

# ecoregpy

Metadata also available as

## Metadata:

- [Identification Information](#)
- [Data Quality Information](#)
- [Spatial Data Organization Information](#)
- [Spatial Reference Information](#)
- [Entity and Attribute Information](#)
- [Distribution Information](#)
- [Metadata Reference Information](#)

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### *Identification\_Information:*

#### *Citation:*

##### *Citation\_Information:*

*Originator:* TPWD GIS Lab  
*Publication\_Date:* 20100312  
*Title:* ecoregpy  
*Geospatial\_Data\_Presentation\_Form:* vector digital data  
*Publication\_Information:*

*Publication\_Place:* Austin, TX  
*Publisher:* Texas Parks and Wildlife Department

*Other\_Citation\_Details:* Size of Data: approx. 88 MB  
*Online\_Linkage:*  
\\Gis-datasrvr\GIS\_Data1\GIS\_Archive\texas\tsms\bio\shp\ecoregpy.shp  
*Larger\_Work\_Citation:*

##### *Citation\_Information:*

*Originator:* Western Ecology Division, US EPA, Corvallis, Oregon  
*Publication\_Date:* 2009  
*Title:* Level III and IV Ecoregions of the Conterminous United States  
*Geospatial\_Data\_Presentation\_Form:* vector digital data

#### *Description:*

##### *Abstract:*

Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources. They are designed to serve as a spatial framework for the research, assessment, management, and monitoring of ecosystems and ecosystem components. These general purpose regions are critical for structuring and implementing ecosystem management strategies across federal agencies, state agencies, and nongovernment organizations that are responsible for different types of resources within the same geographical areas. The approach used to compile this map is based on the

premise that ecological regions can be identified through the analysis of patterns of biotic and abiotic phenomena, including geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology. The relative importance of each characteristic varies from one ecological region to another. A Roman numeral hierarchical scheme has been adopted for different levels for ecological regions. Level I is the coarsest level, dividing North America into 15 ecological regions. Level II divides the continent into 52 regions (Commission for Environmental Cooperation Working Group, 1997). At Level III, the continental United States contains 104 regions whereas the conterminous United States has 84 (U.S. Environmental Protection Agency, 2005). Level IV ecoregions are further subdivisions of Level III ecoregions. Methods used to define the ecoregions are explained in Omernik (1995, 2004), Omernik and others (2000), and Gallant and others (1989).

Literature cited: Commission for Environmental Cooperation Working Group, 1997, Ecological regions of North America- toward a common perspective: Montreal, Commission for Environmental Cooperation, 71 p. Gallant, A. L., Whittier, T.R., Larsen, D.P., Omernik, J.M., and Hughes, R.M., 1989, Regionalization as a tool for managing environmental resources: Corvallis, Oregon, U.S. Environmental Protection Agency, EPA/600/3-89/060, 152p. Omernik, J.M., 1995, Ecoregions - a framework for environmental management, in Davis, W.S. and Simon, T.P., eds., Biological assessment and criteria-tools for water resource planning and decision making: Boca Raton, Florida, Lewis Publishers, p.49-62. Omernik, J.M., Chapman, S.S., Lillie, R.A., and Dumke, R.T., 2000, Ecoregions of Wisconsin: Transactions of the Wisconsin Academy of Science, Arts, and Letters, v. 88, p. 77-103. Omernik, J.M., 2004, Perspectives on the nature and definitions of ecological regions: Environmental Management, v. 34, Supplement 1, p. s27-s38.

Comments and questions regarding the Level III and IV Ecoregions should be addressed to Glenn Griffith, Dynamac Corporation, c/o US EPA., 200 SW 35th Street, Corvallis, OR 97333, (541)-754-4465, email:griffith.glenn@epa.gov Alternate: James Omernik, USGS, c/o US EPA, 200 SW 35th Street, Corvallis, OR 97333, (541)-754-4458, email:omernik.james@epa.gov

*Purpose:*

Ecoregion maps assist managers of aquatic and terrestrial resources to understand the regional patterns of the realistically attainable quality of these resources.

*Supplemental\_Information:*

Electronic versions of ecoregion maps and posters, as well as other ecoregion resources are available at: <http://www.epa.gov/wed/pages/ecoregions.htm>.

Level IV ecoregions are not complete for California and Arizona, as of December, 2009. For these states, the polygons are for Level III only and the field "LEVEL4CODE" contains placeholder information derived from "LEVEL3CODE". Ecoregions were digitized at 1:250,000 scale and are intended for large geographic extents (i.e. states, multiple counties, or river basins). Use for smaller areas, such as individual counties or a 1:24,000 scale map boundary, is not recommended.

TPWD GIS Lab: 20100312 - This nationwide file was clipped using the Texas outline in the GIS archive. The file was projected from Albers Equal Area to the Texas Statewide Mapping System.

TPWD GIS Lab: 20100412 - The attributes were dissolved the Level 4 and Level 3 attributes.

*Time\_Period\_of\_Content:*

*Time\_Period\_Information:*

*Single\_Date/Time:*

*Calendar\_Date:* 2009

*Currentness\_Reference:* Ongoing

*Status:*

*Progress:* Ongoing  
*Maintenance\_and\_Update\_Frequency:* As needed

*Spatial\_Domain:*

*Bounding\_Coordinates:*

*West\_Bounding\_Coordinate:* -106.976165  
*East\_Bounding\_Coordinate:* -93.121756  
*North\_Bounding\_Coordinate:* 36.534206  
*South\_Bounding\_Coordinate:* 25.705948

*Keywords:*

*Theme:*

*Theme\_Keyword\_Thesaurus:*  
REQUIRED: Reference to a formally registered thesaurus or a similar authoritative source of theme keywords.  
*Theme\_Keyword:* Level III and Level IV Ecoregions

*Theme:*

*Theme\_Keyword\_Thesaurus:* ISO 19115 Topic Categories  
*Theme\_Keyword:* biota  
*Theme\_Keyword:* environment  
*Theme\_Keyword:* geoscientificinformation

*Place:*

*Place\_Keyword:* State of Texas  
*Place\_Keyword:* Texas  
*Place\_Keyword:* TX

*Access\_Constraints:* None

*Use\_Constraints:* none

*Point\_of\_Contact:*

*Contact\_Information:*

*Contact\_Person\_Primary:*

*Contact\_Person:* Glenn Griffith  
*Contact\_Organization:* Dynamac Corporation

*Contact\_Address:*

*Address\_Type:* mailing and physical address  
*Address:* c/o US EPA., 200 SW 35th  
*City:* Corvallis  
*State\_or\_Province:* Oregon  
*Postal\_Code:* 97333  
*Country:* USA

*Native\_Data\_Set\_Environment:*

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3; ESRI ArcCatalog 9.3.1.3500

*Cross\_Reference:*

*Citation\_Information:*

*Originator:* Western Ecology Division, US EPA, Corvallis, Oregon  
*Publication\_Date:* 2009  
*Title:* Level III and IV Ecoregions of the Conterminous United States  
*Geospatial\_Data\_Presentation\_Form:* vector digital data  
*Publication\_Information:*

*Publication\_Place:* Corvallis, Oregon  
*Publisher:* US EPA

*Online\_Linkage:* <<http://www.epa.gov/wed/pages/ecoregions.htm>>.  
*Larger\_Work\_Citation:*

*Citation\_Information:*

*Publication\_Date:* 2009  
*Title:* Level III and IV Ecoregions of the Conterminous United States

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*Data\_Quality\_Information:**Logical\_Consistency\_Report:*

Although ecoregion polygons and attributes have been checked for accuracy, some errors may remain.

*Completeness\_Report:*

Level IV ecoregions are not complete for California and Arizona, as of December, 2009. For these states, the polygons are for Level III only and the field "LEVEL4CODE" contains placeholder information derived from "LEVEL3CODE". Ecoregions were digitized at 1:250,000 scale and are intended for large geographic extents (i.e. states, multiple counties, or river basins). Use for smaller areas, such as individual counties or a 1:24,000 scale map boundary, is not recommended.

*Lineage:**Source\_Information:**Source\_Contribution:*

The state borders were derived from the dtl\_st.sdc on the ArcGIS DVD provided by ESRI. It was modified by removing Alaska and Hawaii polygons and all but the State field, adding some coastal islands based on imagery or NHDPlus areas, and restoring topology (removing internal gaps and small overlaps).

*Process\_Step:**Process\_Description:*

- 1) U.S.G.S. 1:250,000 topographic maps are used to delineate the ecoregions. The lines drawn are manually digitized or scanned to produce georeferenced electronic files.
- 2) All base maps are joined together and errors along the edges are resolved.
- 3) Topology is established and the maps are reviewed for accuracy, completeness, and conformity with the original lines. Corrections are made as needed and topology regenerated.
- 4) Attributes are added.
- 5) Maps are plotted for visual inspection by two individuals and necessary changes made.
- 6) Ecoregions from all available states are merged and dissolved to identify and correct inconsistencies.
- 7) Polygons of the corrected seamless ecoregion features are extended beyond the coastal borders.
- 8) State and Ecoregion datasets are intersected.
- 9) Topology errors removed.

*Process\_Contact:*

*Contact\_Information:*

*Contact\_Organization\_Primary:*

*Contact\_Organization:* GIS contractors to US EPA

*Contact\_Address:*

*Address\_Type:* mailing and physical address

*Address:* c/o US EPA

*Address:* 200 SW 35th Street

*City:* Corvallis

*State\_or\_Province:* Oregon

*Postal\_Code:* 97333

*Country:* USA

*Contact\_Electronic\_Mail\_Address:* johnson.colleen@epa.gov

*Process\_Step:*

*Process\_Description:* Metadata imported.

*Source\_Used\_Citation\_Abbreviation:*

C:\DOCUME~1\cjohns05\LOCALS~1\Temp\xml635.tmp

*Process\_Date:* 20091214

*Process\_Time:* 09402400

*Process\_Step:*

*Process\_Description:* Metadata imported.

*Source\_Used\_Citation\_Abbreviation:* M:\cyn\work\bio\ecomaj\20100312\useco\_rev1.xml

*Process\_Date:* 20100312

*Process\_Time:* 12431500

*Process\_Step:*

*Process\_Description:* Dataset copied.

*Source\_Used\_Citation\_Abbreviation:*

*Process\_Date:* 20100312

*Process\_Time:* 13200200

*Process\_Step:*

*Process\_Description:* Dataset copied.

*Source\_Used\_Citation\_Abbreviation:* M:\cyn\work\bio\ecomaj\20100312\ecoregpy

*Process\_Date:* 20100312

*Process\_Time:* 14352700

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*Spatial\_Data\_Organization\_Information:*

*Direct\_Spatial\_Reference\_Method:* Vector

*Point\_and\_Vector\_Object\_Information:*

*SDTS\_Terms\_Description:*

*SDTS\_Point\_and\_Vector\_Object\_Type:* G-polygon

*Point\_and\_Vector\_Object\_Count: 57*

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*Spatial\_Reference\_Information:*

*Horizontal\_Coordinate\_System\_Definition:*

*Planar:*

*Map\_Projection:*

*Map\_Projection\_Name: Lambert Conformal Conic  
Lambert\_Conformal\_Conic:*

*Standard\_Parallel: 27.416667  
Standard\_Parallel: 34.916667  
Longitude\_of\_Central\_Meridian: -100.000000  
Latitude\_of\_Projection\_Origin: 31.166667  
False\_Easting: 1000000.000000  
False\_Northing: 1000000.000000*

*Planar\_Coordinate\_Information:*

*Planar\_Coordinate\_Encoding\_Method: coordinate pair  
Coordinate\_Representation:*

*Abscissa\_Resolution: 0.000000  
Ordinate\_Resolution: 0.000000*

*Planar\_Distance\_Units: meters*

*Geodetic\_Model:*

*Horizontal\_Datum\_Name: North American Datum of 1983  
Ellipsoid\_Name: Geodetic Reference System 80  
Semi-major\_Axis: 6378137.000000  
Denominator\_of\_Flattening\_Ratio: 298.257222*

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*Entity\_and\_Attribute\_Information:*

*Detailed\_Description:*

*Entity\_Type:*

*Entity\_Type\_Label: ecoregpy*

*Attribute:*

*Attribute\_Label: FID  
Attribute\_Definition: Internal feature number.  
Attribute\_Definition\_Source: ESRI  
Attribute\_Domain\_Values:*

*Unrepresentable\_Domain:*

Sequential unique whole numbers that are automatically generated.

*Attribute:*

*Attribute\_Label:* Shape  
*Attribute\_Definition:* Feature geometry.  
*Attribute\_Definition\_Source:* ESRI  
*Attribute\_Domain\_Values:*

*Unrepresentable\_Domain:* Coordinates defining the features.

*Attribute:*

*Attribute\_Label:* LEVEL4CODE  
*Attribute\_Definition:* Code for Level IV Ecoregion

*Attribute:*

*Attribute\_Label:* LEVEL4NAME  
*Attribute\_Definition:* Name for Level IV Ecoregion

*Attribute:*

*Attribute\_Label:* LEVEL3CODE  
*Attribute\_Definition:* Code for Level III Ecoregion

*Attribute:*

*Attribute\_Label:* LEVEL3NAME  
*Attribute\_Definition:* Name for Level III Ecoregion

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*Distribution\_Information:*

*Resource\_Description:* Download Data  
*Standard\_Order\_Process:*

*Digital\_Form:*

*Digital\_Transfer\_Information:*

*Transfer\_Size:* 87.130

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*Metadata\_Reference\_Information:*

*Metadata\_Date:* 20100412  
*Metadata\_Contact:*

*Contact\_Information:*

*Contact\_Organization\_Primary:*

*Contact\_Organization:* SRA/Raytheon Contractors to US EPA  
*Contact\_Person:* Colleen Burch Johnson

*Contact\_Address:*

*Address\_Type:* mailing and physical address  
*Address:* c/o USEPA 200 SW 35th Street  
*City:* Corvallis  
*State\_or\_Province:* Oregon  
*Postal\_Code:* 97333  
*Country:* USA

*Contact\_Voice\_Telephone:* (541) 754-4454  
*Contact\_Electronic\_Mail\_Address:* johnson.colleen@epa.gov

*Metadata\_Standard\_Name:* FGDC Content Standards for Digital Geospatial Metadata  
*Metadata\_Standard\_Version:* FGDC-STD-001-1998  
*Metadata\_Time\_Convention:* local time  
*Metadata\_Extensions:*

*Online\_Linkage:* <<http://www.esri.com/metadata/esriprof80.html>>  
*Profile\_Name:* ESRI Metadata Profile

*Metadata\_Extensions:*

*Online\_Linkage:* <<http://www.esri.com/metadata/esriprof80.html>>  
*Profile\_Name:* ESRI Metadata Profile

*Metadata\_Extensions:*

*Online\_Linkage:* <<http://www.esri.com/metadata/esriprof80.html>>  
*Profile\_Name:* ESRI Metadata Profile