

Energy Potential Non-Powered Dam



Tags

Non-Powered Dams, NPD, National Inventory of Dams, NID, Assessment, Hydrography, Dams, Flood Control, Water Supply, Navigation, Recreation, Oak Ridge National Laboratory, ORNL, U.S. Department of Energy Wind and Water Power Program, DOE, Idaho National Laboratory, INL

Summary

This layer was created to assess the energy potential at non-powered dams (NPDs) throughout the United States.

Description

To assess the energy potential at non-powered dams (NPDs) throughout the United States.

Credits

Oak Ridge National Laboratory (ORNL), U.S. Department of Energy (DOE) Wind and Water Power Program, Idaho National Laboratory (INL)

Use limitations

Acknowledgment of Oak Ridge National Laboratory (ORNL), U.S. Department of Energy (DOE) Wind and Water Power Program, and Idaho National Laboratory (INL) would be appreciated in products derived from this data.

ArcGIS Metadata

Topics and Keywords

THEMES OR CATEGORIES OF THE RESOURCE environment, inlandWaters, location, structure

* **CONTENT TYPE** Downloadable Data

EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

THEME KEYWORDS Non-Powered Dams, NPD, National Inventory of Dams, NID, Assessment, Hydrography, Dams, Flood Control, Water Supply, Navigation, Recreation, Oak Ridge National Laboratory, ORNL, U.S. Department of Energy Wind and Water Power Program, DOE, Idaho National Laboratory, INL

Citation

* **TITLE** energy_potential_non_powered_dam_site

PUBLICATION DATE 2012-11-29 00:00:00

PRESENTATION FORMATS * digital map

Citation Contacts

RESPONSIBLE PARTY

INDIVIDUAL'S NAME Boualem Hadjerioua

ORGANIZATION'S NAME Oak Ridge National Laboratory
CONTACT'S POSITION Deputy Water Power Program Manager & Sr. Research Engineer
CONTACT'S ROLE originator

CONTACT INFORMATION

PHONE

VOICE 1-865-574-5191

FAX 1-865-576-8646

ADDRESS

TYPE both

DELIVERY POINT 1 Bethel Valley Road

CITY Oak Ridge

ADMINISTRATIVE AREA TN

POSTAL CODE 37831

COUNTRY US

E-MAIL ADDRESS hadjjeriouab@ornl.gov

Resource Details

DATASET LANGUAGES * English (UNITED STATES)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

SPATIAL REPRESENTATION TYPE * vector

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

CREDITS

Oak Ridge National Laboratory (ORNL), U.S. Department of Energy (DOE) Wind and Water Power Program, Idaho National Laboratory (INL)

ARCGIS ITEM PROPERTIES

* NAME energy_potential_non_powered_dam_site

* LOCATION

* ACCESS PROTOCOL Local Area Network

Extents

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -116.027390

* EAST LONGITUDE -67.089860

* NORTH LATITUDE 48.998710

* SOUTH LATITUDE 25.540000

* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE -12916109.972873

* EAST LONGITUDE -7468409.052592

* SOUTH LATITUDE 2942218.621046

* NORTH LATITUDE 6274642.510831

* EXTENT CONTAINS THE RESOURCE Yes

Resource Points of Contact

POINT OF CONTACT

INDIVIDUAL'S NAME Boualem Hadjerioua

ORGANIZATION'S NAME Oak Ridge National Laboratory
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POSTAL CODE 37831

COUNTRY US

E-MAIL ADDRESS hadjeriuab@ornl.gov

Resource Maintenance

RESOURCE MAINTENANCE

UPDATE FREQUENCY unknown

Resource Constraints

CONSTRAINTS

LIMITATIONS OF USE

Acknowledgment of Oak Ridge National Laboratory (ORNL), U.S. Department of Energy (DOE) Wind and Water Power Program, and Idaho National Laboratory (INL) would be appreciated in products derived from this data.

Spatial Reference

ARCGIS COORDINATE SYSTEM

- * TYPE Projected
- * GEOGRAPHIC COORDINATE REFERENCE GCS_WGS_1984
- * PROJECTION WGS_1984_Web_Mercator_Auxiliary_Sphere
- * COORDINATE REFERENCE DETAILS

PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 3857

X ORIGIN -22041545.196626503

Y ORIGIN -33272760.666301586

XY SCALE 135368852.55354038

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["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_Sphere"],PARAMETER["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["EPSG",3857]]

REFERENCE SYSTEM IDENTIFIER

- * VALUE 4269
- * CODESPACE EPSG
- * VERSION 7.4.1

Spatial Data Properties

VECTOR

- * LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

- FEATURE CLASS NAME energy_potential_non_powered_dam_site
- * OBJECT TYPE point
- * OBJECT COUNT 51406

ARCGIS FEATURE CLASS PROPERTIES

- * FEATURE TYPE Simple
- * GEOMETRY TYPE Point
- * HAS TOPOLOGY FALSE
- * FEATURE COUNT 51406
- * SPATIAL INDEX TRUE
- * LINEAR REFERENCING FALSE

Distribution

DISTRIBUTION FORMAT

- * NAME File Geodatabase Feature Class

Fields

DETAILS FOR OBJECT energy_potential_non_powered_dam_site

- * TYPE Feature Class
- * ROW COUNT 51406

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 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.

FIELD DAM_NAME

* ALIAS DAM_NAME
* DATA TYPE String
* WIDTH 254
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION
Dam Name

DESCRIPTION SOURCE
Oak Ridge National Laboratory (ORNL)

FIELD NIDID

* ALIAS NIDID
* DATA TYPE String
* WIDTH 254
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION
National Inventory of Dams ID Number

DESCRIPTION SOURCE
Oak Ridge National Laboratory (ORNL)

FIELD LATITUDE

* ALIAS LATITUDE
* DATA TYPE Double
* WIDTH 8
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION
Latitude

DESCRIPTION SOURCE
Oak Ridge National Laboratory (ORNL)

FIELD LONGITUDE

* ALIAS LONGITUDE
* DATA TYPE Double
* WIDTH 8
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION
Longitude

DESCRIPTION SOURCE
Oak Ridge National Laboratory (ORNL)

FIELD COUNTY

* ALIAS COUNTY
* DATA TYPE String
* WIDTH 254
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION

County Name

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD CITY

- * ALIAS CITY
- * DATA TYPE String
- * WIDTH 254
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

City Name

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD STATE

- * ALIAS STATE
- * DATA TYPE String
- * WIDTH 254
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

State Abbreviation

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD RIVER

- * ALIAS RIVER
- * DATA TYPE String
- * WIDTH 254
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

River Name

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD OWNER_NAME

- * ALIAS OWNER_NAME
- * DATA TYPE String
- * WIDTH 254
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Owner Name

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD YEAR_COMPL

- * ALIAS YEAR_COMPL
- * DATA TYPE String
- * WIDTH 254

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Year Completed

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD YEAR_MODIF

* ALIAS YEAR_MODIF

* DATA TYPE String

* WIDTH 254

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Year Modified

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD NID_HEIGHT

* ALIAS NID_HEIGHT

* DATA TYPE Double

* WIDTH 8

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

National Inventory of Dams Height (feet)

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD MAX_DISCHA

* ALIAS MAX_DISCHA

* DATA TYPE Double

* WIDTH 8

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Max Discharge (cfs)

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD MAX_STORAG

* ALIAS MAX_STORAG

* DATA TYPE Double

* WIDTH 8

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Max Storage (acre-feet)

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD NORMAL_STO

* ALIAS NORMAL_STO

* DATA TYPE Double

- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Normal Storage (acre-feet)

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD NID_STORAG

- * ALIAS NID_STORAG
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

National Inventory of Dams Storage (acre-feet)

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD FED_REGULA

- * ALIAS FED_REGULA
- * DATA TYPE String
- * WIDTH 254
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Federal Regulator

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD HYDROLOGIC

- * ALIAS HYDROLOGIC
- * DATA TYPE String
- * WIDTH 254
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Hydrological Region

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD EST_HEAD__

- * ALIAS EST_HEAD__
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Estimated Head (feet)

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD EST_ANNUAL

- * ALIAS EST_ANNUAL
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Estimated Annual Average Flow (cfs)

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD EST_POWER_

- * ALIAS EST_POWER_
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Estimated Potential Power (MWh)

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

FIELD EST_POTENT

- * ALIAS EST_POTENT
- * DATA TYPE Double
- * WIDTH 8
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Estimated Potential Installed Capacity (MW)

DESCRIPTION SOURCE

Oak Ridge National Laboratory (ORNL)

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 2013-02-05

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0
METADATA STYLE ISO 19139 Metadata Implementation Specification
STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS 2012-02-09 11:58:19
LAST MODIFIED IN ARCGIS 2013-02-05 08:50:40

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes
LAST UPDATE 2013-02-05 08:50:40

Metadata Contacts

METADATA CONTACT

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ORGANIZATION'S NAME Argonne National Laboratory
CONTACT'S POSITION GIS Assistant/Specialist
CONTACT'S ROLE processor

CONTACT INFORMATION

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TYPE both
DELIVERY POINT 9700 South Cass Avenue, EVS/Bldg 240
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POSTAL CODE 60439
COUNTRY US
E-MAIL ADDRESS khlava@anl.gov

Metadata Maintenance

MAINTENANCE

UPDATE FREQUENCY unknown

Thumbnail and Enclosures

THUMBNAIL

THUMBNAIL TYPE JPG

FGDC Metadata (read-only)