

# U.S. Army Corps of Engineers Vegetation & Flood Damage Reduction

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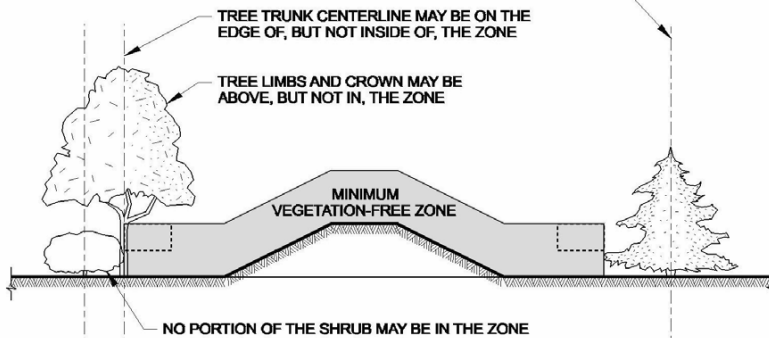


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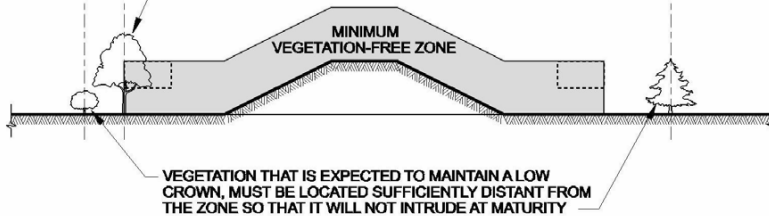
# Vegetation Policy

TREES WITH LOW LIMBS OR CROWN, SUCH AS A CONIFEROUS TREE, MUST HAVE TRUNK CENTERLINE SUFFICIENTLY DISTANT FROM THE ZONE THAT NO PART OF THE TREE IS IN THE ZONE. IF THIS TREE WERE TO GROW INTO THE ZONE, IT WOULD HAVE TO BE EITHER PRUNED OR REMOVED



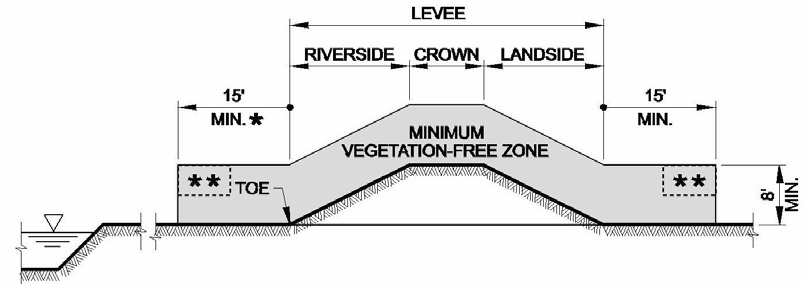
a. MATURE TREES AND SHRUB

THESE LIMBS AND CROWN ARE ACCEPTABLE AS TEMPORARY INTRUSIONS INTO THE ZONE. AS THE TREE DEVELOPS IT SHALL GROW, OR BE PRUNED, CLEAR OF THE ZONE. HOWEVER, DURING DEVELOPMENT, IF EMERGENCY ACCESS REQUIRES, THE TREE MAY HAVE TO BE REMOVED



b. NEWLY PLANTED TREES AND SHRUB

NOTE: THE MIRROR IMAGE OF THIS FIGURE WOULD BE EQUALLY CORRECT, REGARDLESS OF WHICH SIDE IS THE RIVERSIDE



\* 15' OR DISTANCE TO EDGE OF NORMAL WATER SURFACE, IF LESS

\*\* IN THIS 4' X 7' TRANSITION ZONE, TEMPORARY OBSTRUCTION BY LIMBS AND CROWN IS ALLOWED DURING DEVELOPMENT OF NEW PLANTINGS, FOR UP TO 10 YEARS

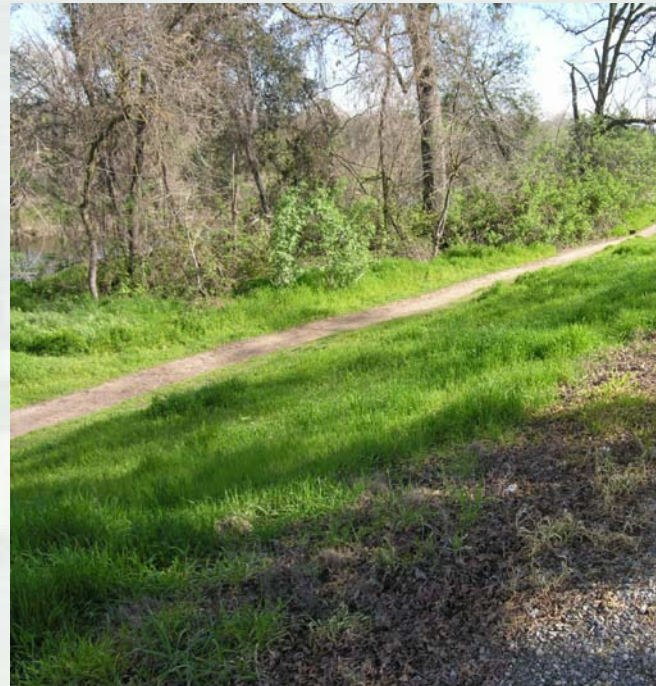
▽ NORMAL WATER SURFACE



# New Plantings

Any addition of landscape plantings to existing flood damage reduction systems must comply with the project's O&M manual. New plantings may not be approved without an appropriately detailed and documented engineering evaluation to ensure that design intent and safety criteria are maintained as originally authorized.

- *Channel Capacity*
- *Levee Safety*
- *Operations & Maintenance*



# Vegetation Variances

In certain instances, to further enhance environmental values or to meet state or federal laws and/or regulations, the local sponsor may request a variance from the standard vegetation guidelines.

(1) Only feasible means to preserve, protect, and enhance natural resources and/or protect the rights of Native Americans, pursuant to treaty and statute.

(2) With regard to flood damage reduction systems, the variance must assure that safety, structural integrity, and functionality are retained, and accessibility for maintenance, inspection, monitoring, and flood-fighting are retained.



# A Balanced Approach

Can environmental restoration and flood damage reduction projects be implemented collaboratively?



Truckee River Restoration

American River – Cal Expo



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