


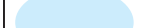







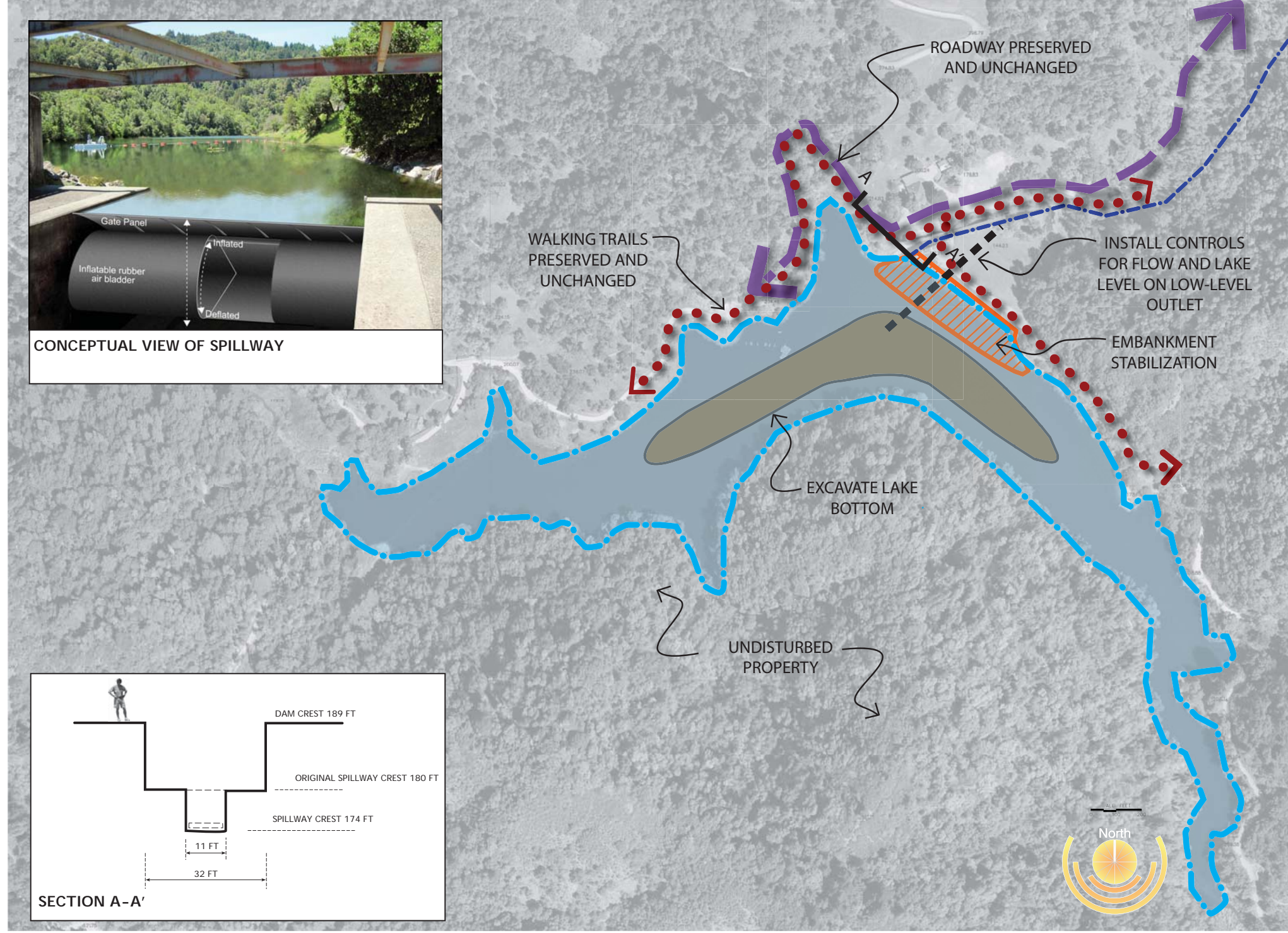
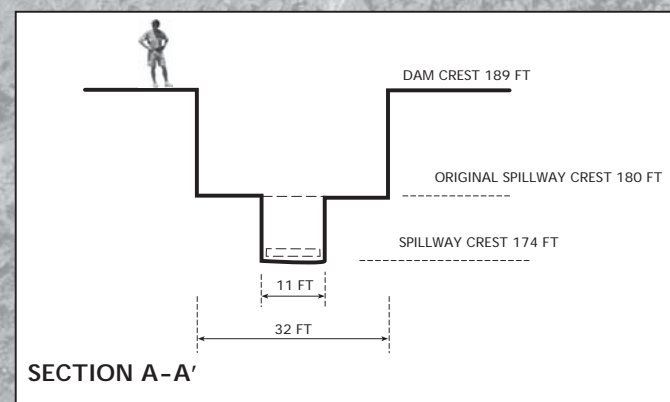
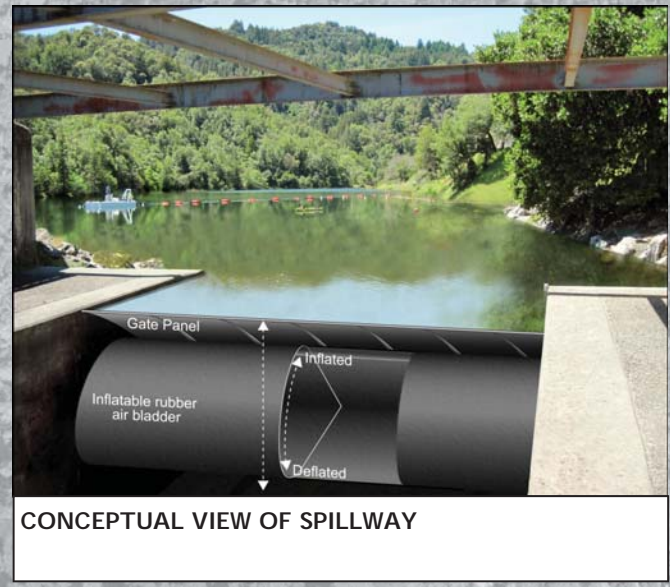


- KEY:**
-  ACCESS ROAD
 -  PEDESTRIAN PATH
 -  HIGH WATER LINE
 -  DETENTION BASIN
 -  GRADED SLOPE
 -  BRIDGE
 -  VIEW
 -  EXISTING CREEK FLOW
 -  CULVERT
 -  CONTOURS
 -  NUTRIENT-REDUCING BIOSWALE

PROJECT DESCRIPTION:
 Phoenix Lake is located above and southwest of the Town of Ross and is owned by the Marin Municipal Water District. Little needs to change to utilize this beautiful reservoir as a detention basin. Flood management calling for drawing the water level down in advance of the winter's rainy season would increase the lake's capacity to detain potential flood waters. To increase the lake's capacity further, an inflatable/deflatable rubber dam & gate is proposed to close off the lower spillway when needed. The upper and larger spillway would remain to release overflow water in the event of extreme rainfall conditions. Additional improvements to Phoenix Lake may be needed for purposes of flood control and water supply. To provide better control of outflow and release of deeper, cooler water, controls will be installed on the low-level outlet.



MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT FLOOD ZONE 9

CORTE MADERA CREEK WATERSHED FLOOD DAMAGE REDUCTION AND CREEK MANAGEMENT STRATEGY - DETENTION BASIN ANALYSIS

PLANNING TEAM:
 STETSON ENGINEERS
 MICHAEL REX ASSOCIATES
 STUDIO GREEN

PHOENIX LAKE ISSUES AND OPPORTUNITIES

- FLOOD DETENTION COMPONENTS**
- Existing dam and 300 acre-foot capacity reservoir inundating 25 acres
 - Modify reservoir operations to draw down the water level ahead of storms to provide detention capacity
 - Install 6 ft. high inflatable/deflatable rubber dam across spillway to further increase detention capacity

EXISTING CONDITIONS DELETED
 • All existing conditions remain

EXISTING CONDITIONS RETAINED
 • All existing conditions remain

- NEW FEATURES ADDED**
- Inflatable/deflatable rubber dam across lower spillway.
 - Controls for flow and lake level on low-level outlet.

- PUBLIC BENEFIT**
- 650 cubic feet per second reduction in peak flow of Corte Madera Creek in Ross.
 - Up to 120 acre feet of additional detention capacity when rubber dam is activated

JANUARY 28, 2011
 PLATE 2-9.2 (PL)
 ADAPTED FROM STETSON ENGINEERS DB-5

PHOENIX LAKE- ISSUES AND OPPORTUNITIES