



The Role of SCCWRP as a Steward of the National Hydrography Dataset for the Santa Ana River Watershed

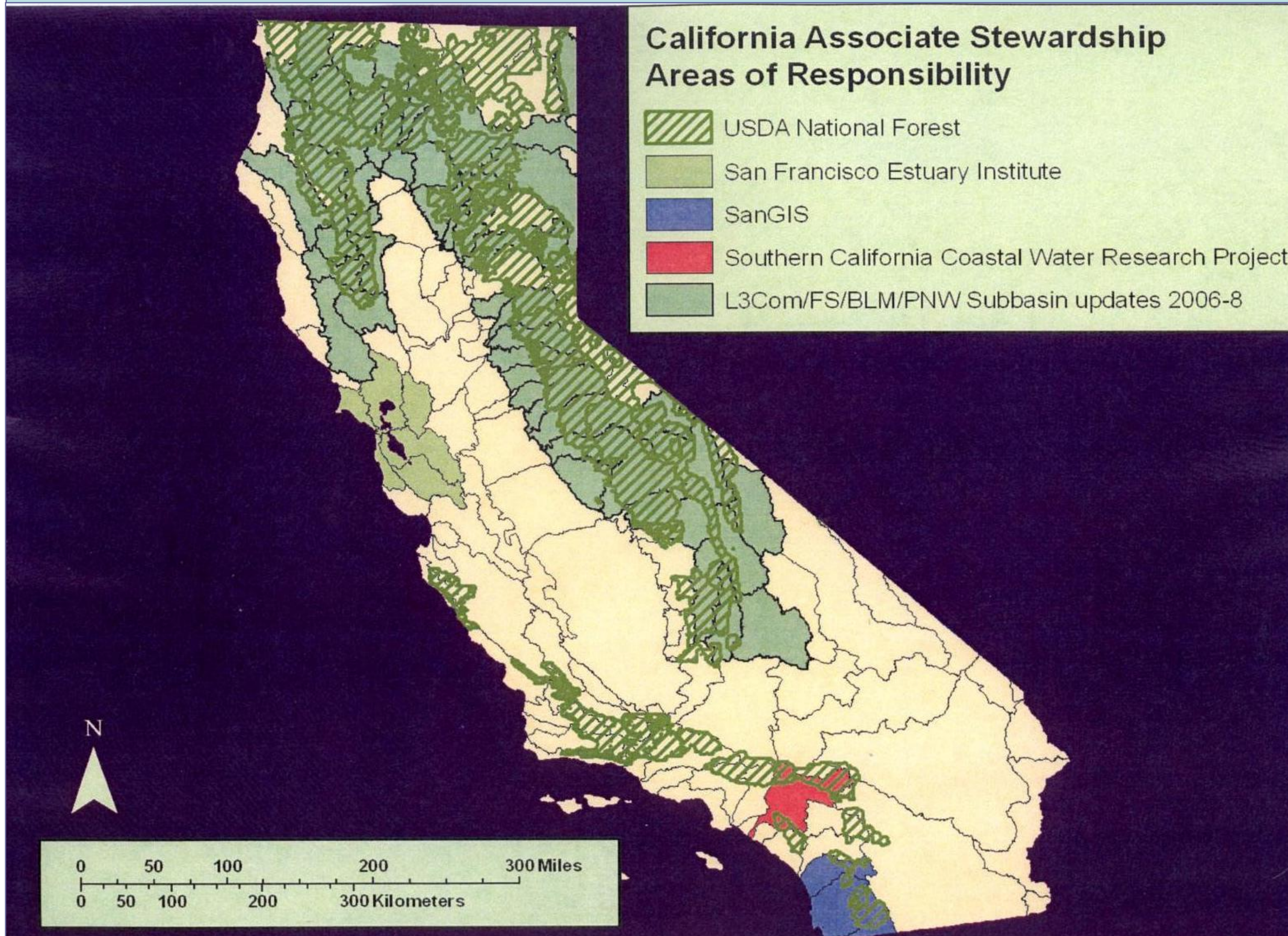
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What is the National Hydrography Dataset?

The NHD is a comprehensive set of GIS data that contains information about surface water features such as lakes, ponds, streams, rivers, canals, springs, and wells. The NHD provides a nationally consistent framework for addressing and analysis of water-related information that can be shared among organizations and easily integrated into many different types of applications. NHD data is available for download from <http://nhdgeo.usgs.gov>.

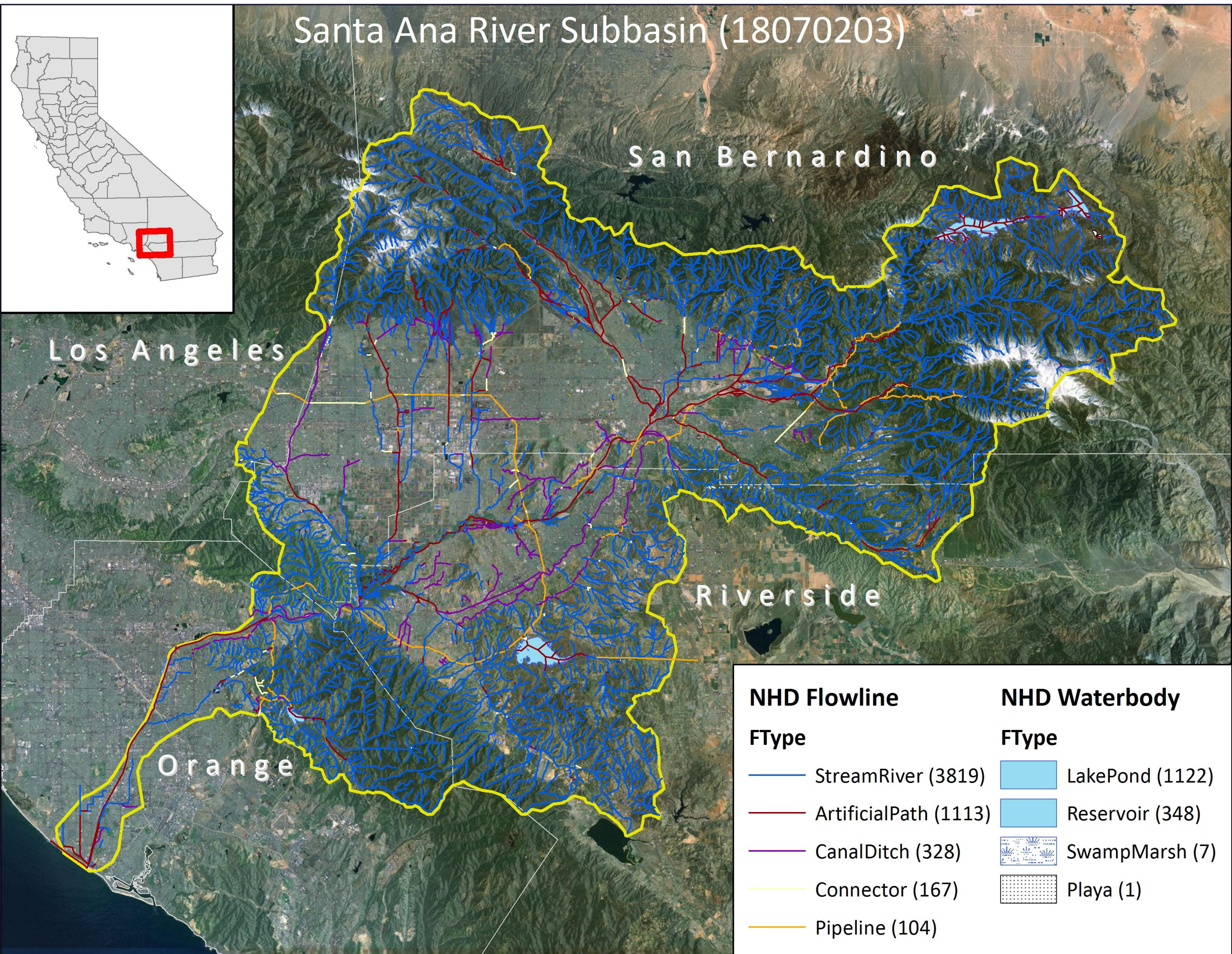
NHD Stewardship Process

In 2008, SCCWRP formalized an agreement with the USGS to act as an associate steward for the Santa Ana River watershed. NHD stewards help USGS to improve the quality of the high resolution GIS data in the NHD by soliciting information from local agencies and individuals with comprehensive knowledge of regional hydrography. In California, the Department of Water Resources will eventually serve as the primary data steward, with a variety of regional agencies serving as associate stewards (below).



SCCWRP Roles and Responsibilities

- Identify regional hydrography users and data creators*
- Acquire suggested updates from data partners
- Promote and facilitate the use of NHD in the Southern Los Angeles Region
- Maintain quality assurance for the GIS data
- Provide publicly available information on status of data updating.

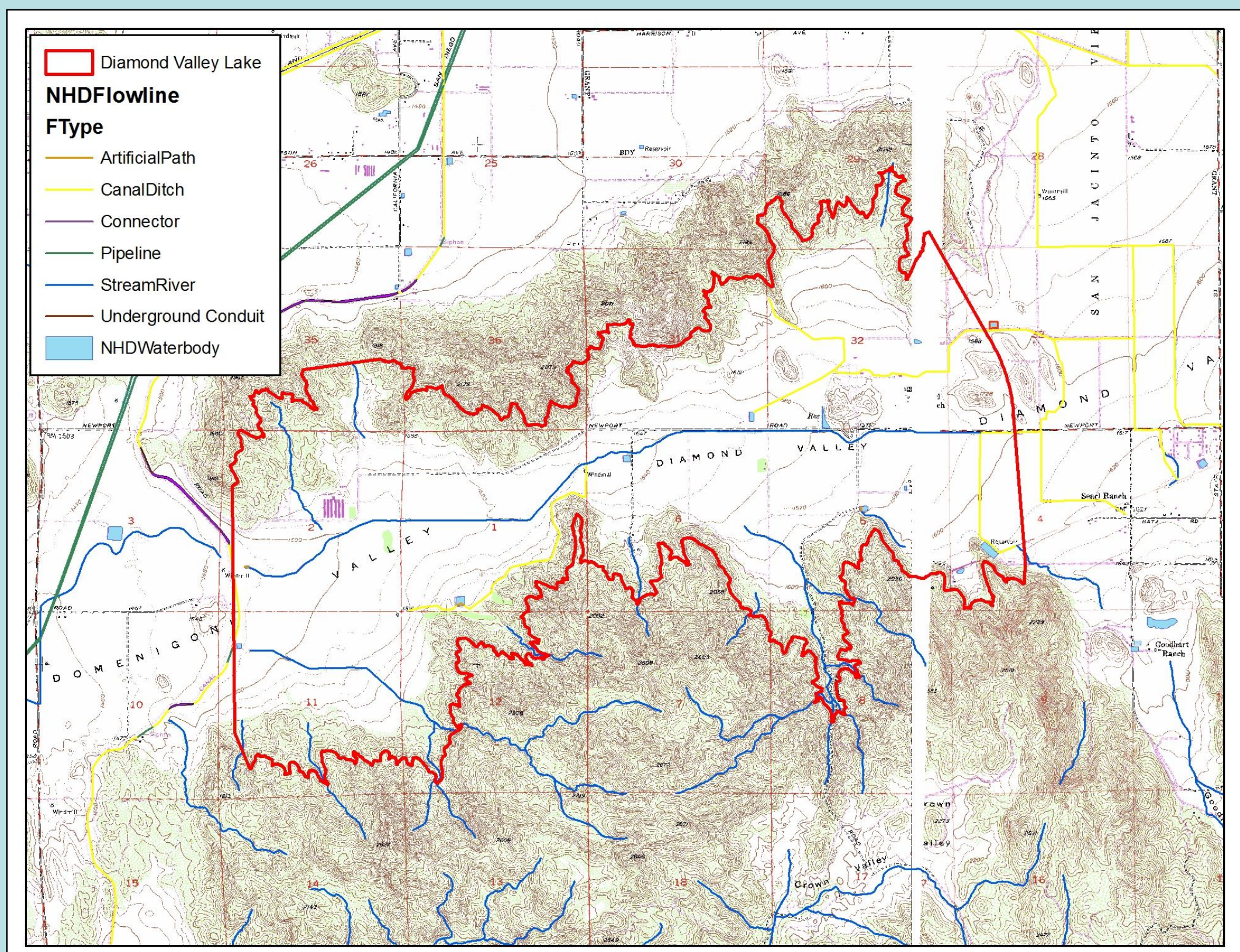


The Santa Ana River Subbasin

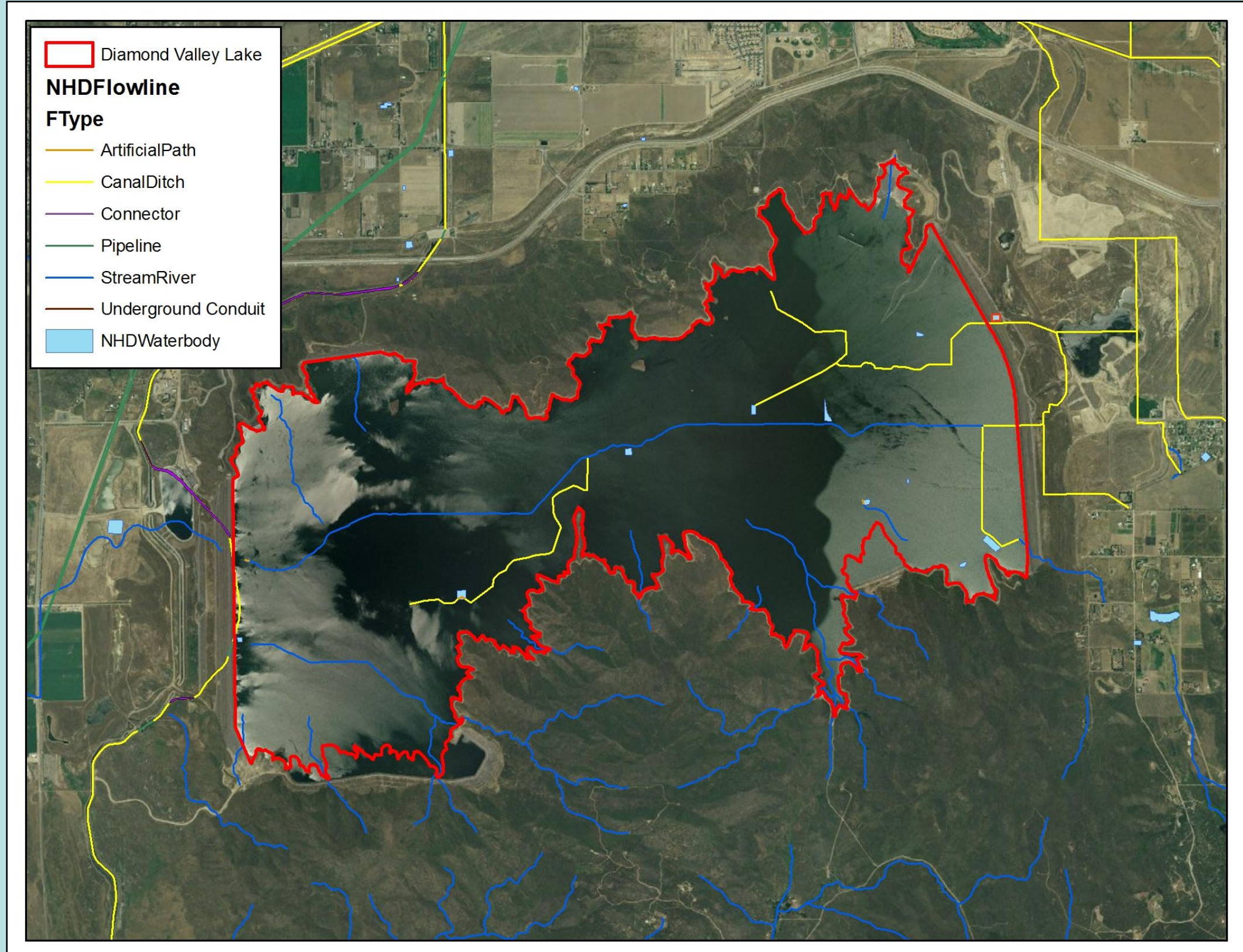
This major Southern California watershed covers portions of four counties, has a total area of 4377 sq. km (1690 sq. mi.), and includes over 5000 km of rivers, streams, and other hydrographic flow features. It includes both major urban centers and rural, mountainous regions, with elevations ranging from sea level to 3500 m. The subbasin represents a hydrographic unit of great complexity and importance to the ecology of Southern California. SCCWRP has entered into an agreement with the USGS to assist in maintaining and updating the National Hydrography Dataset for the subbasin.

An Example of NHD Stewardship: Addition of Diamond Valley Lake

Diamond Valley Lake in Hemet was constructed in 1999 in the saddle of two mountains by the Metropolitan Water District to serve as a water storage site. The lake is the largest and newest reservoir in Southern California. In the process of creating it, several canals and streams were flooded or removed, and their flowlines will need to be removed from the NHD. A new polygon will be created to represent the high-water level of the reservoir. In addition to the water features, new line features will be added in to represent the two large and one smaller dam constructed to retain the water.



Location of Diamond Valley Lake before (above) and after (below) filling. NHD flowline features are shown to indicate those which will need updating or removal in the database.



*What you can do to help:

Does your agency work with digital hydrographic data, or have extensive knowledge of the Santa Ana River watershed?
Sharing this information with the NHD can help improve the quality of this public dataset.
Contact Becky at beckys@sccwrp.org for more information

References

<http://nhd.usgs.gov/>
<http://www.dvlake.com/>

Acknowledgements

Drew Decker, USGS
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