

Key to Methods - Watershed Summary Map

The following section describes the information contained in each watershed summary.

Name: Watershed name recognized by DAR.

Island: The island on which the watershed occurs.

Watershed code: a five digit code that identifies the island, region, and specific watershed. The DAR watershed coding system was first developed in 1992 (Higashi, 1992) and underwent further improvement by Darrell Kuamo'o (DAR Hilo) in 2002 to provide a complete coding system for all watersheds in Hawaii. This watershed code is similar to codes used in early watershed coding efforts, especially the Hawaii Stream Assessment (HSA) (Hawaii Cooperative Park Service Unit, 1990). Where possible, similar digits were used in the newer DAR watershed code, but, as a result of the much larger number of watersheds coded by DAR (1000+ versus 376), many new codes were needed. The watershed codes displayed in the Atlas generally follow a clockwise circular geographic pattern around an island comparable to the HSA system. Some of the newer watershed codes may not follow the next closest watershed pattern because watersheds not included in the HSA system were added to the end of the numbering system for a region.

In this Atlas, we have chosen to present the watersheds in geographic order, so in some cases the watershed code may seem out of order in relation to their positions in the Atlas. While the watershed code is useful for finding information in the DAR Aquatic Surveys Database, it seems more intuitive to the general reader to view the watersheds in a normal geographic context. The watershed codes are especially useful for requesting information from DAR on specific watersheds because the codes are unique and do not repeat on the different islands. This is in contrast to watershed names, some of which occur on multiple islands (i.e. Punaluu Stream on Oahu, Maui, and Hawaii).

Map: A map of the watershed includes information on the topography, stream reach type, tributary names, biotic sample location and types, diversion ditches, roads, US Geological Survey (USGS) stream gages, dams, and land use/land cover. See map legend for more information. The following describe data sources not covered later in the key.

Streams: Stream information was downloaded from the State of Hawaii's Office of Planning Statewide Geographic Information System (GIS) Program website (<http://www.hawaii.gov/dbedt/gis/>). Lines were extracted from the 1983 USGS Digital Line Graphs hydrography layers. Stream Types were based on USGS hydrography major codes. Office of Planning Staff edited the information and merged islands together and projected it in NAD83. DAR further modified the stream information by coding each stream and stream segment to match the DAR Aquatic Surveys Database coding system.

Diversion Ditches: Ditch information was downloaded from the State of Hawaii's Office of Planning Statewide GIS Program website (<http://www.hawaii.gov/dbedt/gis/>). Lines were extracted from the 1983 USGS Digital Line Graphs hydrography layers. Ditch Types were based on USGS hydrography major codes. Office of Planning Staff edited the information and merged islands together and projected it in NAD83.

Roads: Major road information was downloaded from the State of Hawaii's Office of Planning Statewide GIS Program website (<http://www.hawaii.gov/dbedt/gis/>). "Major roads" extracted from the 1983 USGS Digital Line Graphs for the main Hawaiian Islands. H-3 was added to the layer by the Office of Planning. The roads are provided as a reference to the reader as to the location of the surveys.

USGS Stream Gages: Stream gage information was downloaded from the State of Hawaii's Office of Planning Statewide GIS Program website (<http://www.hawaii.gov/dbedt/gis/>). The stream gage data is from the Commission on Water Resource Management as provided by the USGS in 1994.

Dams: Dam information was downloaded from the State of Hawaii's Office of Planning Statewide GIS Program website (<http://www.hawaii.gov/dbedt/gis/>). Dam locations were based on the National Inventory of Dams. Edits to the locations have been made by Office of Planning and DAR staff.

Notes:

As you navigate this site, you will find the content for much of the Atlas is stored in linked pdf files. We recommend that you download a copy of the Key and Legend in addition to any watersheds of interest so that you understand the details of the information presented in the Atlas pages.

Additionally, this Atlas is linked to the DAR Aquatic Surveys Database so that the Atlas can be updated as new information becomes available. We plan to replace files periodically with new versions.

Finally, as we created this 4,500+ page Atlas, we corrected errors we found in the DAR Aquatic Surveys Database and this Atlas. Please feel free to contact us with inconsistencies or additional information you may have. Our intent is to provide the most up-to-date and accurate information as possible, and your help in insuring this would be greatly appreciated.

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