

From: [Turner, Ed](#)
To: [Betty Grizzle](#)
Subject: EPA Level II Metadata
Date: Tuesday, May 2, 2017 4:51:41 PM
Attachments: [US Environmental Protection Agency 2010-05-01 NA CEC Eco Level2.pdf](#)

I was able to download from the web.

I have a copy in the folder too.

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NA_CEC_Eco_Level2

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](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator: U.S. Environmental Protection Agency

Publication_Date: 20100501

Title: NA_CEC_Eco_Level2

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Publication_Information:

Publication_Place: Corvallis, OR

Publisher:

U.S. EPA Office of Research & Development (ORD) - National Health and Environmental Effects Research Laboratory (NHEERL)

Online_Linkage: ftp://ftp.epa.gov/wed/ecoregions/cec_na/NA_CEC_Eco_Level2.zip

Online_Linkage: <http://www.epa.gov/wed/pages/ecoregions.htm>

Larger_Work_Citation:

Citation_Information:

Publication_Date:

Title:

Series_Information:

Publication_Information:

Description:

Abstract:

Ecological regions 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 international, national, province and state agencies, and nongovernment organizations that are responsible for different types of resources within the same geographical areas.

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 50 regions. At Level III, there are currently 181 ecological regions for North America. These files of Level I ecological regions of North America are a 2010 update and revision of files developed by Canada, the United States, and Mexico in 2006, which were an update of earlier files from the late 1990's in a cooperative project for the Commission for Environmental Cooperation (CEC 1997). The CEC was created under the North American Agreement on Environmental Cooperation (NAAEC) to address regional environmental concerns, help prevent potential trade and environmental conflicts and

promote the effective enforcement of environmental law. The Agreement complements the environmental provisions established in the North American Free Trade Agreement (NAFTA). The 2006 version of North American ecological regions was developed in a meeting between representatives of the three nations in April 2006 in Newport, Oregon. This 2010 version updates mainly the United States ecoregions in those states where new ecoregion mapping has occurred since 2006, particularly in Michigan, New York, and New England. Issues relating to topology (overlaps and gaps in the data) and to waterbodies were the only revisions for Canada and Mexico. Many small waterbodies in Mexico and in coastal areas of the United States were merged with surrounding ecoregions to conform with their depiction in the interior United States and Canada. The 2010 files are considered draft and subject to further refinements. Commission for Environmental Cooperation. 1997. Ecological regions of North America: toward a common perspective. Commission for Environmental Cooperation, Montreal, Quebec, Canada. 71pp.

U.S. Environmental Protection Agency, 2010, Level III ecoregions of the continental United States (revision of Omernik, 1987): Corvallis, Oregon, USEPA National Health and Environmental Effects Research Laboratory, Map M-1, various scales.

Comments and questions regarding the North America 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>. Symbology layers for US Levels III and IV also available. Level IV ecoregions are not complete for California and Arizona, as of May, 2010. For these states, the polygons are for Level III or lower. The field "US_L4CODE" contains placeholder information derived from "US_L3CODE". 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.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20100501

Currentness_Reference: Publication date

Status:

Progress: Ongoing

Maintenance_and_Update_Frequency: As needed

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -180.000000

East_Bounding_Coordinate: 180.000000

North_Bounding_Coordinate: 84.132635

South_Bounding_Coordinate: 6.630919

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: boundaries

Theme_Keyword: environment

Theme_Keyword: location

Theme:

Theme_Keyword_Thesaurus: EPA GIS Keyword Thesaurus

Theme_Keyword: Biology

Theme_Keyword: Conservation

Theme_Keyword: Ecology

Theme_Keyword: Ecosystem

Theme_Keyword: Land

Theme_Keyword: Natural Resources

Theme:

Theme_Keyword_Thesaurus: User

Theme_Keyword:

US Ecoregion Levels III and IV, North American (CEC) Ecoregion Levels I, II, III

Place:

Place_Keyword: Selected State, Conterminous United States

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: United States

Access_Constraints: None

Use_Constraints: None

Point_of_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Marc Weber

Contact_Organization:

U.S. Environmental Protection Agency, Office of Research & Development (ORD) - National
Health and Environmental Effects Research Laboratory (NHEERL)

Contact_Position: GIS Analyst

Contact_Address:

Address_Type: mailing and physical address

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State_or_Province: OR

Postal_Code: 97333

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Contact_Electronic_Mail_Address: weber.marc@epa.gov

Contact_Instructions: <http://www.epa.gov/>

Security_Information:

Security_Classification_System: FIPS Pub 199

Security_Classification: No Confidentiality

Security_Handling_Description: Standard Technical Controls

Native_Data_Set_Environment:

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3; ESRI ArcCatalog 9.3.1.3000

Cross_Reference:

Citation_Information:

Title: Ecoregions of the United States

Data_Quality_Information:

Logical_Consistency_Report:

Although ecoregion polygons and attributes have been checked for accuracy, some errors may remain. Polygons along state borders were reviewed and updated, May 2010.

Completeness_Report:

Ecoregion development is ongoing in the United States and may be integrated into the North America data in the future. This pertains mainly to the states of California and Arizona.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Data were collected using methods that have unknown accuracy (EPA National Geospatial Data Policy [NGDP] Accuracy Tier 10). For more information, please see EPA's NGDP at <http://epa.gov/geospatial/policies.html>)

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). The EPA regions were added to this custom geodatabase (dtl_48plyf) prior to the intersection process with the seamless ecoregion data.

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. 10) Final QA

Process_Date: 20100526

Process_Step:

Process_Description: Metadata imported.

Process_Date: 20101129

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: 2261

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Planar:

Map_Projection:

Map_Projection_Name: Lambert Azimuthal Equal Area

Lambert_Azimuthal_Equal_Area:

Longitude_of_Projection_Center: -100.000000

Latitude_of_Projection_Center: 45.000000

False_Easting: 0.000000

False_Northing: 0.000000

Planar_Coordinate_Information:

Planar_Coordinate_Encoding_Method: coordinate pair

Coordinate_Representation:

Abscissa_Resolution: 0.000001

Ordinate_Resolution: 0.000001

Planar_Distance_Units: meters

Geodetic_Model:

Horizontal_Datum_Name: D_Sphere_ARC_INFO

Ellipsoid_Name: Sphere_ARC_INFO

Semi-major_Axis: 6370997.000000

Denominator_of_Flattening_Ratio: infinity

Entity_and_Attribute_Information:

Detailed_Description:

Entity_Type:

Entity_Type_Label: NA_CEC_Eco_Level2

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: NA_L2CODE

Attribute:

Attribute_Label: NA_L2NAME

Attribute:

Attribute_Label: NA_L1CODE

Attribute_Definition: Code for Level I Ecoregion (North America)

Attribute_Definition_Source: CEC

Attribute:

Attribute_Label: NA_L1NAME

Attribute_Definition: Name for Level I Ecoregion (North America)

Attribute_Definition_Source: CEC

Attribute:

Attribute_Label: NA_L2KEY

Attribute:

Attribute_Label: NA_L1KEY

Attribute:

Attribute_Label: Shape_Leng

Attribute:

Attribute_Label: Shape_Area

Attribute_Definition: Area of feature in internal units squared.

Attribute_Definition_Source: ESRI

Attribute_Domain_Values:

Unrepresentable_Domain: Positive real numbers that are automatically generated.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization:

U.S. Environmental Protection Agency, Office of Research & Development (ORD) - National Health and Environmental Effects Research Laboratory (NHEERL)

Contact_Person: Marc Weber

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Contact_Instructions: <http://www.epa.gov/>

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the Environmental Protection Agency, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. It is strongly recommended that careful attention be paid to the contents of the metadata file

Metadata_Reference_Information:

Metadata_Date: 20101129

Metadata_Future_Review_Date: 20140920

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Colleen Burch Johnson

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Contact_Instructions: <http://www.epa.gov/>

Metadata_Standard_Name: FGDC Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Metadata_Time_Convention: local time