DATADAPTIVE

Product Summary

UK Reservoir Locations is a spatial data product that contains point locations and other information about reservoirs in England, Scotland, Wales and Northern Ireland. Together the 273 individual reservoirs in the dataset account for approximately 90% of the UK's total reservoir storage.

This product contains data supplied by Natural Environment Research Council as an output of the <u>Historic Droughts project</u>.

Datadaptive has geocoded the reservoir locations and compiled GIS files in SHP and KMX formats. All other data in the product is from an inventory of UK reservoirs published under the <u>Open Government Licence</u> by the NERC Environmental Information Data Centre. Please see the EIDC source page for full supporting documentation:

Durant, M.J.; Counsell, C.J. (2018). Inventory of reservoirs amounting to 90% of total UK storage. NERC Environmental Information Data Centre. <u>https://doi.org/10.5285/f5a7d56c-cea0-4f00-b159-c3788a3b2b38</u>

Data methods and quality statement

Datadaptive has taken reasonable care in compiling and preparing the data. However the accuracy and currency of the data is dependent on the source data.

Following is an extract from the supporting information document:

"Information on reservoirs and their capacity was collected from the Environment Agency under Open Government Licence through a Freedom of Information request, and the UK Lakes Portal (CEH). Information was then gathered from internet searches. ... As such, the quality of data varies greatly. This has been identified wherever possible through the use of a data flag system, and use of the notes section. References are supplied for all information within the inventory.

"The composition of reservoir groups were confirmed through correspondence with Water Companies responsible for submitting storage volumes for the Hydrological Summaries, produced by CEH.

"The inventory includes reservoirs up to 1,600 MI capacity, as well as reservoirs below this capacity that are included within reservoir groups for which there is historic storage information and sufficient information on planning and construction dates. The threshold of 1,600 MI was decided, based on less available information for smaller reservoirs, and that 1,600 MI equates to approximately 90 % capacity of all reservoirs in the Reservoirs Act 1975 (logarithmic interpolation of approximately 2,500 reservoirs and minimum capacity of 25 MI (EA, 2017))."

Data formats

The data is supplied as a table in CSV format, and as geocoded point data in ESRI Shapefile and KMZ formats.

Licensing

The data may be re-used under the terms of the Open Government Licence 3.0.

Attribution

If you re-use this data in a product or application you must use the following attribution statement:

Contains data supplied by Natural Environment Research Council.

Pricing

Free

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File Specification

UK Reservoir Locations

File name:	RESERVOIRS_UK_NERC_201807
Record count:	273
Geographic coverage:	United Kingdom
File format:	CSV and SHP

These files each contain the same information about UK reservoirs.

Following is a table, lightly adapted from the supporting information, that describes the fields in the CSV file. The SHP file is attributed with the same fields, except that the contents of the NOTES field have been distributed over three fields (NOTES1, NOTES2, and NOTES3) to avoid truncation.

Field	NERC column	Description
RESERVOIR	Reservoir	Name of the reservoir
LATITUDE		Y coordinate of reservoir location in WGS84 coordinate system
LONGITUDE		X coordinate of reservoir location in WGS84 coordinate system
EASTING	Easting	X coordinate of reservoir location in OSGB36 (British National Grid) reference system
NORTHING	Northing	Y coordinate of reservoir location in OSGB36 (British National Grid) reference system
STORVOL	Storage_vol	Maximum volume of the reservoir, in megalitres (MI). The storage relates to the storage of the water body, rather than necessarily the live water resources storage.
STORVOLREF	Storage_vol_ref	Reference number of STORVOL, cross-referenced with HD_Inventory_of_UK_reservoirs_references.csv.
USGAUGE1	US_gauge_1	National River Flow Archive (NRFA) gauge number of the gauge closest to the upstream limit of the reservoir (if present) that has the largest catchment. If only one upstream gauge is present, the gauge number is located in this column.
USGAUGE1DF	US_gauge_1_DF	Data flag for USGAUGE1 column
USGAUGE2	US_gauge_2	NRFA gauge number of the upstream reservoir gauge (if present) of the second largest catchment
DSGAUGE	DS_gauge	NRFA gauge number of the gauge closest to the downstream limit of the reservoir
DSGAUGEDF	DS_gauge_DF	Data flag for DSGAUGE column
PLANDATE	Planning_date	Planning date (Year) of the reservoir, as determined from available references
PLANDATE DF	Planning_DF	Data flag for PLANDATE column. Varying quality of data for the planning date of the reservoirs necessitated multiple definitions of planning dates. These are referenced in this column.
COMPDATE	Completion_date	Date (Year) the reservoir was completed

COMPDATE DF	Completion_DF	Data flag for the COMPDATE column. Varying quality of data for the completion of the reservoirs necessitated multiple definitions of completion dates. These are referenced in this column.
RESTYPE	Res_type	Reservoir type - either impounding (damming the river valley to store streamflow - online) or non-impounding (offline storage, usually pumped from a nearby river)
HDRECNFLOW	HD_recon_flow	The NRFA gauge number (either upstream or downstream) is stated if included in the streamflow reconstruction undertaken by Smith et al (2018).
TIMESERIES	Timeseries	Indicates the reservoir group to which the individual reservoir is associated, based on the current usage within the CEH Monthly Hydrological Summary (https://nrfa.ceh.ac.uk/monthly-hydrological-summary-uk)
INCEPTUSE	Inception_use	The primary use of the reservoir at inception, classified into hydro-electric (H), water resources (WR), drainage (D), canal (C), flood storage (FSA) and environmental (E).
NOTES	Notes	Notes relating to drought-system linkages, supply system information, or any further information on any of the columns for that reservoir
REFID	Reference_ID	A number, corresponding to the reference located in the column with same header in HD_Inventory_of_UK_reservoirs_references.csv.

UK Reservoir Locations

File name:	RESERVOIRS_UK_NERC_201807
Record count:	273
Geographic coverage:	United Kingdom
File format:	KMZ

The KMZ file contains points for reservoir locations, attributed with a subset of the information from the other files as listed in the table below.

Field	NERC column	Description
Reservoir	Reservoir	Name of the reservoir
Storage volume (MI)	Storage_vol	Maximum volume of the reservoir, in megalitres (MI). The storage relates to the storage of the water body, rather than necessarily the live water resources storage.
Planning date	Planning_date	Planning date (Year) of the reservoir, as determined from available references
Completion date	Completion_date	Date (Year) the reservoir was completed
Reservoir type	Res_type	Reservoir type - either impounding (damming the river valley to store streamflow - online) or non-impounding (offline storage, usually pumped from a nearby river)
Primary use at inception	Inception_use	The primary use of the reservoir at inception, classified into hydro-electric (H), water resources (WR), drainage (D), canal (C), flood storage (FSA) and environmental (E).