

eWRIMS Scraped DB Documentation

This documentation applies to the downloaded version of the eWRIMS database. The database is made up of 14 distinct files. All files can be merged using the “ApplID” (spelled A P P L I D) field. Each file has a data dictionary which shows examples of each of the columns found in the files.

Database Construction

The database was constructed using a series of jupyter notebooks. These have embedded instructions. In order to open them and rerun the scraper you must download the anaconda distribution <https://anaconda.org/anaconda/python>, then you will be able to run a jupyter notebook directly and open each file. You must also download the selenium webdriver in order for the scraper to function, this can be downloaded at: <http://chromedriver.chromium.org/downloads>.

The notebooks are numbered to describe the order in which they should be run. They each come with detailed instructions and explanations of what the code is doing, you may run the code block in each notebook using ctrl+Enter. Reach out to cvalcarc@asu.edu if any assistance is required.

master_data

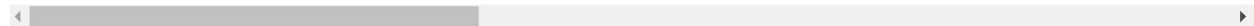
Contains every application recorded in the eWRIMS dataset. Each row represents a single application. There are no duplicate rows. The fields are:

'ApplID', 'permit_id', 'license_id', 'water_righttype', 'status', 'holder_name', 'date', 'face_amt', 'county', 'source', 'viewreports', 'waterright', 'open_in_gis', 'export_toexcel', 'appl_id_link', 'viewreports_link', 'waterright_link', 'open_in_gis_link', 'export_toexcel_link', 'county_search', 'entity_search', 'watershed_search'

Note the columns county_search, entity_search, watershed_search contain additional information. These columns were generated by searching the eWRIMS website and assigning the search values to the records yielded. This takes advantage of search engine data which is not made available directly to users. The county_search column is a substitute for county. Entity search refers to entity type and watershed_search refers to any watershed that the record is a part of.

	ApplID	appl_id_link	county	county_search	date	entity_search	export_toexcel	export_
0	UN000404	http://ciwqs.waterboards.ca.gov/ciwqs/ewrims/E...		NaN		Federal Government	Download to Excel	http://ciwqs.waterboards.ca.gov/ciwq
1	UN000327	http://ciwqs.waterboards.ca.gov/ciwqs/ewrims/E...	Marin	Siskiyou	09/20/2018	Individual		http://ciwqs.waterboards.ca.gov/ciwq
2	UN000718	http://ciwqs.waterboards.ca.gov/ciwqs/ewrims/E...	San Diego	Marin	05/11/2018	NaN		http://ciwqs.waterboards.ca.gov/ciwq
3	UN000740	http://ciwqs.waterboards.ca.gov/ciwqs/ewrims/E...	Sonoma	San Diego	05/10/2018	Limited Liability Company		http://ciwqs.waterboards.ca.gov/ciwq
4	UN000581	http://ciwqs.waterboards.ca.gov/ciwqs/ewrims/E...	Mendocino	Sonoma	05/09/2018	Estate		http://ciwqs.waterboards.ca.gov/ciwq

5 rows × 22 columns



current_parties

Information on the latest parties listed as the owners of the application

'Current_Parties', 'Relationship', 'Effective_Date', 'ApplID'

	ApplID	Current_Parties	Effective_Date	Relationship
0	29-05-03	Ed Townsend	2010-05-26	Primary Owner
1	31-18-03	Dave Cook	2007-10-05	Agent
2	31-18.03	HEATHER ROBINSON TANAKA	2009-07-20	Non-Primary Owner
3	39-11-05	GEORGE ALBERT SULLIVAN	2009-07-30	
4	40-12-02	William N. Spillman	2008-04-25	

decisions

Information on court decisions related to the application. This is a very small dataset and the information can only be retrieved by following the links in the View_Document field to the pdfs that hold the decisions.

'Decision_Order_Number', 'Date', 'Description', 'View_Document', 'ApplID'

	ApplID	Date	Decision_Order_Number	Description	View_Document
0	A032810	1967-11-30	1290	In the matter of applications 353, 360, 5640, ...	http://www.waterboards.ca.gov/waterrights/boar...
1	A031487	2012-10-16	1651	In the Matter of the Truckee River Watershed -...	http://www.waterboards.ca.gov/waterrights/boar...
2	A031488	2015-07-21	2015-0025	In the Matter of Draft Cease and Desist Order ...	http://www.waterboards.ca.gov/waterrights/boar...
3	A032563B	2015-10-02	2015-0031-EXEC	In the Matter of Unauthorized Diversion and Us...	http://www.waterboards.ca.gov/waterrights/boar...
4	A032563A	1997-06-19	97-03	In the Matter of Petitions for Reconsideration...	http://www.waterboards.ca.gov/waterrights/boar...

historical_parties

Informations about the parties previously listed as the owners of the application
'Historical_Parties', 'Relationship', 'Date_Range', 'ApplID'

	ApplID	Date_Range	Historical_Parties	Relationship
0	D032652	2016-04-04 To \r\n 2018-02-08	LACO ASSOCIATES	Agent
1	D032780	2017-03-27 To \r\n 2018-03-02	HOLLIE HALL AND ASSOCIATES	Non-Primary Owner
2	D030834	1999-03-05 To \r\n 2009-02-24	ELIZABETH A LEEPER	Primary Owner
3	D030964	1998-06-17 To \r\n 2017-01-31	ED M LEEPER	
4	L031493	2005-09-22 To \r\n 2009-09-14	RICHARD CRONIN	

summary_data

Summary information including water right status and the primary owner.

'ApplID', 'Permit_ID', 'License_ID', 'Water_Right_Type', 'Water_Rights_Status', 'Primary_Owner'

	ApplID	License_ID	Permit_ID	Primary_Owner	Water_Right_Type	Water_Rights_Status
0	UN000404	None	None	US National Park Service - Point Reyes Nationa...	Not Determined	()
1	UN000327	001066\r\n \r\n \r\n ...	011240	STEPHEN WIELAND	Adjudicated	Closed\r\n (09/20/2018)
2	UN000718	001092\r\n \r\n \r\n ...	021399\r\n \r\n \r\n ...	JERRY HENDRICKSON	Appropriative	Registered\r\n (05/11/2018)
3	UN000740	001094\r\n \r\n \r\n ...	021353\r\n \r\n \r\n ...	MADELINE R HENNING ET AL	Registration Domestic	Inactive\r\n (05/11/2018)
4	UN000581	000951\r\n \r\n \r\n ...	019910	None	Statement of Div and Use	Active\r\n (05/11/2018)

record_summary

Summary information regarding the record itself including license number, acceptance date, and nominal ammount of water use if any was recorded.

'Permit_Issuance_Date', 'License_Issuance_Date', 'Face_Value_Amount',
'Subtypes_Statements_Only', 'Application_Acceptance_Date', 'ApplID'

	ApplID	Application_Acceptance_Date	Face_Value_Amount	License_Issuance_Date	Permit_Issuance_Date	Subtypes_Statements_Only
0	UN000404		0.0			
1	UN000327	2014-12-09	21.0	2018-05-11	1958-03-06	Riparian
2	UN000718	2008-04-08	2.5	2018-05-10	2018-04-16	Riparian \n\n\n\n\n\n Incomplete ...
3	UN000740	2014-06-24	1.34	2018-05-09	1986-11-10	Other - Sheetflow or diffused surface water
4	UN000581	2008-04-25	1.06	2018-05-08	2003-01-02	Other - Well #1

electronic_reports

A map to the reports associated with each application. This will describe what type of report exists for each application. Note that this does not contain the information in each report but is moreso meant to be used to filter applications based on types of reports and then match to the REP_ datasets introduced further below.

'Year', 'Revision', 'Report_Type', 'Date_Received', 'Report_ID', 'ApplID'

	ApplID	Date_Received	Report_ID	Report_Type	Revision	Year
0	S023170	2017-04-17	http://ciwqs.waterboards.ca.gov/ciwqs/ewrims_o...	Supplemental Statement of Water Diversion and Use	1	2016
1	S023180	2017-04-28	http://ciwqs.waterboards.ca.gov/ciwqs/ewrims_o...	Report of Registrant	2	2015
2	D030834	2014-03-06	http://ciwqs.waterboards.ca.gov/ciwqs/ewrims_o...	Report of Licensee	3	2014
3	D030952	2016-06-20	http://ciwqs.waterboards.ca.gov/ciwqs/ewrims_o...	Annual Notice of Groundwater Extraction and Di...	6	2013
4	A017747	2014-02-24	http://ciwqs.waterboards.ca.gov/ciwqs/ewrims_o...	Report of Stockpond	5	2012

beneficial_uses

Information on how the water was used and in some cases when and how much land the use is applied towards.

'Beneficial_Uses', 'Acres', 'Direct_Diversion_Season', 'Collection_to_Storage_Season', 'ApplID'

	Acres	ApplID	Beneficial_Uses	Collection_to_Storage_Season	Direct_Diversion_Season
0	0.0	D032762	Fire Protection	11/1	
1	0.25	S026699	Domestic		1/1\n\n\n\n\n\n ...
2	30.0	D032695	Recreational	12/1	10/9\n\n\n\n\n\n ...
3	103.0	D032589	Fish and Wildlife Preservation and Enhancement	1/1	1/1\n\n\n\n\n\n ...
4	0.5	D032402	Irrigation	10/9	10/1\n\n\n\n\n\n ...

water_sources

Information on the sources of water that the application refers to. This includes descriptions of the water source and location information by coordinates.

'Names_of_Sources_of_Water', 'County_Location', 'Parcel_Number', 'Diversion_Site_Name',
'Lat/Long_Coordinates', 'ApplID'

	ApplID	County_Location	Diversion_Site_Name	Lat/Long_Coordinates	Names_of_Sources_of_Water	Parcel_Number
0	UN000297	Marin		38.094 ; -122.9371	UNNAMED STREAM	109-090-16
1	UN001154	Stanislaus	905 Lindley well	37.32616 ; -121.10293	DELTA MENDOTA CANAL	
2	D032762	Mendocino	044-060-038	37.31875 ; -121.09601	MATTOLE RIVER	107-200-21
3	S026699	Humboldt	TRI-COLOR	39.340268 ; -123.228815	BUCK MOUNTAIN CREEK	223-072-002
4	D032695	Trinity	Reclamation District 2035	39.34016 ; -123.22928	DEW DROP SPRING	107-054-030

REP_

See electronic_reports. The REP_ datasets are the organized version of the data contained in the electronic reports. Each dataset also contains ApplID so it is mergeable with every other table. These data are very detailed and include monthly rate of water diversion, changes to projects, amount of surface water diverted, groundwater diverted, and more. Given the well known problems with reporting policies in California this data is far from complete. Nevertheless, the data is large and may be used to provide insight on use trends over time or even in particular geographic area. Each REP_ dataset has its own data dictionary as well which also contains every column along with sample at most 5 sample values from each.