A. Represents full range of CA wetland form and function

California has extraordinarily diverse wetlands and riverine systems because of its physiographic and climatic variability. The purpose of this criterion is to assure that the classification system captures the extreme forms of wetlands and riverine systems that typify alpine, coastal, desert, and temperate rainforest conditions, and that it captures the major variations in wetland form along the continuum of conditions between the extremes, to the extent that the variations can be discerned during wetland and stream mapping (see “B” below).

B. Can be applied during mapping

Some classification systems are based entirely on indicators that are evident in aerial images, satellite images, or on maps. Other systems modify such indicators based on information about management objectives or field conditions that cannot be known without site-specific reports or site visits. The purpose of this criterion is to make sure that the wetlands can be classified during wetland mapping without field visits or site reports, other than QAQC procedures, assuming that the mapping is based on 1-m pixel resolution color imagery or CIR imagery viewed at scale 1:5,000 (i.e., based on the draft State wetland mapping protocols).

C. Supports ambient assessment

The classification system will be part of the State Wetland and Riparian Area Monitoring Program (WRAMP). The wetland maps need to serve as the sample frame for both rapid and intensive assessment. The classification system must therefore be consistent with the typology that is dictated by the assessment methods. The State has no standard methods of intensive assessment of wetlands. However, the State is examining how the California Rapid Assessment Method for wetlands and wadeable streams (CRAM) might be used in regulatory and other contexts. CRAM recognizes ten wetland types. For each type, there is a unique version of CRAM.

D. Is consistent with nomenclature of CA wetland policies and programs

A primary goal of the WRAMP is to evaluate the performance of the State’s policies and programs for protecting and restoring wetlands and riparian areas. This means that the classification system needs to recognize the types of wetlands that are named in the State’s policies and programs. For example, since the State has an Interagency Vernal Pool Stewardship Initiative, it needs a classification system that specifically identifies vernal pools. The State is developing programs to protect montane wet meadows. It therefore needs a classification system that recognizes wet meadows. All wetland types that are targeted by State policy or programs will be identified.
E. Can be adequately cross-walked to other systems, especially NWI

For the State’s effort to map wetlands to enjoy federal funding, it must be consistent with, or exempt from, the wetland mapping standards promulgated by the Federal Geographic Data Committee (FGDC). At this time, the FGDC standards require using the Cowardin system of wetland classification based on guidance from the National Wetland Inventory (NWI) of the USFWS. The Cowardin system will be provided for review. However, the FGDC standards allow NWI to accept maps that do not strictly use the Cowardin system. NWI knows that many states have their own, unique wetland mapping and classification systems that could benefit NWI through a process of data translation and transference.

F. Complements the VegCAMP

The State is implementing a statewide initiative to map vegetation (VegCAMP 2007), and has recently expressed interest in integrating vegetation mapping with wetlands mapping. VegCAMP does not map wetlands per se, but does map associations and alliances of plant species that are suggestive of wetlands. The wetland maps should help predict plant species distributions, and VegCAMP should help identify candidate wetland areas.

G. Aids identification of site-specific beneficial uses

The classification system should help wetland managers and regulators determine the kinds of beneficial uses or ecological services that any given wetland is likely to provide. This is a particular purpose of the State wetland map. It might be accomplished by annotating each mapped wetland with information about water source, geomorphic setting, position in drainage network, land use context, etc. The existing classification systems that address these kinds of factors for wetlands, such as LLWW of the USFWS (Landscape Position, Landform, Water Flow Path, Waterbody Type), will be carefully reviewed. The classification system would ideally be cross-referenced to the habitat classification system of the California Wildlife Habitat Relationships database.

H. Can be expanded or contracted without requiring new inventories or maps

State policies and programs that focus on one or a few wetlands types tend to subtypes of special interest. For example, the focus on vernal pools has revealed numerous subtypes of them relating to variations in soil chemistry, hydroperiod, characteristic flora, etc. The increasing interest in wet meadows is likely to cause more kinds of them to be recognized. The classification system should be adjustable to accommodate such changes in the scope and specific focus of wetland policies and programs.

I. Is not too elaborate or complicated

Classification can be an expensive aspect of mapping. To minimize the cost, the classification system should be no more complicated or involved than needed to meet the other criteria.