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April 17, 2007

Song Her,
Clerk to the Board
Executive Office
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

re: Comments on proposed Wetland and Riparian Area Protection Policy

Dear Board Members,

I do not have any advanced degrees in hydrology or biology, but I have spent many of my 73 years walking streams and riparian habitats and observing the flora, fauna, and human impacts found there, first as a citizen commenting on various state and local plans, then, for the last 22 years as Senate Rules Committee appointee to the Santa Monica Mountains Conservancy Advisory Committee, and, finally, for the last 15 years as a Planning Commissioner for the City of Calabasas.

If the goal is to minimize loss and incremental degradation of the valuable wetland and riparian habitats of the state - as I believe it should be - I would strongly recommend the Board adopt ALTERNATIVE 4, as it is clearly the most comprehensively protective alternative.

As for a "DEFINITION OF A WETLAND that is fully protective of these waters", in addition to the presence of permanent or seasonal standing or flowing water, an important indicator of a wetland is the presence of certain moisture-dependent vegetation. In the area of the state I am most familiar with - the Santa Monica Mountains and the Simi Hills - certain plants are indicators of permanent water. These would include the White Alder (*Alnus Rhombifolia*), Stream Orchis (*Epipactis Gigantea*), and Giant Chain Fern (*Woodwardia Fimbriata*). If the standard for a "wetland" is to be seasonal standing or flowing water, the indicators would be such plants as various species of Willow (*Salix Sp.*), Cattail (*Typha Sp.*), etc.. It should not be difficult to compile similar lists of true wetland indicator species in each of the various regions of the state.

Unfortunately, vegetation is sometimes removed before permits are applied for, so another standard, such as USGS "blue-line" streams is often used by state and local planners to define a wetland. In my experience there is

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usually a pretty close correlation between streams mapped by USGS with a solid or dashed blue line and streams with perennial or significant seasonal flow. However, I have run into a few cases where perennial streams with significant riparian vegetation were not mapped as "blue-lines". If USGS "blue-line" is to be a standard for defining a wetland, you may wish to set up some procedure with scientific criteria where citizens can present evidence that a stream or other aquatic habitat should be classified as a "wetland" even if it is not mapped as a "blue line" stream.

The practical problem of defining a "wetland" in southern California is shown by the seasonally dry, rocky, 8'-wide bed of Arroyo Sequit in Leo Carrillo State Park lined with Mulefat and Coastal Sage species. At first glance it would seem to the casual observer to be devoid of all aquatic life and only marginally a "wetland"..

Yet Fish and Game has proposed to post this apparently lifeless stream with a "no fishing" sign. The reason is because they have solid evidence that it supports one of the last known spawning runs of the endangered Southern Steelhead in Los Angeles County. (This run has been confirmed by Fish and Game, even to the point of diving into upstream pools in scuba gear and counting the fish.)

The message here is that a stream that could easily be dismissed as a dry wash might still support important wetland resources at some point in the yearly cycle. Through ignorance of this, some southern California streams that once supported steelhead spawning runs have, over time, been blocked by dams, Arizona crossings, and other barriers to fish passage.

As for definition of a "RIPARIAN AREA", again, in the streams I am familiar with, there are certain tree species that are indicators of riparian woodlands, such as California Sycamore (*Platanus Racemosa*) and various species of willow.

There are cases where long-term OVERGRAZING drastically reduced or largely eliminated willows and other riparian vegetation. When such streams are purchased by state or federal park agencies and grazing has been eliminated, the Willow Riparian Forest has recovered rapidly, so that, within a generation a forest of tree-sized willows has grown up to shade the stream. (This recovery of the Willow Riparian Forest can be seen today along Las Virgenes, Cheeseboro, and Medea creeks in western Los Angeles County, where cattle grazing once drastically reduced the riparian cover.) Thus, in areas where grazing is still depleting the riparian habitat, it would probably be advisable to use additional criteria other than vegetation type for defining a "Riparian Area".

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(Of course, in an ideal world, heavy grazing should be kept out of riparian areas altogether, not only because grazing animals deplete riparian vegetation, but also because of the obvious water quality impacts.)

“RIPARIAN AREA” could be defined by mapped flood plains, as there often seems to be a close correlation between riparian vegetation and areas subject to occasional flooding in the streams I am familiar with.

Defining a **“Riparian Area”** by a set distance from a stream is not the best method, given the tendency of streams to cut meanders in flatter lands and undercut cliffs in narrow canyons. In the streams I am familiar with, the riparian woodland may be only a few feet wide in some locations, then, with changes in stream morphology, water table, or topography, it may widen to 100 feet or more.

Both Los Angeles County and the Coastal Commission define **“Riparian Areas”** in terms of the outer edge of the riparian canopy. In areas where streams are lined with a **“gallery forest”** and the line between the gallery forest and adjoining vegetation is well-defined, this would seem to be a good standard – as long as the gallery forest has not been depleted by over-grazing or other human activities.

Removal of riparian vegetation not only impacts terrestrial habitat and increases sedimentation, but, by removing the shade of trees, it raises water temperatures, impacting aquatic habitats as well.

There seems to be sufficient scientific literature available, both on the distance riparian organisms travel from riparian habitats to breed and forage and on the desirable width of riparian buffers to provide the basis for a riparian setback policy.

In 1976 a Los Angeles County environmental consultant recommended a **“BUFFER ZONE”** of 75 feet beyond the outer limit of riparian woodlands because the organisms that lived in riparian woodlands tended to forage in surrounding open areas.

The current draft of Los Angeles County's **SANTA MONICA MOUNTAINS LOCAL COASTAL PLAN** - already approved by the County's Regional Planning Commission - requires development to be set back 100' from the outer edge of the riparian canopy. Because the County Fire Department requires brush clearance up to 200' from flammable structures, the Draft LCP requires such structures to be set back 200' from the outer edge of the riparian canopy to avoid fire clearance of riparian habitat.

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As for a consistent definition of **BENEFICIAL USES OF RIPARIAN AREAS**, the Board should consider the value of riparian areas in urban and suburban contexts, as well as in undeveloped rural areas.

- In developed areas **RIPARIAN CORRIDORS** may provide the only remaining habitats where **WILDLIFE** can continue to survive and migrate between isolated habitat areas. This has obvious habitat value to wildlife, but it may also have **AESTHETIC**, **RECREATIONAL**, and **EDUCATIONAL** value to bird watchers and other naturalists the surrounding community.
- In developed areas riparian corridors not only have **RECREATIONAL** value for such pursuits as fishing and bird watching, but, in inland areas with hot summer climates, they often have special value for **TRAIL CORRIDORS** and **JOGGING PATHS** because they are shaded from the hot daytime sun in summer, permitting public use during hours, when more open parks and school playgrounds may be too hot for recreational activities.
- Riparian areas have special value in urban and suburban areas for **NATURE TRAILS** and for school and community **NATURE STUDY** areas in all seasons of the year.
- Undisturbed riparian areas also provide citizens an opportunity to observe and understand natural stream processes at work, something that may not be possible in areas where streams are rip-rapped or contained in concrete channels. (The importance of improving public understanding of stream processes such as flooding, flood plains, and meandering channels has been highlighted in recent years by news coverage of newly-developed housing tracts in the Central Valley submerged under several feet of floodwaters.)

Thank you for the opportunity to comment on the **PROPOSED STATEWIDE WETLAND AND RIPARIAN AREA PROTECTION POLICY**.

Sincerely,

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