COLORADO BRIGHTFIELDS: Frequently Asked Questions

Answers to some frequently asked questions about the geodatabase and web-mapping application

Q: What data sources are used in COLORADO BRIGHTFIELDS?

A: COLORADO **BRIGHT**FIELDS contains more than 100 publicly-available datasets that are sourced from local, state, and federal agencies. The complete list of data sources can be found in the Data Dictionary. The project team imported and formatted the datasets as needed to compile the geodatabase or provide informational layers in the web-mapping application. In some cases, the web-mapping application links directly to the original data sources, which are provided "as is". There were no changes to the attributes or geometry of any source data; any inaccuracies or inconsistencies in the data can be traced back to the original data sources.

Q: Which parcels are included in Brightfields?

A: Parcels are included in the web-mapping application if they are located in Adams, Arapahoe, Denver, El Paso, Jefferson, Lake, Montezuma, Ouray, Pueblo, or Weld counties and are associated with one or more of 12 Brightfield types. Brightfield types were determined by previous use, characterization, or regulatory designation. Parcels of less than one acre in size were excluded from the web-mapping application unless they adjoined other parcels such that the total area of all contiguous parcels was one acre or greater.

Q: Why do some fields in the data table not match data in the 'County Assessor Parcel Data' link for the same parcel?

A: Although counties maintain their own parcel GIS data and online property records (assessor data), there are sometimes discrepancies between the two. COLORADO **BRIGHT**FIELDS does not change any source data but provides that information as it appears in publicly-available data sources.

Q: Why might a data field be blank in the Brightfields data table?

A: The GIS parcel data provided by some counties was incomplete. If a field of interest is blank in the parcel data table, users may be able to find that data at the 'County Assessor Parcel Data' link. Owner data is precluded from the web-mapping application where required by law.

Q: Why not include all the data from county assessors' links in the data table?
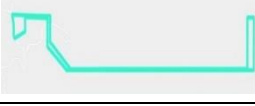
A: The web-mapping application cannot retrieve information directly from the county assessor's records that are not formatted for geospatial applications.

Q: Why do some parcels list land use as Residential if residential properties were supposed to be omitted from the web-mapping application?

A: Only those parcels that are zoned for strictly residential land uses were omitted from the web-mapping application. Some parcels may be zoned for a variety of use types (i.e., commercial, institutional, and residential), and such parcels were kept in the web-mapping application and database, even if their current land use is listed as residential, as that land use can shift over time and may present future opportunities for renewable energy development.

Q: What does the ParcelShapeIndex attribute measure?

A: ParcelShapeIndex is a ratio of the parcel's perimeter to its area, indicative of the regularity of the parcel's shape. A perfectly square parcel would have a value of 1.00; a rectangular parcel would have a value of slightly more than 1.00 (up to about 1.15 or so); and a parcel with a highly irregular, convoluted, or extremely elongated shape would have a value as high as 4.00 or 5.00. In a few cases, the value can be less than 1.00, which is an indicator that the parcel shape is approaching that of a circle (though it's typically a square with chamfered corners). The ParcelShapeIndex value can be a good indicator of the ease with which a renewable energy array can be fit to a site. Here are a few examples:

ParcelShapeIndex Value	Parcel Geometry
0.97	
1.00	
1.05	
1.24	
2.18	
6.44	

Please note that the ParcelShapeIndex value is not valid for multi-part parcels (those parcels that consist of multiple individual pieces of land, whether or not they are contiguous).

Q: What does the BuiltArea attribute measure?

A: The BuiltArea attribute is a measure of the total footprint area of all built structures (buildings, sheds, etc.) on the site, reported in square feet. Please note that this measure was derived from a nationwide building footprint GIS dataset (maintained by Microsoft for their Bing mapping application) that is not always 100% accurate due to normal development activities affecting buildings that have been erected or demolished but have not yet been updated in the dataset, or simply due to errors in the artificial intelligence that is used to automatically map these buildings. It is therefore possible that an aerial photo may show a building on a site, but the BuiltArea will have a value of 0, or conversely, the BuiltArea may show a positive number when the aerial photo shows a vacant lot.

Q: What does the CanopyArea attribute measure?

A: The CanopyArea attribute is a measure of the total area of tree canopy on the site, reported in square feet. Please note that this measure was derived from GIS data that is not always 100% accurate due to time lags between trees being planted or cut down and those changes appearing in the dataset. It is therefore possible that an aerial photo may show trees on a site, but the CanopyArea will have a value of 0, or conversely, the CanopyArea may show a positive number when the aerial photo shows no trees.

Q: What does the EasementArea attribute measure?

A: The EasementArea attribute is a measure of the total area of all easements and rights-of-way that intersect the selected parcel, reported in acres. These may include railroad and utility rights-of-way, conservation areas, and conservation easements that may hinder opportunities for renewable energy development on that site. Please note that GIS data for rights-of-way were not available for all counties or all types of easements, so due diligence in confirming this information with the local assessor's office is advised.

Q: What is the difference between a Conservation Area and a Conservation Easement?

A: A conservation area is an area of land that has been set aside for protection due to a high ecological value, while a conservation easement is an agreement that protects certain portion(s) of a property from certain type(s) of development or activities or allows for certain activities, such as hiking or hunting. The Conservation Areas layer was sourced from the Colorado Ownership, Management and Protection (COMaP) state database, while the Conservation Easements layer was sourced from the National Conservation Easement Database. Areas of overlap between these two datasets were eliminated, with COMaP data taking precedence.

For assistance using the COLORADO **BRIGHT**FIELDS web-mapping application, contact Susan@ConvergenceAssociates.com.