the Conservation scenario of the PNW-ERC project. Source values are binary, 1=Yes, 0= No.

FUTSI

Description

Future site soil productivity index

Values or codes

Source

This field will be maintained by software during modeling.

MUKEY

Description

NRCS SSURGO Map Unit primary identifier

Values or codes

Unique identifier soil unit type

Source

The mukey data element links the map unit symbol in the spatial map data to related tabular attribute data in the Map Unit Record tables.from *http://soils.usda.gov/technical/handbook/contents/part647.html* (NRCS technical document)

MUKEY2

Description

NRCS SSURGO Mapping Unit secondary identifier

Values or codes

Unique identifier soil unit type

Source

Derived from Mukey for data processing of the site index attribute

LULC

Description

Areas weighted dominant land use or land cover classification

Values or codes

Value	Description
1	Residential 0 - 4 DU/ac
2	Residential 4 - 9 DU/ac
3	Residential 9 - 16 DU/ac
4	Residential > 16 DU/ac
6	Commercial
7	Commercial/Industrial
8	Industrial
10	Residential and commercial
11	Urban non-vegetated unknown
16	Rural structures
18	Railroad
19	Primary roads
20	Secondary roads
21	Light duty roads
24	Rural non-vegetated unknown
29	Main channel non-vegetated
33	Water
40	Snow/ice
42	Barren
49	Urban tree overstory
51	Forest open
52	Forest semi-closed mixed
53	Forest closed hardwood
54	Forest closed mixed
55	Upland semi-closed conifer
56	Conifer 0-20 yrs
57	Forest closed conifer 21-40
58	Forest closed conifer 41-60
59	Forest closed conifer 61-80
60	Forest closed conifer 81-20
61	Forest closed conifer >200y
Value	**Description**
62	Upland semi-closed hardwood
66	Hybrid poplar

67	Grass seed
68	Row crop
71	Grains
72	Nursery
73	Berries & Vineyards
74	Double cropping
75	Hops
76	Mint
78	Sugar beet seed
83	Hay
85	Pasture
86	Natural grassland
87	Natural shrub
88	Bare/fallow
89	Flooded/marsh
90	Field crop
91	Turfgrass/park
92	Orchard
93	Christmas trees
95	Woodlot
98	Oak

Source
ISE LULC2K version P grid

DISTURB

Description
Time since last major disturbance

Values or codes

Source

STANDAGE

Description
Conifer forest stand age

Values or codes
Years

Source
Derived from the Grid Nearest Neighbor dataset developed by the LEMMA project.
Not populated in this release.

PSDOMCL

Description

Area weighted dominant pre-settlement vegetation class

Values or codes

1851 CODE	1851 TYPE
11	Upland Prairie
12	Wetland Prairie
21	Oak Savanna
22	Douglas Fir Savanna
31	Oak-Fir Woodland
32	Douglas Fir Woodland
41	Oak-Fir Forest
42	Upland Conifer Forest
43	Riparian Forest
51	Shrubland
52	Emergent Wetland
60	Water

Source

Derived from the PNW-ERC VEG1851_V4 grid, re-classed to 12 categories.

PSUPPR

Description

Fraction of IDU area in pre-settlement Upland Prarie

Values or codes

Decimal fraction

Source

PSDOMCL code 11

PSOAKSV

Description

Fraction of IDU area in pre-settlement Oak Savanna

Values or codes

Decimal fraction

Source

PSDOMCL code 21

PSOAKFIRWD

Description
Fraction of ID area in pre-settlement Oak-fir Woodland

Values or codes
Decimal fraction

Source
PSDOMCL code 31

PSOAKFIRFR

Description
Fraction of ID area in pre-settlement Oak-fir forest

Values or codes
Decimal fraction

Source
PSDOMCL code 41

TAXLOTID

Description
County taxlot map parcel identifier

Values or codes
Unique taxlot identification code

Source
County ca. 2000 parcel map

PCNTTL

Description
Fraction of parent taxlot area in IDU

Values or codes
Decimal fraction

Source
Calculated by dividing the IDU area by the area of the taxlot from which it is derived.

RMVLAND00

Description
Ca. 2000 assessed real market value of land of taxlot from which the IDU is derived.

Values or codes
Integer dollars

Source
County taxlot coverage attribute data

RMVIMP00

Description

Ca. 2000 assessed real market value of improvements of taxlot from which the IDU is derived

Values or codes

Integer dollars

Source

County taxlot coverage attribute data

TLAREA

Description

Area of parent taxlot of IDU

Values or codes

Square meters

Source

County taxlot coverage

IN_UGB

Description

Identifies the city in which IDUs lying within Urban Growth Boundaries reside.

Zero value indicates an IDU whose majority of area lies outside of any UGB.

Lebanon Study Area

Albany	1
Lebanon	2
Waterloo	3
Sodaville	4
Brownsville	5
Sweet Home	6

Eugene Study Area

Coburg	7
Eugene-Springfield	8
Veneta	9
Creswell	10
Lowell	11

Source

Derived from the 2009 UGB map provided by the Oregon Spatial Data Library.

FLD100

Description

Specifies whether the majority of the IDU area is inside or outside of a FEMA

100 year flood zone.

Values or codes

0 No
1 Yes

Source

Derived from the PNW-ERC FEMA100 map.

POPDEN00

Description

Human population density ca. 2000.

Values or codes

Persons per square mile

Source

Derived from the ISE WRBBLK coverage.

MC1CELL

Description

The area weighted dominant, uncorrected MC1 cell number for the IDU

Values or codes

Sequential cell number in row major order numbering from the southwest corner of the coverage

Source

A polygonal coverage of preliminary MC1 cells is intersected with the IDU coverage. The resulting coverage is processed by the script **mc1net.aml** to assign the area dominant preliminary MC1 cell number to each IDU.

MC1ROW

Description

Corrected MC1 row number

Values or codes

Sequential row number assigned beginning from the northwest corner of the coverage.

Source

.MC1CELL processed by the **cellnum.aml** script.

MC1COL

Description

Corrected MC1 column number

Values or codes

Sequential row major column number assigned beginning from the northwest corner of the coverage.

Source

.MC1CELL processed by the **cellnum.aml** script.

NUMRS

Description

Number of rural structures lying within the IDU

Values or codes

Integer count

Source

The PNW-ERC ca. 1990 LULC grid code 16, rural structures

VEGCLASS

Description

The values represent either land use/ land cover (values 1-110) or vegetation suitable for VDDT succession (values 200-255). Values 200-255 are used by the Envision/ VDDT adapter to update this attribute value as Envision runs using VDDT succession. (VDDT-Vegetation Dynamics Development Tool).

Values or codes

	vegclass	ctss0	Description
Core VDDT states for current landscape	200	oagf	Upland prairie
	201	oay	Oak savanna, saplings
	202	oapo	Oak savanna, pole-sized trees
	203	oaso1	Oak savanna, small trees, one layer
	204	oalo1	Oak savanna, large trees, one layer
	210	owpm	Oak woodland, pole-sized trees
	211	owsm1	Oak woodland, small trees, one layer
	212	owlm1	Oak woodland, large trees, one layer
	220	odsm2	Oak-fir woodland, small trees, two layers
	221	odlm2	Oak-fir woodland, large trees, two layers
	230	dogf	Douglas-fir w/oak, grass-forb stage
	231	doy	Douglas-fir w/oak, saplings
	232	dopm	Douglas-fir w/oak, pole-sized trees, medium to closed canopy
	233	dosm2	Douglas-fir w/oak, small trees, medium to closed canopy, two layers
	234	dolm2	Douglas-fir w/oak, large trees, medium to closed canopy, two layers
	239	dogfp	Douglas-fir w/oak, grass-forb stage, post-disturbance
	240	ddgf	Douglas-fir, grass-forb stage
	241	ddy	Douglas-fir, saplings
	242	ddpo	Douglas-fir, pole-sized trees, open canopy
	243	ddso1	Douglas-fir, small trees, open canopy, one layer
	244	ddlo1	Douglas-fir, large trees, open canopy, one layer
	245	ddpm	Douglas-fir, pole-sized trees, medium to closed canopy
	246	ddsm2	Douglas-fir, small trees, medium to closed canopy, two layers
	247	ddlm2	Douglas-fir, large trees, medium to closed canopy, two layers

Core VDDT states for current landscape	259	ddgfp	Douglas-fir, grass-forb stage, post-disturbance
	260	dmgf	Mesic mixed Douglas-fir & broadleaf deciduous, grass-forb stage
	261	dmy	Mesic mixed Douglas-fir & broadleaf deciduous, saplings
	vegclass	**ctss0**	**Description**
	262	dmpm	Mesic mixed Douglas-fir & broadleaf deciduous, pole-sized trees, medium canopy
	263	dmsm1	Mesic mixed Douglas-fir & broadleaf deciduous, small trees, medium canopy, one layer
	264	dmlm1	Mesic mixed Douglas-fir & broadleaf deciduous, large trees, medium canopy, one layer
	265	dmpc	Mesic mixed Douglas-fir & broadleaf deciduous, pole-sized trees, closed canopy
	269	dmgfp	Mesic mixed Douglas-fir & broadleaf deciduous, grass-forb stage, post-disturbance
	270	dgsc2	Mesic needleleaf evergreen, small trees, closed canopy, two layers
	271	dglc2	Mesic needleleaf evergreen, large trees, closed canopy, two layers
	280	bmgf	Mesic broadleaf deciduous, grass-forb stage
	281	bmy	Mesic broadleaf deciduous, saplings
	282	bmpm	Mesic broadleaf deciduous, pole-sized trees, medium canopy
	285	bmsc1	Mesic broadleaf deciduous, small trees, closed canopy, one layer
	286	bmlc1	Mesic broadleaf deciduous, large trees, closed canopy, one layer
Reduced Fuels States	300	oagfrf	Oak savanna, grass-forb stage, reduced fuels
	301	oayrf	Oak savanna, saplings, reduced fuels
	302	oaporf	Oak savanna, pole-sized trees, reduced fuels
	303	oaso1rf	Oak savanna, small trees, one layer, reduced fuels
	304	oalo1rf	Oak savanna, large trees, one layer, reduced fuels
	311	owsm1rf	Oak woodland, small trees, one layer, reduced fuels
	312	owlm1rf	Oak woodland, large trees, one layer, reduced fuels
	320	odsm2rf	Oak-fir woodland, small trees, two layers, reduced fuels
	321	odlm2rf	Oak-fir woodland, large trees, two layers, reduced fuels
	333	dosm2rf	Douglas-fir w/oak woodland, small trees, two layers, reduced fuels
	334	dolm2rf	Douglas-fir w/oak woodland, large trees, two layers, reduced fuels
	343	ddso1rf	Douglas-fir woodland, small trees, one layer, reduced fuels
	344	ddlo1rf	Douglas-fir woodland, large trees, one layer, reduced fuels
	346	ddsm2rf	Douglas-fir woodland, small trees, two layers, reduced fuels
	347	ddlm2rf	Douglas-fir woodland, large trees, two layers, reduced fuels
	363	dmsm1rf	Mesic mixed Douglas-fir & broadleaf deciduous woodland, small trees, one layer, reduced fuels
	364	dmlm1rf	Mesic mixed Douglas-fir & broadleaf deciduous woodland, large trees, one layer, reduced fuels

	370	dgsc2rf	Mesic needleleaf evergreen woodland, small trees, two layers, reduced fuels
	371	dglc2rf	Mesic needleleaf evergreen woodland, large trees, two layers, reduced fuels
	385	bmsc1rf	Mesic broadleaf deciduous woodland, small trees, one layer, reduced fuels
	386	bmlc1rf	Mesic broadleaf deciduous woodland, large trees, one layer, reduced fuels
	vegclass	**ctss0**	**Description**
Potential plantation conifer sequence	440	ddgfpl	Douglas-fir, grass-forb stage, plantation
	441	ddypl	Douglas-fir, saplings, plantation
	442	ddpopl	Douglas-fir, pole-sized trees, open canopy, plantation
	443	ddsc1pl	Douglas-fir, small trees, closed canopy, one layer, plantation
	444	ddlc1pl	Douglas-fir, large trees, closed canopy, one layer, plantation
	447	ddgc1pl	Douglas-fir, giant trees, closed canopy, one layer, plantation
	448	ddgc2pl	Douglas-fir, giant trees, closed canopy, two layers, plantation
Emerging Future VDDT states	500	py	Pine savanna, saplings
	501	ppo	Pine savanna, pole-sized trees
	502	pso1	Pine savanna, small trees, one layer
	503	plo1	Pine savanna, large trees, one layer
	504	ppm	Pine woodland, pole-sized trees
	505	psm2	Pine woodland, small trees, two layers
	506	plm2	Pine woodland, large trees, two layers
	520	mgf	Madrone, grass-forb stage
	521	my	Madrone, saplings
	522	mpo	Madrone, pole-sized trees, open canopy
	523	mso1	Madrone, small trees, open canopy, one layer
	524	mlo1	Madrone, large trees, open canopy, one layer
	525	mpm	Madrone, pole-sized trees, medium canopy
	526	msm1	Madrone, small trees, medium canopy, one layer
	527	mlm1	Madrone, large trees, medium canopy, one layer
	540	mdsm2	Mixed madrone & Douglas-fir, small trees, medium canopy, two layers
	541	mdlm2	Mixed madrone & Douglas-fir, large trees, medium canopy, two layers
Reduced Fuels States for Future VDDT states	602	pso1rf	Pine savanna, small trees, one layer, reduced fuels
	603	plo1rf	Pine savanna, large trees, one layer, reduced fuels
	605	psm1rf	Pine woodland, small trees, one layer, reduced fuels
	606	plm1rf	Pine woodland, large trees, one layer, reduced fuels
	626	msm1rf	Madrone, small trees, medium canopy, one layer, reduced fuels
	627	mlm1rf	Madrone, large trees, medium canopy, one layer, reduced fuels
	640	mdsm2rf	Mixed madrone & Douglas-fir, small trees, medium canopy, two layers, reduced fuels
	641	mdlm2rf	Mixed madrone & Douglas-fir, large trees, medium canopy, two layers, reduced fuels

Source
Bart Johnson 3/2/2011

CTSS0

Description
This is a text code representation of cover type and successional stage (ctss) at time zero. At time zero, vegstate and ctss represent the same vegetation condition. ctss0 represents the starting condition and is not updated as Envision runs.

Values or codes
The table provided for *vegclass* (the previous attribute) contains descriptions for both vegclass and ctss0.

Source
Bart Johnson 3/2/2011

CZONE

Description
The area weighted dominant Linn County zoning code for the IDU

Values or codes

Lebanon Study Area County Zoning Codes

Oregon State Zoning Code	*Oregon State Zoning Description*
LNA1	Exclusive Farm Use Zone
LNA2	EFU-80 Zone
LNC1	Interchange Commercial Zone
LNF1	Forest Conservation Land
LNI1	Rural Industrial Zone
LNM1	Farm and Forest Zone
LNN1	Aggregate Resource Zone
LNR1	Rural Residential Zone
LNS3	Lacomb RSC
LNS5	Crawfordsville RSC
LNU10	Sodaville UGB
LNU11	Waterloo UGB
LNU12	Brownsville UGB
LNU13	Sweet Home UGB
LNU6	Lebanon UGB
LNU8	Albany UGB (Linn Co.)

Eugene Study Area County Zoning Codes

Lane County Zoning Code	*Lane County Zoning Description*
C2	Neighborhood Commercial
C3	Commercial
E25	Exclusive Farm Use (25 Acre Minimum)
E30	Exclusive Farm Use (30 Acre Minimum)
E40	Exclusive Farm Use (40 Acre Minimum)
E60	Exclusive Farm Use (60 Acre Minimum)
F1	Non-Impacted Forest
F2	Impacted Forest
M2	Light Industrial
ML	Marginal Lands
NR	Natural Resource
PF	Public Facility
PR	Park and Recreation
QM	Quarry and Mining Operations
RC	Rural Commercial
RI	Rural Industrial
RPF	Rural Public Facility
RR1	Rural Residential (1 Acre Minimum)
RR10	Rural Residential (10 Acre Minimum)
RR10-NRES	Non Resource (10 Acre Minimum)
RR2	Rural Residential (2 Acre Minimum)
RR5	Rural Residential (5 Acre Minimum)
RR5-NRES	Non Resource (5 Acre Minimum)
SG	Sand, Gravel and Rock Products

Source

Linn and Lane County zoning map shape files.

SZONE

Description

The area weight dominant Oregon state zoning code for the IDU

Values or codes

Lebanon Study Area State Zoning Codes

Oregon State Zoning Code (Lebanon)	*Oregon State Zoning Description (Lebanon)*
LNA1	Exclusive Farm Use Zone
LNA2	EFU-80 Zone
LNC1	Interchange Commercial Zone
LNF1	Forest Conservation Land
LNI1	Rural Industrial Zone
LNM1	Farm and Forest Zone

LNN1	Aggregate Resource Zone
LNR1	Rural Residential Zone
LNS3	Lacomb RSC
LNS5	Crawfordsville RSC
LNU10	Sodaville UGB
LNU11	Waterloo UGB
LNU12	Brownsville UGB
LNU13	Sweet Home UGB
LNU6	Lebanon UGB
LNU8	Albany UGB (Linn Co.)

Eugene Study Area State Zoning Codes

Oregon State Zoning Code (Eugene)	*Oregon State Zoning Description (Eugene)*
LAA1	Exclusive Farm Use Zone
LAC1	Rural Commercial Zone
LAF1	Non Impacted Forest Lands
LAF2	Impacted Forest Lands
LAI1	Rural Industrial Zone
LAN1	Resource Use Zone
LAN2	Mt. Pisgah Park
LAR1	Various Rural Residential Zones
LAU1	Springfield UGB
LAU10	Veneta UGB
LAU2	Lowell UGB
LAU5	Creswell UGB
LAU7	Eugene UGB
LAU8	Coburg UGB
WATER	Pacific Ocean

Source

The statewide zone map zoning.shp was retrieved from the Oregon State Geospatial Data Clearinghouse: http://www.oregon.gov/DAS/EISPD/GEO/sdlibrary.shtml

D_STREAMS

Description

Average distance to streams for the IDU

Values or codes

Meters

Source

Derived from the RIVREACH_2 line coverage produced for the PNW-ERC project.

D_ROADS

Description
Average distance to roads and highways for the IDU

Values or codes
Meters

Source
Derived from the ISE RDNET line coverage produced for the PNW-ERC project

TRAVTIME

Description
Average travel time over roads and highways to major cities for the IDU

Values or codes
Minutes

Source
Derived from the ISE ALLTRAVTIM grid prepared for the PNW-ERC project

PUBLANDS

Description
The area weighted dominant public land ownership type for the IDU

Values or codes

Code	Class
0	Not public
1	Unknown public – "federal unk. Agency", "federal"
2-4	not used
5	Indian reservation, tribal lands
6	National wildlife refuge
7	State parks
8	State forest
9	Federal forest
10-22	not used
23	County park
24	City park
25	Other federal land
26	Other state land
27	Other county land
28	Other city land
29	Utilities and other services
31-32	not used
33	Unbuildable, DEQ easement or R/W
34	Cemetery
35	Wilderness area
36	Research natural area
37	State wildlife refuge

38	Private conservation, wildlife refuge
39	Airport
40	School

Source
Derived from the PNW-ERC public lands map assembled from taxlot coverages, USGS 7.5' quadrangle maps, a bio-management map produced by Defenders of Wildlife, a parks coverage provided by Portland Metro, the ERC 1990 LULC grid, the USFS grid FS0, and the Willamette National Forest WNFLMP7 coverage.

WETLAND

Description
Area of significant wetlands within IDU

Values or codes
Square meters

Source
NWI wetlands equal to or larger than 2 hectares in extent.

RDSMAJ

Description
Distance from major roads

Values or codes
Meters

Source
Derived from the PNW-ERC Transportation Coverage DOT97C, IGDS_level classes 50-53.

RDSMIN

Description
Distance from minor roads

Values or codes
Meters

Source
Derived from the PNW-ERC Transportation Coverage DOT97C, IGDS_Level classes 12, 18, 29, and 54.

CRO

Description
Conservation and Restoration Opportunities areas.

Values or codes

1	Tier 1 Oak
2	Tier 1 Prairie
3	Tier 1 Floodplain Forest
4	Tier 1 Upland Forest
6	Tier 1 Forest Riparian protection zones
7	Tier 1 Wetlands
10	Willamette River restored channels
14	Tier 2 Forest
15	Tier 2 Oak and Prairie
16	Tier 2 Riparian protection zones
18	Tier 2 Wetland protection zones

Source

Produced by the PNW Ecosystem Research Consortium. Information available at: http://www.fsl.orst.edu/pnwerc/wrb/metadata/cro50.html