

Technical Appendix - Characteristics of farms applying for cannabis cultivation permits

Appendix Table A1:

Variable	Definition	Data Source
<i>Apply</i>	=1 if a permit application was filed listing the parcel as the location of production; zero otherwise	Humboldt County Planning Department
<i>New Farm</i>	Cannabis production detected on the parcel in 2016, but not in 2012.	Calculated from Butsic et al. (2018)
<i>Total number of cannabis plants in 2016</i>	Sum of greenhouse & outdoor cannabis plants in 2016	Calculated from Butsic et al. (2018)
<i>Total number of cannabis plants in 2012</i>	Sum of greenhouse & outdoor cannabis plants in 2012	Calculated from Butsic et al. (2018)
<i>Number of greenhouse cannabis plants in 2016</i>	Estimated count of cannabis plants in 2016 based on greenhouse dimensions	Calculated from Butsic et al. (2018)
<i>Number of greenhouse cannabis plants in 2012</i>	Estimated count of cannabis plants in 2012 based on greenhouse dimensions	Calculated from Butsic et al. (2018)
<i>Number of outdoor cannabis plants in 2016</i>	Count of cannabis plants growing outdoors in 2016	Calculated from Butsic et al. (2018)
<i>Number of outdoor cannabis plants in 2012</i>	Count of cannabis plants growing outdoors in 2016	Calculated from Butsic et al. (2018)
<i>Northness</i>	Y coordinate in meters	Calculated in ArcGIS
<i>Distance to a city (00s of km)</i>	Distance to city in in hundred of KM	Humboldt County parcel layers http://www.humboldt.gov/201/Maps-GIS-Data
<i>Distance to an ocean (00s of km)</i>	Distance to ocean in hundred KM	California Department of Fish and Wildlife https://www.wildlife.ca.gov/Data/GIS/Clearinghouse
<i>Distance to Stream (km)</i>	Distance to nearest stream or waterbody in KM	California Department of Fish and Wildlife https://www.wildlife.ca.gov/Data/GIS/Clearinghouse
<i>Distance to steelhead habitat (km)</i>	Distance to steelhead habitat in KM	National Marine Fisheries Service (NMFS) 2016 Coastal Multispecies Recovery Plan National Marine Fisheries Service (NMFS) 2017 Intrinsic Potential GIS Data - North-central California Coast
<i>Distance to chinook habitat (km)</i>	Distance to Chinook habitat in KM	www.westcoast.fisheries.noaa.gov/maps_data/maps_and_gis_data.html)
<i>Distance to road (km)</i>	Distance of parcel to road in km	Derived from road layer from Humboldt GIS http://www.humboldt.gov/201/Maps-GIS-Data
<i>Slope over 30 % on property</i>	Percent of parcel with slope greater than 30%	Humboldt County parcel layers http://www.humboldt.gov/201/Maps-GIS-Data
<i>Property size (acres)</i>	Size of parcel in acres	Humboldt County parcel layers http://www.humboldt.gov/201/Maps-GIS-Data
<i>Timber Harvest Plan since 1997</i>	=1 if a Timber Harvest Plan was on the parcel at any time between 1997-2012)	CALFIRE calfire.ca.gov/resource_mgmt/resource_mgmt_forest_practice_gis
<i>Agricultural zone</i>	=1 if any part of parcel zoned AG or AE; zero otherwise	Data on zoning developed and provided by Humboldt County http://humboldt.gov/1357/Web-GIS)
<i>TPZ or Forest Zone</i>	=1 if parcel zoned TPZ or FR; zero otherwise	Data on zoning developed and provided by Humboldt County http://humboldt.gov/1357/Web-GIS)
<i>Parcel has been transacted since 2015</i>	=1 if parcel has been transacted in 2015, 2016 or 2017; Zero otherwise	CoreLogic; Humboldt County Assessors Office
<i>Prime Ag Soil</i>	=1 if parcel contains area designated as prime agricultural soil; zero otherwise	Data on soil developed and provided by Humboldt County http://humboldt.gov/1357/Web-GIS)