**Preliminary integrated databases for the United States – Western States: California, Nevada, Arizona, and Washington**

Metadata also available as - [[Questions & Answers](http://tin.er.usgs.gov/geology/state/metadata/wa.faq.html)] - [[Parseable text](http://tin.er.usgs.gov/geology/state/metadata/wa.txt)] - [[XML](http://tin.er.usgs.gov/geology/state/metadata/wa.xml)]

**Metadata:**

* [Identification\_Information](http://tin.er.usgs.gov/geology/state/metadata/wa.html#1)
* [Data\_Quality\_Information](http://tin.er.usgs.gov/geology/state/metadata/wa.html#2)
* [Spatial\_Data\_Organization\_Information](http://tin.er.usgs.gov/geology/state/metadata/wa.html#3)
* [Spatial\_Reference\_Information](http://tin.er.usgs.gov/geology/state/metadata/wa.html#4)
* [Entity\_and\_Attribute\_Information](http://tin.er.usgs.gov/geology/state/metadata/wa.html#5)
* [Distribution\_Information](http://tin.er.usgs.gov/geology/state/metadata/wa.html#6)
* [Metadata\_Reference\_Information](http://tin.er.usgs.gov/geology/state/metadata/wa.html#7)

*Identification\_Information:*

*Citation:*

*Citation\_Information:*

*Originator:* Steve Ludington

*Originator:* Barry C. Moring

*Originator:* Robert J. Miller

*Originator:* Kathryn S. Flynn

*Originator:* Melanie J. Hopkins

*Publication\_Date:* 2005

*Title:*

Preliminary integrated databases for the United States – Western States: California, Nevada, Arizona, and Washington

*Edition:* Version 1.0

*Geospatial\_Data\_Presentation\_Form:* vector digital data

*Series\_Information:*

*Series\_Name:* U.S. Geological Survey Open-File Report

*Issue\_Identification:* OFR 2005-1305

*Publication\_Information:*

*Publication\_Place:* Reston, Virginia, USA

*Publisher:* U.S. Geological Survey

*Online\_Linkage:* [<http://pubs.usgs.gov/of/2005/1305>](http://pubs.usgs.gov/of/2005/1305)

*Description:*

*Abstract:*

These digital maps are a reformulation of previously published maps, primarily maps of states. The reformulation gives all the maps the same structure and format, allowing them to be combined into regional maps. The associated data tables have information about age and lithology of the map units, also in a standard format.

*Purpose:*

Provide digital maps and databases that, because of their common structure and format, allow creation of regional maps that depict age and lithology of map units.

*Supplemental\_Information:*

The data is provided in decimal degrees and in Lambert Conformal Conic projection. The data is provided in both coverage and shapefile format, and includes supplemental attribute tables. No attempt was made to reconcile differences in mapping across state boundaries.

*Time\_Period\_of\_Content:*

*Time\_Period\_Information:*

*Single\_Date/Time:*

*Calendar\_Date:* 2005

*Currentness\_Reference:* publication date

*Status:*

*Progress:* Complete

*Maintenance\_and\_Update\_Frequency:* None planned

*Spatial\_Domain:*

*Bounding\_Coordinates:*

*West\_Bounding\_Coordinate:* -125.037620

*East\_Bounding\_Coordinate:* -116.233944

*North\_Bounding\_Coordinate:* 49.858968

*South\_Bounding\_Coordinate:* 44.937264

*Keywords:*

*Theme:*

*Theme\_Keyword\_Thesaurus:* none

*Theme\_Keyword:* geology

*Theme\_Keyword:* lithology

*Theme\_Keyword:* geologic age

*Theme\_Keyword:* maps

*Place:*

*Place\_Keyword\_Thesaurus:* none

*Place\_Keyword:* USA

*Place\_Keyword:* Washington

*Access\_Constraints:*

No warranty, expressed or implied, is made regarding the accuracy or utility of this data for general or scientific purposes, nor shall the act of distribution constitute any such warranty. The U.S. Geological Survey shall not be held liable for improper or incorrect use of this data.

*Use\_Constraints:*

This database is not meant to be used at scales appreciably larger or smaller than the original scale. Any printed material utilizing these databases shall clearly indicate their source. If modifications to the data are made, this should be clearly indicated and described in print. Users specifically agree not to misrepresent these data, nor to imply that any changes they have made were approved by the U.S. Geological Survey. This database has been approved for release and publication by the Director of the U.S. Geological Survey. Although the database has been subjected to review and is substantially complete, the U.S. Geological Survey reserves the right to revise the data pursuant to further analysis and review. The database is released on the condition that neither the U.S. Geological Survey or the United States Government may be held liable for any damages resulting from its authorized or unauthorized use.

*Point\_of\_Contact:*

*Contact\_Information:*

*Contact\_Person\_Primary:*

*Contact\_Person:* Steve Ludington

*Contact\_Organization:* U.S. Geological Survey

*Contact\_Position:* geologist

*Contact\_Address:*

*Address\_Type:* mailing and physical address

*Address:* U.S. Geological Survey, MS 901

*Address:* 345 Middlefield Road

*City:* Menlo Park

*State\_or\_Province:* CA

*Postal\_Code:* 94025

*Country:* USA

*Contact\_Voice\_Telephone:* 650.329.5371

*Contact\_Electronic\_Mail\_Address:* slud@usgs.gov

*Data\_Set\_Credit:* U.S. Geological Survey

*Security\_Information:*

*Security\_Classification:* Unclassified

*Native\_Data\_Set\_Environment:*

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 9.0.0.535

*Data\_Quality\_Information:*

*Attribute\_Accuracy:*

*Attribute\_Accuracy\_Report:*

Map unit designations follow original compilation faithfully. Additional information about age and lithology was obtained from the paper map legend and geologic literature.

*Logical\_Consistency\_Report:*

All internal polygons were checked for closure. Overshoots and undershoots have been deleted or corrected as appropriate.

*Completeness\_Report:*

The dataset contains all the map units and faults that were portrayed on the original printed map. Bodies of water are classified as water, and geologic units underlying them are not portrayed.

*Positional\_Accuracy:*

*Horizontal\_Positional\_Accuracy:*

*Horizontal\_Positional\_Accuracy\_Report:*

The geologic map was digitized from compilations ranging in scale from 1:100,000 to 1:1,000,000, and is an accurate representation of the source maps. It is intended to be used at scales equal to or smaller than 1:500,000. Display at significantly larger scales may produce error in location of contacts or faults relative to features contained in other data sets. The state boundary arcs are based on the 1:100,000 scale USGS topographic map series digital line graphs.

*Lineage:*

*Source\_Information:*

*Source\_Citation:*

*Citation\_Information:*

*Originator:* G.L. Raines

*Originator:* B.R. Johnson

*Publication\_Date:* 1995

*Title:* USGS OFR 95-684

*Geospatial\_Data\_Presentation\_Form:* vector digital data

*Series\_Information:*

*Series\_Name:* USGS Open-File Reports

*Issue\_Identification:* 95-684

*Other\_Citation\_Details:*

Digital representation of the Washington state geologic map: a contribution to the Interior Columbia River basin ecosystem management project

*Online\_Linkage:* [<http://pubs.usgs.gov/of/1995/of95-684/>](http://pubs.usgs.gov/of/1995/of95-684/)

*Source\_Scale\_Denominator:* 500,000

*Type\_of\_Source\_Media:* online

*Source\_Time\_Period\_of\_Content:*

*Time\_Period\_Information:*

*Single\_Date/Time:*

*Calendar\_Date:* 1996

*Source\_Currentness\_Reference:* publication date

*Source\_Citation\_Abbreviation:* USGS OFR 95-684

*Source\_Information:*

*Source\_Citation:*

*Citation\_Information:*

*Originator:* Bruce R. Johnson

*Publication\_Date:* Unpublished Material

*Title:* State boundaries

*Geospatial\_Data\_Presentation\_Form:* vector digital data

*Source\_Scale\_Denominator:* 100,000

*Type\_of\_Source\_Media:* online

*Source\_Citation\_Abbreviation:* US001

*Source\_Contribution:* Provided linework for state boundaries

*Process\_Step:*

*Process\_Description:* Dataset copied from original source

*Process\_Date:* 2002

*Process\_Step:*

*Process\_Description:*

Combined the geology and a separate fault coverage into one as follows: 1) Arcs coded as faults in the geology coverage were buffered at a distance of 5 meters, 2) This buffer was used to select duplicate arcs in the fault coverage; they were then deleted, 3) The remaining faults were then imported into the geology coverage, and a copy of the now complete set of arcs was intersected with the original coverage to produce polygon labels for the newly created polygons.

*Process\_Date:* 2002

*Process\_Step:*

*Process\_Description:*

Adjusted the perimeter of the coverage to match a reference dataset of state boundaries derived from 1:100,000 scale digital line graphs. This allows the map to be used together with adjoining state maps referenced to the same boundary data. The state and international boundaries have a source of US001 in the AAT.

*Process\_Date:* 2003

*Process\_Step:*

*Process\_Description:*

Changed map unit labels for 14 polygons to conform to the printed map. These have a source of WA201 through WA214 in the PAT.

*Process\_Date:* 2004-2005

*Process\_Step:*

*Process\_Description:*

Made 13 new polygons to conform to the printed map. These have a source of WA215 through WA227.

*Process\_Date:* 2004-2005

*Process\_Step:*

*Process\_Description:*

To prepare a uniform AAT file, the following items were added: arc-code, arc-para1, and arc-para2. The last two are not used. Arc-code was populated, using the information in the original item, and inspection of the printed map. Then the original items in the AAT were deleted (LINE\_TYPE, MODIFIER, ACCURACY, FAULT\_CONT, SOURCE\_ID, OBJ\_TYPE, OBJ\_NO, SP\_OBJ\_ID).

*Process\_Date:* 2004-2005

*Process\_Step:*

*Process\_Description:*

To prepare a uniform PAT file, the following items were added: ORIG\_LABEL, SGMC\_LABEL, UNIT\_LINK, SOURCE, UNIT\_AGE, ROCKTYPE1, and ROCKTYPE2. ORIG\_LABEL was populated from the original item (PTYPE), SGMC\_LABEL and UNIT\_LINK were populated with information in the accompanying attribute table AZunits, UNIT\_AGE was populated with information in the accompanying attribute table AZage, and ROCKTYPE1 and ROCKTYPE2 were populated with information in the accompanying attribute table AZlith. Then the original items in the PAT were deleted (MAP\_UNIT, SOURCE\_ID, OBJ\_TYPE, OBJ\_NO, SP\_OBJ\_ID, FORMATION).

*Process\_Date:* 2004-2005

*Process\_Step:*

*Process\_Description:* Metadata imported.

*Source\_Used\_Citation\_Abbreviation:* C:\SGMC\_metadata\FINAL4\wametadata.xml

*Process\_Step:*

*Process\_Description:* Metadata imported.

*Source\_Used\_Citation\_Abbreviation:* C:\DOCUME~1\Barry\LOCALS~1\Temp\xml18D.tmp

*Process\_Step:*

*Process\_Description:* Metadata imported.

*Source\_Used\_Citation\_Abbreviation:* C:\DOCUME~1\slud\LOCALS~1\Temp\xml9.tmp

*Spatial\_Data\_Organization\_Information:*

*Direct\_Spatial\_Reference\_Method:* Vector

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

*SDTS\_Terms\_Description:*

*SDTS\_Point\_and\_Vector\_Object\_Type:* Complete chain

*Point\_and\_Vector\_Object\_Count:* 12899

*SDTS\_Terms\_Description:*

*SDTS\_Point\_and\_Vector\_Object\_Type:* Label point

*Point\_and\_Vector\_Object\_Count:* 5232

*SDTS\_Terms\_Description:*

*SDTS\_Point\_and\_Vector\_Object\_Type:* GT-polygon composed of chains

*Point\_and\_Vector\_Object\_Count:* 5232

*SDTS\_Terms\_Description:*

*SDTS\_Point\_and\_Vector\_Object\_Type:* Point

*Point\_and\_Vector\_Object\_Count:* 29

*SDTS\_Terms\_Description:*

*SDTS\_Point\_and\_Vector\_Object\_Type:* String

*Point\_and\_Vector\_Object\_Count:* 0

*SDTS\_Terms\_Description:*

*SDTS\_Point\_and\_Vector\_Object\_Type:* String

*Point\_and\_Vector\_Object\_Count:* 0

*Spatial\_Reference\_Information:*

*Horizontal\_Coordinate\_System\_Definition:*

*Planar:*

*Map\_Projection:*

*Map\_Projection\_Name:* Lambert Conformal Conic

*Lambert\_Conformal\_Conic:*

*Standard\_Parallel:* 33.000000

*Standard\_Parallel:* 45.000000

*Longitude\_of\_Central\_Meridian:* -100.000000

*Latitude\_of\_Projection\_Origin:* 0.000000

*False\_Easting:* 0.000000

*False\_Northing:* 0.000000

*Planar\_Coordinate\_Information:*

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

*Coordinate\_Representation:*

*Abscissa\_Resolution:* 0.003494

*Ordinate\_Resolution:* 0.003494

*Planar\_Distance\_Units:* meters

*Geodetic\_Model:*

*Horizontal\_Datum\_Name:* North American Datum of 1927

*Ellipsoid\_Name:* Clarke 1866

*Semi-major\_Axis:* 6378206.400000

*Denominator\_of\_Flattening\_Ratio:* 294.978698

*Entity\_and\_Attribute\_Information:*

*Detailed\_Description:*

*Entity\_Type:*

*Entity\_Type\_Label:* wageol\_lcc.aat

*Entity\_Type\_Definition:* arc attribute table

*Entity\_Type\_Definition\_Source:* ESRI

*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:* FNODE#

*Attribute\_Definition:* Internal node number for the beginning of an arc (from-node).

*Attribute\_Definition\_Source:* ESRI

*Attribute\_Domain\_Values:*

*Unrepresentable\_Domain:* Whole numbers that are automatically generated.

*Attribute:*

*Attribute\_Label:* TNODE#

*Attribute\_Definition:* Internal node number for the end of an arc (to-node).

*Attribute\_Definition\_Source:* ESRI

*Attribute\_Domain\_Values:*

*Unrepresentable\_Domain:* Whole numbers that are automatically generated.

*Attribute:*

*Attribute\_Label:* LPOLY#

*Attribute\_Definition:* Internal node number for the left polygon.

*Attribute\_Definition\_Source:* ESRI

*Attribute\_Domain\_Values:*

*Unrepresentable\_Domain:* Whole numbers that are automatically generated.

*Attribute:*

*Attribute\_Label:* RPOLY#

*Attribute\_Definition:* Internal node number for the right polygon.

*Attribute\_Definition\_Source:* ESRI

*Attribute\_Domain\_Values:*

*Unrepresentable\_Domain:* Whole numbers that are automatically generated.

*Attribute:*

*Attribute\_Label:* LENGTH

*Attribute\_Definition:* Length of feature in internal units.

*Attribute\_Definition\_Source:* ESRI

*Attribute\_Domain\_Values:*

*Unrepresentable\_Domain:* Positive real numbers that are automatically generated.

*Attribute:*

*Attribute\_Label:* WAGEOL\_LCC#

*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:* WAGEOL\_LCC-ID

*Attribute\_Definition:* User-defined feature number.

*Attribute\_Definition\_Source:* ESRI

*Attribute:*

*Attribute\_Label:* ARC-CODE

*Attribute\_Definition:* unique identifier for line features

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 1

*Enumerated\_Domain\_Value\_Definition:* Contact, location certain

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 2

*Enumerated\_Domain\_Value\_Definition:* Contact, location approximate

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 4

*Enumerated\_Domain\_Value\_Definition:* Normal fault, location certain

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 5

*Enumerated\_Domain\_Value\_Definition:* Normal fault, location approximate

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 7

*Enumerated\_Domain\_Value\_Definition:* Shoreline or riverbank

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 8

*Enumerated\_Domain\_Value\_Definition:* Internal contact

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 10

*Enumerated\_Domain\_Value\_Definition:* Thrust fault, location certain

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 11

*Enumerated\_Domain\_Value\_Definition:* Thrust fault, location approximate

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 30

*Enumerated\_Domain\_Value\_Definition:*

Fault, sense of displacement unknown or undefined, location certain

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 31

*Enumerated\_Domain\_Value\_Definition:*

Fault, sense of displacement unknown or undefined, location approximate

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 32

*Enumerated\_Domain\_Value\_Definition:*

Fault, sense of displacement unknown or undefined, location inferred or queried

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 52

*Enumerated\_Domain\_Value\_Definition:* Normal fault, concealed

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 53

*Enumerated\_Domain\_Value\_Definition:* Thrust fault, concealed

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 57

*Enumerated\_Domain\_Value\_Definition:* Right lateral fault, concealed

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 58

*Enumerated\_Domain\_Value\_Definition:* Left lateral fault, concealed

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 87

*Enumerated\_Domain\_Value\_Definition:* Right lateral fault, location certain

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 88

*Enumerated\_Domain\_Value\_Definition:* Right lateral fault, location approximate

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 89

*Enumerated\_Domain\_Value\_Definition:* Right lateral fault, location inferred or queried

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 90

*Enumerated\_Domain\_Value\_Definition:* Left lateral fault, location certain

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 91

*Enumerated\_Domain\_Value\_Definition:* Left lateral fault, location approximate

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 92

*Enumerated\_Domain\_Value\_Definition:* Left lateral fault, location inferred or queried

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 100

*Enumerated\_Domain\_Value\_Definition:* Fault, sense of displacement unknown, concealed

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 109

*Enumerated\_Domain\_Value\_Definition:* Detachment fault, location certain

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 113

*Enumerated\_Domain\_Value\_Definition:* Strike-slip fault, motion unknown, location certain

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 114

*Enumerated\_Domain\_Value\_Definition:* Strike-slip fault, motion unknown, location approximate

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 115

*Enumerated\_Domain\_Value\_Definition:* Strike-slip fault, motion unknown, location inferred

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 116

*Enumerated\_Domain\_Value\_Definition:* Strike-slip fault, motion unknown, location concealed

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 124

*Enumerated\_Domain\_Value\_Definition:* State boundary

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 125

*Enumerated\_Domain\_Value\_Definition:* International boundary

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* 129

*Enumerated\_Domain\_Value\_Definition:* Playa shoreline

*Attribute:*

*Attribute\_Label:* ARC-PARA1

*Attribute\_Definition:* additional spatial information about structures; not used

*Attribute:*

*Attribute\_Label:* ARC-PARA2

*Attribute\_Definition:* available scratch field; not used

*Attribute:*

*Attribute\_Label:* SOURCE

*Attribute\_Definition:* a coded reference citation indicating source used

*Attribute\_Definition\_Source:* Steve Ludington

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA801

*Enumerated\_Domain\_Value\_Definition:*

Added contact to split polygons when missing in original coverage

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA001

*Enumerated\_Domain\_Value\_Definition:* from original source coverage

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* US001

*Enumerated\_Domain\_Value\_Definition:* state and international boundaries

*Detailed\_Description:*

*Entity\_Type:*

*Entity\_Type\_Label:* wageol\_lcc.pat

*Entity\_Type\_Definition:* polygon attribute table

*Entity\_Type\_Definition\_Source:* ESRI

*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:* 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.

*Attribute:*

*Attribute\_Label:* PERIMETER

*Attribute\_Definition:* Perimeter of feature in internal units.

*Attribute\_Definition\_Source:* ESRI

*Attribute\_Domain\_Values:*

*Unrepresentable\_Domain:* Positive real numbers that are automatically generated.

*Attribute:*

*Attribute\_Label:* WAGEOL\_LCC#

*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:* WAGEOL\_LCC-ID

*Attribute\_Definition:* User-defined feature number.

*Attribute\_Definition\_Source:* ESRI

*Attribute:*

*Attribute\_Label:* ORIG\_LABEL

*Attribute\_Definition:* unmodified map unit symbol from source coverage

*Attribute\_Domain\_Values:*

*Codeset\_Domain:*

*Codeset\_Name:* WAunits

*Codeset\_Source:*

Accompanying attribute table in OFR 2005-1305. View by opening .csv file in Excel

*Attribute:*

*Attribute\_Label:* SGMC\_LABEL

*Attribute\_Definition:*

orig\_label + ;n, where n is a province number (0 if no provinces)

*Attribute\_Definition\_Source:* Steve Ludington

*Attribute\_Domain\_Values:*

*Codeset\_Domain:*

*Codeset\_Name:* WAunits

*Codeset\_Source:*

Accompanying attribute table in OFR 2005-1305. View by opening .csv file in Excel

*Attribute:*

*Attribute\_Label:* UNIT\_LINK

*Attribute\_Definition:*

sgmc\_label, preceded by 2-letter state abbreviation); provides a unique identifier

*Attribute\_Definition\_Source:* Steve Ludington

*Attribute\_Domain\_Values:*

*Codeset\_Domain:*

*Codeset\_Name:* WAunits

*Codeset\_Source:*

Accompanying attribute table in OFR 2005-1305. View by opening .csv file in Excel

*Attribute:*

*Attribute\_Label:* SOURCE

*Attribute\_Definition:* a coded reference citation indicating source used

*Attribute\_Definition\_Source:* Steve Ludington

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA902

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to P to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA901

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to Tas to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA903

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to EOc to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA904

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to CAs to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA905

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to Qg to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA906

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to JKv to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA907

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to pT to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA908

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to TKc to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA909

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to pJph to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA910

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to EV2 to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA911

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to Qg1 to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA912

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to OG to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA913

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to OG to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA914

*Enumerated\_Domain\_Value\_Definition:* Unit label changed to OGMI to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA915

*Enumerated\_Domain\_Value\_Definition:* Polygon and SGMC\_label added in order to conform to printed map

*Attribute\_Domain\_Values:*

*Enumerated\_Domain:*

*Enumerated\_Domain\_Value:* WA001

*Enumerated\_Domain\_Value\_Definition:* from original source coverage

*Attribute:*

*Attribute\_Label:* UNIT\_AGE

*Attribute\_Definition:* free-form field best representing geologic age of unit

*Attribute\_Definition\_Source:* Steve Ludington

*Attribute\_Domain\_Values:*

*Codeset\_Domain:*

*Codeset\_Name:* WAage

*Codeset\_Source:*

Accompanying attribute table in OFR 2005-1305. View by opening .csv file in Excel

*Attribute:*

*Attribute\_Label:* ROCKTYPE1

*Attribute\_Definition:* most abundant lithology in map unit

*Attribute\_Definition\_Source:* Steve Ludington

*Attribute\_Domain\_Values:*

*Codeset\_Domain:*

*Codeset\_Name:* WAunits

*Codeset\_Source:*

Accompanying attribute table in OFR 2005-1305. View by opening .csv file in Excel

*Attribute:*

*Attribute\_Label:* ROCKTYPE2

*Attribute\_Definition:* second most abundant lithology in map unit

*Attribute\_Definition\_Source:* Steve Ludington

*Attribute\_Domain\_Values:*

*Codeset\_Domain:*

*Codeset\_Name:* WAunits

*Codeset\_Source:*

Accompanying attribute table in OFR 2005-1305. View by opening .csv file in Excel

*Distribution\_Information:*

*Distributor:*

*Contact\_Information:*

*Contact\_Organization\_Primary:*

*Contact\_Organization:* U.S. Geological Survey Information Services

*Contact\_Address:*

*Address\_Type:* mailing address

*Address:* U.S. Geological Survey, 507 National Center

*City:* Reston

*State\_or\_Province:* VA

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*Resource\_Description:* U.S. Geological Survey Open-File Report OFR 2005-1305

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*Digital\_Transfer\_Information:*

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*Format\_Version\_Number:* 8.3

*Format\_Information\_Content:* geologic units and structural features

*Transfer\_Size:* 7.965

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*Online\_Option:*

*Computer\_Contact\_Information:*

*Network\_Address:*

*Network\_Resource\_Name:* [<http://pubs.usgs.gov/of/2005/1305/>](http://pubs.usgs.gov/of/2005/1305/)

*Fees:* none

*Metadata\_Reference\_Information:*

*Metadata\_Date:* 20050816

*Metadata\_Contact:*

*Contact\_Information:*

*Contact\_Organization\_Primary:*

*Contact\_Organization:* U.S. Geological Survey

*Contact\_Person:* Steve Ludington

*Contact\_Position:* geologist

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*Address\_Type:* mailing address

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*Metadata\_Standard\_Name:* Content Standard 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>](http://www.esri.com/metadata/esriprof80.html)

*Profile\_Name:* ESRI Metadata Profile