

Hydstra Procedures

Locating Sites

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. Location

. You must enter the site location

Spatial information is the de facto standard for aggregating data from different data sets. For this reason, the site location is required.

. Horizontal Datum

The datum for horizontal coordinate systems shall be NAD83. The California Public Resource Code, Section 8852 states:

8852. The official geodetic datum to which horizontal positions and ellipsoid heights are referenced within the State of California shall be **NAD83**.

Some people will want to use WGS84 as a datum. This is essentially the same as NAD83, and used for displaying locations on web applications, such as Google Maps and Google Earth¹. For our purposes, either datum can be used.

If a GPS system uses WGS84, then I would enter the data as used by the GPS system. If the GPS system uses some other datum, then you will have to convert it to NAD83.

. Vertical Datum

The datum for vertical coordinate systems shall be NAVD88. The California Public Resource Code, Section 8853 states:

8853. The official geodetic datum to which orthometric heights are referenced within the State of California shall be NAVD88.

Vertical datum is not required, but if you enter it then it must be in NAVD88.

1 http://earth.google.com/userguide/v4/ug_importdata.html and http://earth.google.com/userguide/v4/ug_editing.html#entering

If you need to convert to a different datum, then you can set up variable conversions within Hydstra to do so.

. Projections

.. Geographic System

These coordinates are required.

The fields Latitude and Longitude are required. The fields are the decimal latitude and longitude coordinates.

In older versions of Hydstra (before version 10), there were six fields rather than two: Latitude Degrees, Latitude Minutes, Latitude Seconds, Longitude Degrees, Longitude Minutes, and Longitude Seconds.

.. UTM System

These coordinates are not required.

The fields in the site table: Zone, Easting, Northing, GRDatum shall be used for UTM coordinates. The GRDatum should be NAD83. The zone should be 10 or 11.