# Coal Basin, Region & Field



US Department of Energy, Energy, Coal, Carbon Sequestration, NATCARB, USA

# Summary

This dataset provides a single, seamless spatial database of carbon storage potentials for unmineable coal areas across the USA and parts of Canada compiled from regional datasets created by the RCSPs. Storage resource estimates are based on physically accessible CO2 storage pore volume within subsurface geologic formations, and on the assumption that the storage reservoirs are open systems in which in situ fluids will either be displaced from the injection zone or managed accordingly. Economic and regulatory constraints are not considered. These data are intended to be used as an initial assessment of potential geologic storage and are not a substitute for site-specific assessment, testing, and geologic investigation. This spatial data layer provides carbon capture and storage (CCS) project developers a starting point for further inquiry into CCS technologies aimed at reducing CO2 emissions and is intended for use by RCSPs, project developers, and governmental entities for regional- and national-scale assessments of potential CO2 storage resources in the United States and parts of Canada.

# Description

The National Carbon Sequestration Database and Geographic Information System (NATCARB) Coal spatial database is a small-scale (large-area) overview of carbon dioxide (CO2) geologic storage potential in unmineable coal areas across the USA and parts of Canada. This data layer reflects the best available knowledge regarding the location of carbon sequestration potential in the USA and Canada, both onshore and offshore.

Version Log:

v1101 - Initial release for Atlas III;

- v1102 no changes. Version not released;
- v1103 Updated data for WESTCARB. Metadata revised.;
- v1104 no changes to coal layer;

v1204 - Initial release for Atlas IV. New data submitted by all regional partnerships.

NATCARB is administered by the US Dept. of Energy (DOE) National Energy Technology Laboratory (NETL) and contains data provided by several Regional Carbon Sequestration Partnerships (RCSP). RCSPs originally developed the data per individual geologic storage resource, or as continuous surface models, and then converted these data into a 10 km X 10 km vector "grid". The NATCARB Team at the Kansas Geological Survey compiled the regional datasets into a single, seamless layer.

### Credits

Version 1204 (fourth quarter release of 2012) of the NATCARB Coal spatial database was created by the NATCARB Team at the Kansas Geological Survey (KGS). The following Regional Carbon Sequestration Partnerships (RCSP) contributed data to the national dataset: Big Sky Carbon Sequestration Partnership (BSCSP); Midwest Geological Sequestration Consortium (MGSC); Midwest Regional Carbon Sequestration Partnership (MRCSP); Plains CO2 Reduction Partnership (PCOR); Southeast Regional Carbon Sequestration Partnership (SECARB); Southwest Regional Partnership on Carbon Sequestration (SWP); West Coast Regional Partnership (SECARB); Southwest Regional Partnership on Carbon Sequestration (SWP); West Coast Regional Partnership (SECARB); Southwest Regional Partnership on Carbon Sequestration (SWP); West Coast Regional Partnership (SECARB); Southwest Regional Partnership on Carbon Sequestration (SWP); West Coast Regional Partnership (SECARB); Southwest Regional Partnership on Carbon Sequestration (SWP); West Coast Regional Partnership (SECARB); Southwest (SECARB); S

Carbon Sequestration Partnership (WESTCARB). Several site characterization project teams also contributed data through the RCSPs to be included in the national dataset: Black Warrior Basin - University of Alabama; Cambro-Ordovician Strata of the Illinois and Michigan Basins - University of Illinois Gulf of Mexico; Miocene - University of Texas; Triassic Newark Basin of New York and New Jersey - Sandia Technologies; Ozark Plateau Study Area - University of Kansas; Rocky Mountain Region - University of Utah; South Georgia Rift Basin - South Carolina Research Institution; Two Elk Energy Park - North American Power Group; Wilmington Graben, Offshore Los Angeles - Terralog Technologies USA; Wyoming - University of Wyoming.

### **Use limitations**

See access and use constraints information.

# ArcGIS Metadata

**Topics and Keywords** 

\* CONTENT TYPE Downloadable Data

PLACE KEYWORDS Canada, USA

THESAURUS TITLE ISO 19115 Topic Category

THESAURUS TITLE ISO 19115 Topic Category

THEME KEYWORDS US Department of Energy, Energy, Coal, Carbon Sequestration, NATCARB

### Citation

TITLE NATCARB Coal Poly (v1204) PUBLICATION DATE 2012-12-14 00:00:00

EDITION v1204

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data

OTHER CITATION DETAILS http://www.netl.doe.gov/technologies/carbon\_seq/natcarb

# **Citation Contacts**

### **RESPONSIBLE PARTY**

ORGANIZATION'S NAME National Carbon Sequestration Database and Geographic Information System (NATCARB), US Dept of Energy (DOE) National Energy Technology Laboratory (NETL) CONTACT'S ROLE originator

**Resource Details** 

DATASET LANGUAGES English (UNITED STATES)

STATUS completed SPATIAL REPRESENTATION TYPE vector

### SUPPLEMENTAL INFORMATION

For a detailed methodology of storage resource estimates refer to Appendix B of The United States 2012 Carbon Utilization and Storage Atlas - Fourth Edition (Atlas IV). For data access please contact the US DOE-NETL NATCARB Map Team - NatCarb.Maps@netl.doe.gov For questions regarding how the data were assembled, contact the KGS NATCARB Team - natcarb@kgs.ku.edu

\* PROCESSING ENVIRONMENT Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; ESRI ArcGIS 10.0.4.4000

### CREDITS

Version 1204 (fourth quarter release of 2012) of the NATCARB Coal spatial database was created by the NATCARB Team at the Kansas Geological Survey (KGS).

The following Regional Carbon Sequestration Partnerships (RCSP) contributed data to the national dataset:

Big Sky Carbon Sequestration Partnership (BSCSP); Midwest Geological Sequestration Consortium (MGSC); Midwest Regional Carbon Sequestration Partnership (MRCSP); Plains CO2 Reduction Partnership (PCOR); Southeast Regional Carbon Sequestration Partnership (SECARB); Southwest Regional Partnership on Carbon Sequestration (SWP); West Coast Regional Carbon Sequestration Partnership (WESTCARB).

Several site characterization project teams also contributed data through the RCSPs to be included in the national dataset:

Black Warrior Basin - University of Alabama; Cambro-Ordovician Strata of the Illinois and Michigan Basins - University of Illinois Gulf of Mexico; Miocene - University of Texas; Triassic Newark Basin of New York and New Jersey - Sandia Technologies; Ozark Plateau Study Area - University of Kansas; Rocky Mountain Region - University of Utah; South Georgia Rift Basin - South Carolina Research Institution; Two Elk Energy Park - North American Power Group; Wilmington Graben, Offshore Los Angeles - Terralog Technologies USA; Wyoming - University of Wyoming.

### ARCGIS ITEM PROPERTIES

\* NAME NATCARB\_Coal\_Poly\_v1204 \* LOCATION \* ACCESS PROTOCOL Local Area Network

# Extents

# EXTENT

GEOGRAPHIC EXTENT BOUNDING RECTANGLE WEST LONGITUDE -178.554487 EAST LONGITUDE -37.077357 SOUTH LATITUDE 20.138391 NORTH LATITUDE 79.535565

# EXTENT

# GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

- EXTENT TYPE Extent used for searching
- \* WEST LONGITUDE -178.429219
- \* EAST LONGITUDE -40.914016
- \* NORTH LATITUDE 79.497703
- \* SOUTH LATITUDE 20.236657
- \* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

- \* WEST LONGITUDE -3374905.737400
- \* EAST LONGITUDE 1795933.960359
- \* SOUTH LATITUDE -2111979.600200
- \* NORTH LATITUDE 3784901.582600
- \* EXTENT CONTAINS THE RESOURCE Yes

### **Resource Points of Contact**

POINT OF CONTACT ORGANIZATION'S NAME NATCARB Map Team, US Dept. of Energy (DOE) National Energy Technology Laboratory (NETL) CONTACT'S ROLE point of contact

CONTACT INFORMATION PHONE VOICE 304-285-1354 VOICE 304-285-2006

ADDRESS TYPE both DELIVERY POINT 3610 Collins Ferry Road M/S F04 CITY Morgantown ADMINISTRATIVE AREA West Virginia POSTAL CODE 26507 COUNTRY US E-MAIL ADDRESS NatCarb.Maps@netI.doe.gov

### **Resource Maintenance**

RESOURCE MAINTENANCE DATE OF NEXT UPDATE 2013-04-01 00:00:00 UPDATE FREQUENCY quarterly

### **Resource Constraints**

LEGAL CONSTRAINTS LIMITATIONS OF USE See access and use constraints information.

CONSTRAINTS LIMITATIONS OF USE See access and use constraints information.

# **Spatial Reference**

### ARCGIS COORDINATE SYSTEM

- \* TYPE Projected
- \* GEOGRAPHIC COORDINATE REFERENCE GCS\_WGS\_1984
- \* PROJECTION Lambert Azimuthal Equal-area
- \* COORDINATE REFERENCE DETAILS

PROJECTED COORDINATE SYSTEM

X ORIGIN -12749300 Y ORIGIN -12735000 XY SCALE 10000 Z ORIGIN -100000 Z SCALE 10000 M ORIGIN -100000 M SCALE 10000 XY TOLERANCE 0.001 Z TOLERANCE 0.001 M TOLERANCE 0.001 HIGH PRECISION true WELL-KNOWN TEXT PROJCS["LambertAzimut OID["WGS\_1984",63781

PROJCS["LambertAzimuthalEqualarea",GEOGCS["GCS\_WGS\_1984",DATUM["D\_WGS\_1984",SPHER OID["WGS\_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.01745 32925199433]],PROJECTION["Lambert\_Azimuthal\_Equal\_Area"],PARAMETER["False\_Easting",0.0],

PARAMETER["False\_Northing",0.0],PARAMETER["Central\_Meridian",100.0],PARAMETER["Latitude\_ Of\_Origin",45.0],UNIT["Meter",1.0]]

REFERENCE SYSTEM IDENTIFIER \* VALUE 0

**Spatial Data Properties** 

VECTOR

\* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

- FEATURE CLASS NAME NATCARB\_Coal\_Poly\_v1204
- \* OBJECT TYPE composite
- \* OBJECT COUNT 310

#### ARCGIS FEATURE CLASS PROPERTIES

- \* FEATURE TYPE Simple
- \* GEOMETRY TYPE Polygon
- \* HAS TOPOLOGY FALSE
- \* FEATURE COUNT 310
- \* SPATIAL INDEX TRUE
- \* LINEAR REFERENCING FALSE

### Data Quality

SCOPE OF QUALITY INFORMATION RESOURCE LEVEL dataset

#### DATA QUALITY REPORT - CONCEPTUAL CONSISTENCY

MEASURE DESCRIPTION All RCSPs provided carbon storage data in accordance with common standards developed by the RCSPs and the NATCARB project teams. (See Sources for more information on methodologies). Discrepancies and overlaps occur at the boundaries of some adjacent partnerships and DOE-NETL is the final authority on the handling of these issues (see data fields OVERLAP and DUPLICATE in Entity Attributes section of this document for details).

### DATA QUALITY REPORT - COMPLETENESS OMISSION

MEASURE DESCRIPTION This dataset reflects the best available knowledge regarding the location of potential carbon sequestration potential in the USA and Canada, both onshore and offshore. However, not all areas of the United States and Canada have been assessed (e.g., offshore New England). Not all RCSPs provided data for all attribute fields in the database (indicated by <Null>). Values of "0" represent actual measurements. Not all RCSPs provided low (VOL\_LOW), medium (VOL\_MED) and high (VOL\_HIGH) estimates of carbon storage capacity. In cases where only medium estimates (VOL\_MED) were provided, the medium capacities were copied into the VOL\_LOW and VOL\_HIGH attribute fields. If the RCSP provided low and high estimates of capacity but not medium, the VOL\_MED field was set to <Null>.

## DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY

MEASURE DESCRIPTION Questions regarding accuracy of the data (spatial and attribute) should be directed to the individual RCSPs. Except for certain cases of inter-partnership overlap, NATCARB did not make any changes to the data except for corrections to values in text fields (spelling, capitalization, etc.) when errors were noticed.

### Lineage

#### PROCESS STEP

DESCRIPTION The NATCARB Group at the Kansas Geological Survey assembled GIS datasets from the regional partnerships (and other sources where necessary) into a single layer using ESRI's ArcInfo (v10.0) software in the Summer and Fall of 2012. All partnerships provided data in 10 km by 10 km vector "cells" and simple polygon outlines of resource boundaries. Not all partnerships provided low,

medium and high capacity estimates. Where only medium capacities were provided, KGS made the low and high capacity fields (VOL\_LOW and VOL\_HIGH, respectively) equal to the medium capacity (VOL\_MED). Where only low and high estimates were provided, medium values were set to <Null>. Other alterations to the data include identifying overlapping and duplicate data submitted by adjacent partnerships and making corrections to values in text fields (spelling, capitalization, etc.) when errors were noticed.

PROCESS CONTACT ORGANIZATION'S NAME GIS Support Section, Kansas Geological Survey CONTACT'S POSITION NatCarb Team CONTACT'S ROLE processor

CONTACT INFORMATION PHONE VOICE 785-864-3965

ADDRESS TYPE both DELIVERY POINT 1930 Constant Ave CITY Lawrence ADMINISTRATIVE AREA KS POSTAL CODE 66047-3726 COUNTRY US E-MAIL ADDRESS natcarb@kgs.ku.edu

HOURS OF SERVICE 8 am - 5 pm M-F

PROCESS STEP DESCRIPTION Metadata updated.

PROCESS CONTACT ORGANIZATION'S NAME GIS Support Section, Kansas Geological Survey CONTACT'S POSITION NATCARB Team CONTACT'S ROLE processor

SOURCE DATA DESCRIPTION No data submitted for v1204 dataset.

SOURCE CITATION TITLE Site Characterization of the Highest Priority Geologic Formations for CO2 Storage in Wyoming ALTERNATE TITLES WYOMING

RESPONSIBLE PARTY ORGANIZATION'S NAME University of Wyoming CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/publications/factsheets/project/FE0002142.pdf

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/arrasitechar.html

SOURCE DATA

DESCRIPTION As the responsible authority for the National Carbon Sequestration Database and Geographic Information System (NATCARB), the US Department of Energy (DOE) National Energy Technology Laboratory (NETL) NATCARB Team provided data, methodological guidance and expertise in handling issues specific to creation of the composite NATCARB data layers.

SOURCE CITATION TITLE DOE-NETL ALTERNATE TITLES DOE-NETL **RESPONSIBLE PARTY** 

ORGANIZATION'S NAME US Department of Energy (DOE) National Energy Technology Laboratory NATCARB Team CONTACT'S ROLE

originator

### SOURCE DATA

DESCRIPTION Midwest Regional Carbon Sequestration Partnership provided data for the Ohio Valley and Northeastern United States (Eastern Indiana, Eastern Kentucky, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania and West Virginia).

SOURCE CITATION TITLE MRCSP Coal 10K Carbon Sequestration Potential ALTERNATE TITLES MRCSP

PRESENTATION FORMATS digital map vector digital data FGDC GEOSPATIAL PRESENTATION FORMAT

**RESPONSIBLE PARTY ORGANIZATION'S NAME Batelle Memorial Institute** originator CONTACT'S ROLE

**RESPONSIBLE PARTY** ORGANIZATION'S NAME Midwest Regional Carbon Sequestration Partnership CONTACT'S ROLE originator

**RESOURCE LOCATION ONLINE** LOCATION http://www.netl.doe.gov/technologies/carbon\_seg/infrastructure/rcsp.html

**RESOURCE LOCATION ONLINE** LOCATION http://www.mrcsp.org/

### SOURCE DATA

DESCRIPTION Big Sky Carbon Sequestration Partnership provided data for the Innermountain West region of the Northwestern United States (Idaho, Eastern Montana, Eastern Oregon, Western South Dakota, Eastern Washington and Wyoming).

## SOURCE CITATION

TITLE BSCSP Coal 10K Carbon Seguestration Potential ALTERNATE TITLES BSCSP

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data

**RESPONSIBLE PARTY ORGANIZATION'S NAME Montana State University** CONTACT'S ROLE originator

**RESPONSIBLE PARTY ORGANIZATION'S NAME Big Sky Sequestration Partnership** CONTACT'S ROLE originator

**RESOURCE LOCATION ONLINE** LOCATION http://www.netl.doe.gov/technologies/carbon\_seg/infrastructure/rcsp.html

**RESOURCE LOCATION ONLINE** LOCATION http://www.bigskyco2.org/

### SOURCE DATA

DESCRIPTION No data submitted for v1204 dataset.

### SOURCE CITATION

TITLE Two Elk Energy Park Carbon Site Characterization Project

ALTERNATE TITLES TWO ELK RESPONSIBLE PARTY ORGANIZATION'S NAME North American Power Group, Ltd. CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/publications/factsheets/project/FE0001997.pdf

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/arrasitechar.html

### SOURCE DATA

DESCRIPTION Southeast Regional Carbon Sequestration Partnership provided data for the Southeastern United States (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Eastern Texas, West Virginia and Virginia).

# SOURCE CITATION

TITLE SECARB Coal Carbon Sequestration Potential ALTERNATE TITLES SECARB

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT

vector digital data

RESPONSIBLE PARTY ORGANIZATION'S NAME Southern States Energy Board CONTACT'S ROLE originator

RESPONSIBLE PARTY ORGANIZATION'S NAME Southeast Regional Carbon Sequestration Partnership CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.secarbon.org/

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/rcsp.html

## SOURCE DATA

DESCRIPTION Midwest Geological Sequestration Consortium provided data for Illinois, Western Indiana and Western Kentucky.

SOURCE CITATION TITLE MGSC Coal 10K Carbon Sequestration Potential ALTERNATE TITLES MGSC

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data

RESPONSIBLE PARTY ORGANIZATION'S NAME Illinois State Geological Survey CONTACT'S ROLE originator

RESPONSIBLE PARTY ORGANIZATION'S NAME Midwest Geological Sequestration Consortium CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.sequestration.org/

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/rcsp.html SOURCE DATA

DESCRIPTION The University of Alabama contributed data for multiple saline resources in the Black Warrior Basin in Alabama.

#### SOURCE CITATION

TITLE Site Characterization for CO2 Storage from Coal-fired Power Facilities in the Black Warrior Basin of Alabama

ALTERNATE TITLES BLACK WARRIOR

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT

vector digital data

RESPONSIBLE PARTY ORGANIZATION'S NAME University of Alabama CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE

LOCATION http://www.netl.doe.gov/publications/factsheets/project/FE0001910.pdf

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/arrasitechar.html

#### SOURCE DATA

DESCRIPTION The University of Utah contributed data for the Weber Sandstone saline resource in Colorado.

#### SOURCE CITATION

TITLE Characterization of Most Promising Sequestration Formations in the Rocky Mountain Region ALTERNATE TITLES ROCKY MOUNTAIN

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT

vector digital data

RESPONSIBLE PARTY

ORGANIZATION'S NAME University of Utah CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/publications/factsheets/project/FE0001812.pdf

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/arrasitechar.html

# SOURCE DATA

DESCRIPTION The Illinois Geological Survey contributed data for portions of the St Peter Sandstone saline resource in Illinois and Michigan.

#### SOURCE CITATION

TITLE An Evaluation of the Carbon Sequestration Potential of the Cambro Ordovician Strata of the Illinois and Michigan Basins ALTERNATE TITLES CAMBRO ORDOVICIAN

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT ve

vector digital data

RESPONSIBLE PARTY ORGANIZATION'S NAME Illinois State Geological Survey CONTACT'S ROLE originator

RESPONSIBLE PARTY ORGANIZATION'S NAME University of Illinois CONTACT'S ROLE originator

#### RESOURCE LOCATION ONLINE LOCATION

http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/arrasitechar.html

#### RESOURCE LOCATION ONLINE

LOCATION http://www.netl.doe.gov/publications/factsheets/project/FE0002068.pdf

#### SOURCE DATA

DESCRIPTION No data submitted for v1204 dataset.

### SOURCE CITATION

TITLE Characterization of Pliocene and Miocene Formations in the Wilmington Graben, Offshore Los Angeles, for Large Scale Geologic Storage of CO2 ALTERNATE TITLES WILMINGTON GRABEN

**RESPONSIBLE PARTY** 

ORGANIZATION'S NAME Terralog Technologies USA CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/arrasitechar.html

### RESOURCE LOCATION ONLINE

LOCATION http://www.netl.doe.gov/publications/factsheets/project/FE0001922.pdf

# SOURCE DATA

DESCRIPTION The Plains CO2 Reduction Partnership provided data for the upper Midwest and Central Canada (Iowa, Minnesota, Missouri, Eastern Montana, Nebraska, North Dakota, Eastern South Dakota, Wisconsin, Eastern Wyoming, Alberta, Northeastern British Columbia, Manitoba and Saskatchewan).

### SOURCE CITATION

TITLE PCOR Coal 10K Carbon Sequestration Potential ALTERNATE TITLES PCOR

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT

vector digital data

**RESPONSIBLE PARTY** 

ORGANIZATION'S NAME University of North Dakota, Energy and Environmental Research Center CONTACT'S ROLE originator

RESPONSIBLE PARTY ORGANIZATION'S NAME The Plains CO2 Reduction Parthership CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/rcsp.html

### RESOURCE LOCATION ONLINE LOCATION http://www.undeerc.org/pcor/

### SOURCE DATA

DESCRIPTION As the primary entity responsible for compiling the NATCARB layers, the Kansas Geological Survey NATCARB Team worked closely with the DOE-NETL NATCARB Team to develop rules and methods for assembling the composite datasets.

SOURCE CITATION TITLE KGS NATCARB ALTERNATE TITLES KGS

RESPONSIBLE PARTY ORGANIZATION'S NAME Kansas Geological Survey NATCARB Team CONTACT'S ROLE originator

### SOURCE DATA

DESCRIPTION No data submitted for v1204 dataset.

### SOURCE CITATION

TITLE Geologic Characterization of the South Georgia Rift Basin for Source Proximal CO2 Storage ALTERNATE TITLES GEORGIA RIFT

**RESPONSIBLE PARTY** 

ORGANIZATION'S NAME South Carolina Research Foundation CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/publications/factsheets/project/FE0001965.pdf

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/arrasitechar.html

#### SOURCE DATA

DESCRIPTION The University of Kansas contributed data for the Arbuckle saline resource in Kansas.

#### SOURCE CITATION

TITLE Modeling CO2 Sequestration in a Saline Reservoir and Depleted Oil Reservoir to Evaluate The Regional CO2 Sequestration Potential of The Ozark Plateau Aquifer System, South-Central Kansas ALTERNATE TITLES OZARK PLATEAU

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data

RESPONSIBLE PARTY ORGANIZATION'S NAME University of Kansas CONTACT'S ROLE originator

RESPONSIBLE PARTY ORGANIZATION'S NAME Kansas Geological Survey CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/arrasitechar.html

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/publications/factsheets/project/FE0002056.pdf

#### SOURCE DATA

DESCRIPTION No data submitted for v1204 dataset.

#### SOURCE CITATION

TITLE Gulf of Mexico Miocene CO2 Site Characterization Mega Transect ALTERNATE TITLES GOM MIOCENE

RESPONSIBLE PARTY ORGANIZATION'S NAME University of Texas at Austin CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/arrasitechar.html

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/publications/factsheets/project/FE0001941.pdf

# SOURCE DATA

DESCRIPTION Southwest Regional Partnership on Carbon Sequestration provided data for the Southwestern United States (Eastern Arizona, Colorado, Kansas, New Mexico, Western Texas and Utah).

#### SOURCE CITATION

TITLE SWP Coal 10K Carbon Sequestration Potential ALTERNATE TITLES SWP

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT

vector digital data

# RESPONSIBLE PARTY

ORGANIZATION'S NAME New Mexico Institute of Mining and Technology CONTACT'S ROLE originator

RESPONSIBLE PARTY

ORGANIZATION'S NAME Southwest Regional Partnership on Carbon Sequestration CONTACT'S ROLE originator

#### RESOURCE LOCATION ONLINE

LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/rcsp.html/

RESOURCE LOCATION ONLINE LOCATION http://www.southwestcarbonpartnership.org

#### SOURCE DATA

DESCRIPTION No data submitted for v1204 dataset.

### SOURCE CITATION

TITLE Characterization of the Triassic Newark Basin of New York and New Jersey for Geologic Storage of Carbon Dioxide ALTERNATE TITLES NEWARK BASIN

RESPONSIBLE PARTY

ORGANIZATION'S NAME Sandia Technologies LLC CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/arrasitechar.html

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/publications/factsheets/project/FE0002352.pdf

#### SOURCE DATA

DESCRIPTION The United States 2012 Carbon Utilization and Storage Atlas - Fourth Edition (Atlas IV) provides updated information regarding carbon dioxide storage potential in the US and Canada and includes maps, summary tables and, in Appendices A and B, detailed methodologies.

SOURCE MEDIUM NAME online link SOURCE CITATION TITLE The United States 2012 Carbon Utilization and Storage Atlas ALTERNATE TITLES Atlas IV

**EDITION** Fourth

OTHER CITATION DETAILS http://www.netl.doe.gov 1-800-553-7681

#### RESPONSIBLE PARTY

ORGANIZATION'S NAME US Department of Energy - National Energy Technology Laboratory CONTACT'S ROLE publisher

# RESPONSIBLE PARTY

ORGANIZATION'S NAME US Department of Energy - National Energy Technology Laboratory Carbon Sequestration Program CONTACT'S ROLE originator RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/refshelf/atlasIV/

## SOURCE DATA

DESCRIPTION West Coast Regional Carbon Sequestration Partnership provided data for the Western United States and Canada (Alaska, Western Arizona, Western British Columbia, California, Hawaii, Nevada, Western Oregon and Western Washington).

SOURCE CITATION TITLE WESTCARB Coal 10K Carbon Sequestration Potential ALTERNATE TITLES WESTCARB

PRESENTATION FORMATS digital map FGDC GEOSPATIAL PRESENTATION FORMAT

vector digital data

RESPONSIBLE PARTY ORGANIZATION'S NAME California Energy Commission CONTACT'S ROLE originator

RESPONSIBLE PARTY

ORGANIZATION'S NAME West Coast Regional Carbon Sequestration Partnership CONTACT'S ROLE originator

RESOURCE LOCATION ONLINE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/infrastructure/rcsp.html

RESOURCE LOCATION ONLINE LOCATION http://www.westcarb.org/

# Distribution

### DISTRIBUTOR

CONTACT INFORMATION ORGANIZATION'S NAME NATCARB Map Team, US Department of Energy (DOE) National Energy Technoloy Laboratory (NETL) CONTACT'S ROLE distributor

CONTACT INFORMATION

PHONE VOICE 304-285-1354 VOICE 304-285-2006

ADDRESS

TYPE both DELIVERY POINT 3610 Collins Ferry Road M/S F04 CITY Morgantown ADMINISTRATIVE AREA West Virginia POSTAL CODE 26507 COUNTRY US E-MAIL ADDRESS NATCARB.Maps@NETL.DOE.GOV

### AVAILABLE FORMAT

NAME ESRI File Geodatabase VERSION 10.0 FILE DECOMPRESSION TECHNIQUE zip

**ORDERING PROCESS** 

TERMS AND FEES None INSTRUCTIONS

GIS datasets in ESRI file geodatabase format are available online. Please contact NATCARB Map Team for custom requests.

# TRANSFER OPTIONS ONLINE SOURCE LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/natcarb/download.html

### **DISTRIBUTION FORMAT**

\* NAME File Geodatabase Feature Class

# TRANSFER OPTIONS

ONLINE SOURCE

LOCATION http://www.netl.doe.gov/technologies/carbon\_seq/natcarb/download.html

#### Fields

DETAILS FOR OBJECT NATCARB\_Coal\_Poly\_v1204 \* TYPE Feature Class \* ROW COUNT 310 DEFINITION Vector polygon features representing unmineable coal areas in the USA and Canada DEFINITION SOURCE

NATCARB

### FIELD ARRA\_PROJECT

- \* ALIAS ARRA\_PROJECT
- \* DATA TYPE String
- \* WIDTH 20
- \* PRECISION 0
- \* SCALE 0
- FIELD DESCRIPTION

Name of the site characterization study project.

DESCRIPTION SOURCE DOE-NETL

LIST OF VALUES VALUE GOM MIOCENE DESCRIPTION Gulf of Mexico Miocene - U. of Texas at Austin

VALUE NEWARK BASIN DESCRIPTION Triassic Newark Basin of NY and NJ - Sandia Technologies

VALUE BLACK WARRIOR DESCRIPTION Black Warrior Basin - U. of Alabama

VALUE WILMINGTON GRABEN DESCRIPTION Wilmington Graben, Offshore Los Angeles - Terralog Technologies USA

VALUE TWO ELK DESCRIPTION Two Elk Energy Park - North American Power Group

VALUE WYOMING DESCRIPTION U. of Wyoming

VALUE OZARK PLATEAU DESCRIPTION Ozark Plateau Study Area - U. of Kansas VALUE SOUTH GEORGIA DESCRIPTION South Georgia Rift Basin - South Carolina Research Institution

VALUE ROCKY MOUNTAIN DESCRIPTION Rocky Mountain Region - U. of Utah VALUE CAMBRO ORDOVICIAN DESCRIPTION Cambro-Ordovician Strata of the Illinois and Michigan Basins - U. of Illinois

FIELD SHAPE\_Area

- \* ALIAS Shape\_Area
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0
- FIELD DESCRIPTION

Area of feature in internal units squared.

DESCRIPTION SOURCE ESRI

DESCRIPTION OF VALUES Positive real numbers that are automatically generated.

### FIELD OVERLAP

- \* ALIAS OVERLAP
- \* DATA TYPE SmallInteger
- \* WIDTH 2
- \* PRECISION 0
- \* SCALE 0

#### FIELD DESCRIPTION

Flag indicating an overlapping resource with another partnership.

DESCRIPTION SOURCE

KGS

LIST OF VALUES VALUE 0 DESCRIPTION No overlap

VALUE 1

DESCRIPTION Overlap exists with adjacent partnership

# FIELD DUPLICATE

- \* ALIAS DUPLICATE
- \* DATA TYPE SmallInteger
- \* WIDTH 2
- \* PRECISION 0
- \* SCALE 0

### FIELD DESCRIPTION

Flag indicating data is a duplicate of data from another partnership. Data was not used to calculate summaries in the Atlas.

DESCRIPTION SOURCE

# KGS

LIST OF VALUES VALUE 0 DESCRIPTION Not a duplicate

VALUE 1 DESCRIPTION Duplicate data with adjacent partnership

## FIELD OBJECTID

- \* ALIAS OBJECTID
- \* DATA TYPE OID
- \* WIDTH 4

\* PRECISION 0

- \* SCALE 0
- FIELD DESCRIPTION

Internal feature number.

DESCRIPTION SOURCE ESRI

DESCRIPTION OF VALUES Sequential unique whole numbers that are automatically generated.

# FIELD RESOURCE\_NAME

- \* ALIAS RESOURCE\_NAME
- \* DATA TYPE String
- \* WIDTH 50
- \* PRECISION 0
- \* SCALE 0
- FIELD DESCRIPTION

Name of the geologic storage resource.

# FIELD SHAPE\_Length

- \* ALIAS Shape\_Length
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0
- FIELD DESCRIPTION

Length of feature in internal units.

DESCRIPTION SOURCE ESRI

DESCRIPTION OF VALUES Positive real numbers that are automatically generated.

### FIELD PARTNERSHIP

- \* ALIAS PARTNERSHIP
- \* DATA TYPE String
- \* WIDTH 15
- \* PRECISION 0
- \* SCALE 0
- FIELD DESCRIPTION

Abbreviation for RCSP.

DESCRIPTION SOURCE

Atlas IV

#### LIST OF VALUES VALUE SWP

**DESCRIPTION** Southwest Regional Partnership on Carbon Sequestration

VALUE PCOR

DESCRIPTION The Plains CO2 Reduction Partnership

VALUE BSCSP DESCRIPTION Big Sky Sequestration Partnership

VALUE MRCSP DESCRIPTION Midwest Regional Carbon Sequestration Partnership

VALUE SECARB DESCRIPTION Southeast Regional Carbon Sequestration Partnership VALUE WESTCARB DESCRIPTION West Coast Regional Carbon Sequestration Partnership

VALUE MGSC DESCRIPTION Midwest Geological Sequestration Consortium

#### FIELD ASSESSED

- \* ALIAS ASSESSED
- \* DATA TYPE SmallInteger
- \* WIDTH 2
- \* PRECISION 0
- \* SCALE 0
- FIELD DESCRIPTION

Flag defining whether storage resource has been assessed for carbon storage potential

DESCRIPTION SOURCE

DOE-NETL/KGS

LIST OF VALUES

VALUE 0

DESCRIPTION Storage resource has not been assessed. Capacities must be <Null>.

VALUE 1

DESCRIPTION Storage resource has been assessed. Capacities may be "0".

### FIELD SHAPE

- \* ALIAS Shape
- \* DATA TYPE Geometry
- \* WIDTH 0
- \* PRECISION 0
- \* SCALE 0

FIELD DESCRIPTION

Feature geometry.

#### DESCRIPTION SOURCE ESRI

DESCRIPTION OF VALUES Coordinates defining the features.

Metadata Details

METADATA LANGUAGE English (UNITED STATES) METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset SCOPE NAME \* dataset

\* LAST UPDATE 2013-05-13

ARCGIS METADATA PROPERTIES METADATA FORMAT ArcGIS 1.0 METADATA STYLE FGDC CSDGM Metadata STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS 2012-11-28 13:23:13 LAST MODIFIED IN ARCGIS 2013-05-13 10:42:09

AUTOMATIC UPDATES HAVE BEEN PERFORMED Yes LAST UPDATE 2013-05-13 10:42:09

# Metadata Contacts

METADATA CONTACT

ORGANIZATION'S NAME GIS Support Section, Kansas Geological Survey CONTACT'S POSITION NATCARB Team CONTACT'S ROLE point of contact

CONTACT INFORMATION PHONE VOICE 785-864-3965

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