# State Stewardship for NHD and NWI

## **Background**

The Wetland Monitoring Workgroup has recommended on multiple occasions that the State of California establish stewardship for its portion of the National Hydrography Dataset (NHD) and the National Wetlands Inventory (NWI). These maps of the nation's water resources are maintained by the U.S. Geological Survey and the U.S. Fish and Wildlife Service, respectively.

A number of local and regional interests have become local stewards for portions of these maps, ground-truthing and refining maps of water resources in various areas of California. For the results of these more intensive mapping efforts to be made available to others and to maintain a master map of California's water resources for various purposes, these mapping efforts need to be fed back into the NHD and NWI national maps. Having a state steward would help to coordinate and facilitate improved mapping of water resources throughout California, would enable easier updating of California's portion of NHD and NWI, and would improve consistent use of a single map of California's water resources.

#### **State Stewardship Updates**

## Stewardship of the National Wetlands Inventory (NWI)

In April 2011, a 5-year Coordinated Work Plan for Wetlands Conservation Program Development was submitted to USEPA from the State Water Board and the California Department of Fish and Wildlife (CDFW), which identified CDFW as the state's manager of wetland and other aquatic resource maps (i.e., as state steward of the National Wetlands Inventory datasets and maps); however, to our knowledge, there are currently no ongoing efforts to house the state portion of NWI at CDFW.

Despite the lack of a state steward for NWI, the Wetland Monitoring Workgroup has made considerable progress in developing resources, which support comprehensive, coordinated mapping, assessment, and management of wetlands and riparian resources in California. For example, since the original release of the California Wetlands Portal (March 2010), the Wetland Monitoring Workgroup has developed EcoAtlas, which now includes broader water resource data management and analytical functionality than its predecessor (Wetland Tracker). In addition, The California Aquatic Resources Inventory (CARI v.0) was developed by the workgroup, which is a standardized statewide map of wetlands, streams and riparian areas; CARI is the new base map that feeds into EcoAtlas, the data engine that drives the new Wetlands portal.

Mapping efforts for California's wetlands contain varied levels of detail, coverage, as well as criteria for mapping wetland extent and classification. CARI v.O was developed by bringing together the best available data from the NHD, NWI, and local intensification mapping efforts conducted in various areas of the state. As a result, the quality and level of detail for mapping efforts varies considerably from location to location. For example, the Sacramento-San Joaquin Delta currently is not adequately represented in CARI, due to the lack of differentiation between existing wetlands and currently-farmed acreage; however, the Delta Conservancy is currently working with San Francisco Estuary Institute (SFEI) to fill in habitat data for this region. Similar efforts are being pursued around the state, and additional information and data will be added to CARI as new intensive mapping efforts are completed. The inconsistencies and lack of coverage in surface water resource mapping is one of the primary shortcomings that the Wetlands Monitoring Workgroup is trying to address as they move forward.

While the Wetlands Monitoring Workgroup has made great progress in standardizing the mapping of wetland location and extent throughout the state, currently there is no statewide framework for feeding improved wetland mapping data back into the federal National Wetlands Inventory.

#### Stewardship of the National Hydrography Dataset (NHD)

Over the past several years, multiple attempts have been made within DWR to serve as the steward for the National Hydrography Dataset (NHD). While research into the costs of NHD stewardship began as far back as 2008, these efforts did not include any quantitative estimates for the benefits of DWR serving as state steward. More recently, funding requests were developed at DWR regarding stewardship of NHD (for both FY 12-13 and 13-14); however, both requests were denied.

Due to the lack of success for stewardship within DWR, recent efforts have focused on a multi-agency approach for stewardship of NHD in California. A meeting was held in October 2013 to discuss joint stewardship of NHD, with participants from the Department of Water Resources, State Water Resources Control Board, Department of Fish and Wildlife, and CAL FIRE; however, as the meeting was held during the federal shutdown of 2013, no federal agencies were able to participate. Nevertheless, the interagency group determined that it would be beneficial to develop a Memorandum of Understanding (MOU) for California NHD stewardship among interested state and federal agencies. The MOU would define and assign various roles and responsibilities among the signatories, thereby ensuring that the burdens of stewardship would not fall primarily on a single agency. It would also provide a framework by which funding to support NHD stewardship could be secured.

The next inter-agency meeting is planned for January 2014, which will also include potential federal partner agencies. The goal of the meeting is to further develop the roles and responsibilities, using DWR's latest funding request (FY 13-14) as a guide. In preparation for this meeting, staff at DWR's Division of Statewide integrated Water Management are researching the needed resources for joint stewardship of NHD. Similar efforts are underway at other potential partner agencies.

#### **Recommended Actions**

- While there appears to be some progress regarding stewardship of NHD (e.g., potential joint stewardship), further work is needed to find a state steward(s) for NWI.
- As described above, there is a clear nexus between the efforts of the Wetland Monitoring Workgroup and those of the interagency group seeking to steward NHD. The Monitoring Council Coordinators (Kris Jones and Jon Marshack) will recommend that members of the Wetland Monitoring Workgroup participate in the January 2014 meeting regarding joint stewardship of NHD, in order to determine whether these similar efforts could be better coordinated. Participation in the meeting could also help the group explore whether a similar inter-agency approach could be developed for NWI stewardship.
- As EcoAtlas and CARI were developed by non-governmental organizations (SFEI and SCCWRP), an initial Feasibility Study Report (FSR) was not completed; FSRs are prepared to help ensure that state agencies meet the California Department of Technology requirements for documentation of feasibility studies for information technology projects, a key component in their justification. Therefore, the Monitoring Council Coordinators will research whether a retroactive FSR will be needed in the eventuality that state stewards for NWI and NHD will take over responsibility of EcoAtlas and/or CARI and will expend state funds for their augmentation.