

To: Massood Eftekhari From: Gary Hildebrand *GH* Date: June 11, 2013

Subject: Los Angeles County Flood Control District Policy on Additional Vegetation in Los Angeles River Watershed Soft-Bottom Channel Reaches 1, 9, 19-22, and 25.

Attached for your approval is the policy addressing the allowance of additional vegetation in the Los Angeles River.

LAT:sw

P:\wmpubl\Secretarial\2013 Documents\Letter\veg policy.doc\C13064

Attach.

cc: Flood Maintenance (Hanson)
Land Development (Nyivih)
Water Resources (Stone)

GH



Approved by

Mark Pestrella
for Mark Pestrella, Assistant Director

6/27/13

Date



**LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
POLICY ON ADDITIONAL VEGETATION IN LOS ANGELES RIVER
WATERSHED SOFT-BOTTOM CHANNEL REACHES 1, 9, 19-22, AND 25**

The Los Angeles County Flood Control Act (Act) establishes a priority for flood protection and water conservation over recreational, education, and other uses of watercourses under the control of the Los Angeles County Flood Control District (LACFCD). However, when (and only when) it is consistent with the LACFCD's flood control and water conservation objectives, the Act authorizes the LACFCD to take actions to preserve and enhance features on its properties for the protection, preservation, and use of the scenic beauty and natural environment.

The LACFCD supports an adaptive management approach for facilities, which recognizes that facilities can be managed to provide other benefits without increasing flood risk to an unacceptable level. A Study¹ was conducted of the major watercourses in the Los Angeles River Watershed to determine where the perpetual presence of some level of native vegetation might be consistent with the objectives for flood protection and water conservation in those watercourses. The study included both biological and hydraulic studies and analyses.

The study indicated that the estimated actual capacity of certain watercourses (Soft-Bottom Channel (SBC) Reaches 1, 9, 19-22, and 25) is significantly greater than the original design flow rate of those reaches. For these SBC reaches, recommended vegetation levels were developed by BonTerra Consulting, a biological consultant to the LACFCD.

The study also indicated the following:

- The recommended vegetation levels would decrease the capacity of the subject reaches; however, the estimated capacity of these SBC reaches, assuming the presence of the recommended vegetation levels would still be substantially greater than the respective original design flow rate for each SBC reach.
- Assuming the recommended vegetation levels were maintained in each of the subject SBC reaches, the estimated capacity of each SBC reach would still be sufficient to convey an approximate 500-year frequency storm event (SBC Reach 25) or greater (SBC Reaches 1, 9, 19, 20, 21, and 22). The probability of occurrence of a 500-year frequency storm event is 0.2 percent in any given year.

¹Los Angeles River Soft-bottom Channel/Hydraulic Analysis Study by the Los Angeles County Department of Public Works Water Resources Division, June 5, 2013.



**LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
POLICY ON ADDITIONAL VEGETATION IN LOS ANGELES RIVER
WATERSHED SOFT-BOTTOM CHANNEL REACHES 1, 9, 19-22, AND 25**

By allowing the recommended vegetation levels in the referenced watercourses, the scenic beauty of and natural environment in and around those watercourses would be better protected, preserved, and enhanced. In addition, the following benefits would be anticipated to accrue:

- The recommended vegetation levels would allow for additional habitat use by birds and other wildlife and provide greater connectivity between habitat areas;
- Increased biological and species diversity would result from the presence of the recommended vegetation levels in the specified SBC reaches of the Los Angeles River Watershed that do not presently contain such vegetation;
- Water-quality improvements would result from biological treatment of flows from small storms passing through the areas where recommended vegetation levels are present; and
- Increased vegetation in general would reduce air pollution and improve air quality in adjacent urban communities.

It is the determination of the LACFCD that the increase in the risk of overflow in the subject SBC reaches resulting from the presence of the recommended vegetation levels would be extremely small (less than 0.2 percent) and the possibility of overflow, even assuming the presence of the recommended vegetation levels, would still be extremely remote. Further, the remote risk of overflow associated with the recommended vegetation levels does not justify forgoing the environmental and other benefits that the recommended vegetation levels are anticipated to provide.

It is, therefore, the policy of the LACFCD to incorporate the recommended vegetation levels developed by BonTerra Consulting (as generally depicted on the attached exhibits) into the maintenance plan and practices for SBC Reaches 1, 9, 19-22, and 25 of the Los Angeles River Watershed, upon consultation with the appropriate jurisdictional agencies.

Reach 1
 Allow willow canopy to spread outside channel. Allow native shrubs such as coyote bush and mule fat to become established in this area. Relocate existing chainlink fence as shown on exhibit to protect this area.



Vegetation Types

- scale broom scrub
- disturbed scale broom scrub
- southern coast live oak riparian forest
- disturbed southern coast live oak riparian forest
- willow riparian forest

- southern willow scrub
- cattail wetland
- cattail wetland/open water
- disturbed cattail wetland
- riparian herb
- ruderal

- ornamental
- unvegetated wash
- open water
- disturbed
- ungrouted riprap
- developed

Recommendations – Reach 1

Los Angeles River Watershed Feasibility Study



Exhibit 1C



Reach 9
 Remove non-native ash trees at top of both banks and replace with native trees. Sycamore trees are the preferred native trees to be planted per the maintenance plan that will be prepared for this task at a later date.

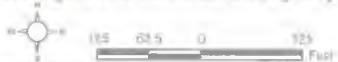


Vegetation Types

- | | | |
|---|----------------------------|------------------|
| scale broom scrub | southern willow scrub | ornamental |
| disturbed scale broom scrub | cattail wetland | unvegetated wash |
| southern coast live oak riparian forest | cattail wetland/open water | open water |
| disturbed southern coast live oak riparian forest | disturbed cattail wetland | disturbed |
| willow riparian forest | riparian herb | ungrouted riprap |
| | ruderal | developed |

Recommendations - Reach 9
 Los Angeles River Watershed Feasibility Study

Exhibit 1F



D:\Project\CO_107\10718\area\123_1000\mxd\10718_1000.mxd

Reach 19
 Except for on the crib structures, allow native shrubs to grow on the invert of the channel reach from the upstream end to the pedestrian bridge at Mountain Ave. Selectively protect native shrubs by removing non-native vegetation. Native trees will not be allowed to grow in the invert.



Vegetation Types

- scale broom scrub
- disturbed scale broom scrub
- southern coast live oak riparian forest
- disturbed southern coast live oak riparian forest
- willow riparian forest

- southern willow scrub
- cattail wetland
- cattail wetland/open water
- disturbed cattail wetland
- riparian herb
- ruderal

- ornamental
- unvegetated wash
- open water
- disturbed
- ungrouted riprap
- developed

Recommendations - Reach 19

Los Angeles River Watershed Feasibility Study



Exhibit 1E



D:\Projects\2014\COA\N\101139\mxd\1_e_recommendations_1805.mxd

Reach 20
 Allow native herbaceous and shrub species to grow on right bank looking downstream. Selectively remove non-native species from right bank. Do not allow oaks or other additional trees to grow on the banks.

Reach 21
 Allow native herbaceous and shrub species to grow on left bank looking downstream underneath the coast live oak woodland. Selectively remove non-native ground cover species (e.g. ivy) from left bank. Do not allow additional oaks or other trees to grow on the banks.



Vegetation Types			
	scale broom scrub		ornamental
	disturbed scale broom scrub		unvegetated wash
	southern coast live oak riparian forest		open water
	disturbed southern coast live oak riparian forest		disturbed
	willow riparian forest		ungROUTED riprap
	southern willow scrub		developed
	cattail wetland		
	cattail wetland/open water		
	disturbed cattail wetland		
	riparian herb		
	ruderal		

Recommendations – Reaches 20 and 21

Los Angeles River Watershed Feasibility Study



D:\Working\SCSD\A870131\reach20_21\reach20_21.dwg

Reach 22

Except for on the crib structures, allow native shrubs (but not trees) to grow on the invert of the entire channel reach. Selectively protect native shrubs by removing non-native vegetation. Native trees will not be allowed to mature on the channel invert.



Vegetation Types

- | | | |
|---|----------------------------|------------------|
| scale broom scrub | southern willow scrub | ornamental |
| disturbed scale broom scrub | cattail wetland | unvegetated wash |
| southern coast live oak riparian forest | cattail wetland/open water | open water |
| disturbed southern coast live oak riparian forest | disturbed cattail wetland | disturbed |
| willow riparian forest | riparian herb | ungrouted riprap |
| | ruderal | developed |

Recommendations – Reach 22
Los Angeles River Watershed Feasibility Study

Exhibit 1A

