PRE-PROPOSAL PROJECT SUMMARY

1. **Project Name: SAN DIEGO RIVER ESTUARY HYDROLOGIC ASSESSMENT PROJECT**

2. **Type of Project** _____ Acquisition ___X_____Planning _____Restoration/ Enhancement

3. **Project summary** (1-2 sentences -- specify key action(s) to be undertaken)**:**
Assess the overall existing hydrology of the fresh water/salt water transition zone of the San Diego River with specific attention to the flow reduction and sediment accumulation resulting from anthropogenic obstacles that were not constructed with the "good of the River" in mind. The assessment will include (1) the pros and cons of relocating, modifying, or removing obstacles; (2) specific recommendations for improving transition zone hydrology (vis-à-vis obstacles, sediment accumulation, river bed elevation, biological communities, survivability of native vegetation, upstream flood risk); and (3) the future possibility of increasing the extent, functions, and value of the River's scarce coastal wetlands habitat.

4. **Location:**	County:	San Diego County
	Watershed:	San Diego River
	State Senate District (#):	39
	State Assembly District (#):	76
5. **Acreage[1]:**	Total acreage of project area:	75 (37 saltwater; 37 freshwater; 1 obstacles)
	Acres of existing (pre-project) wetland habitat:	75 (37 saltwater; 37 freshwater; 1 obstacles)
	Acres of post-project wetland habitat:	75 (unknown saltwater vs. freshwater; proportions may change)
	Feet of stream corridor (if applicable):	unknown

6. **Budget Summary:**	Total project cost:	$150,000
	Amount requested from WRP:	$112,000
	Anticipated Matching Funds:	$ 37,000

7. Contact Information:	Name:	Deborah Jayne, Executive Officer
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Project Description
Project funding will be used to assess the overall existing hydrology of the fresh water/salt water transition zone of the San Diego River with specific attention to the flow reduction and sediment accumulation resulting from anthropogenic obstacles. These obstacles, which were not constructed with the River's ecosystem in mind, include a weir across the main channel of the River (in the segment between Pacific Highway and I-5); a dock; and other miscellaneous structures (located within approximately .75 miles on either side of the I-5 bridge).

The Assessment will include the pros and cons of relocating, modifying, or removing obstacles; specific recommendations for improving transition zone hydrology (vis-à-vis obstacles, sediment accumulation, river bed elevation, biological communities, survivability of native vegetation, upstream flood risk); and the future possibility of increasing the extent, functions, and value of the River's scarce coastal wetlands habitat (should the obstacles be shown to be detrimental to ecosystem functioning). Removal of the weir will increase tidal flow and associated salinity and vegetation. Since coastal wetlands habitat is often displaced by freshwater wetlands habitat, coastal wetlands are more scare and therefore considered of higher habitat value than freshwater wetlands. Furthermore the weir and other barriers impede the ability of aquatic organisms to move upstream, e.g., mullet and perhaps steelhead (in year's past).

A hydrologic assessment of the River's existing salt water/fresh water interface is needed for the following reasons:

(1) We are at the critical turning point as we begin to view the River as a whole integrated ecosystem, rather than as a string of individual development projects;

(2) There are imminent upstream development pressures on the River in this area (e.g. the Riverwalk Golfcourse Redevelopment Project), which will significantly change the River's current hydrology. Such changes should be carefully evaluated and addressed;

(3) The existing conditions likely exacerbate the already embarrassing flooding problem of Mission Valley; and

(4) We now understand more about (a) the importance of preserving adequate wildlife corridor linkages (e.g., bob cat tracks have recently been identified under the I-5 bridge); (b) that tides play a role in Mission Valley flooding; and (c) the relative abundance and value of salt marsh versus upland riparian habitat.

Partnerships and resource levering are important features of the project. Potential partners include the San Diego River Park Foundation, City of San Diego, and other state and federal entities. The Conservancy will seek a 25% total cumulative match from its combined partners.

Project Evaluation Criteria: Check all that apply and provide a brief description.

Ecological Criteria

- ☐ Preserve and restore coastal wetland ecosystems
- ☐ Preserve and restore stream corridors and wetland ecosystems in coastal watersheds.
- ☐ Recover native habitat and species diversity.

Policy Criteria

- ☐ Prevent future degradation/loss of wetland resources
- ☐ Integrate wetlands recovery with other public objectives.
- ☑ Promote education and compatible access related to coastal wetlands and watersheds.
- ☑ Advance the science of wetlands restoration and management in Southern California.

An assessment of the existing hydrology at the fresh water/salt water interface will facilitate informed decision-making regarding the potential need for "restorative hydromodifications" (e.g., removal of anthropogenic barriers). The timing of any such modifications must be carefully considered. Although the Hydrologic Assessment will promote the education and the science of wetlands restoration management in Southern California, it will not, "by itself", preserve or restore the River's wetlands or native habitat/species diversity. Nor will it integrate wetlands recovery with other public objectives or prevent future wetlands degradation or loss. However should the Assessment find that existing anthropogenic conditions/obstacles produce undesirable hydrologic affects, the "Implementation of the Assessment's Recommendations" (i.e., Phase II of the project) will meet each of the listed Ecological and Policy Criteria.

[1] Acreage estimates are very rough.