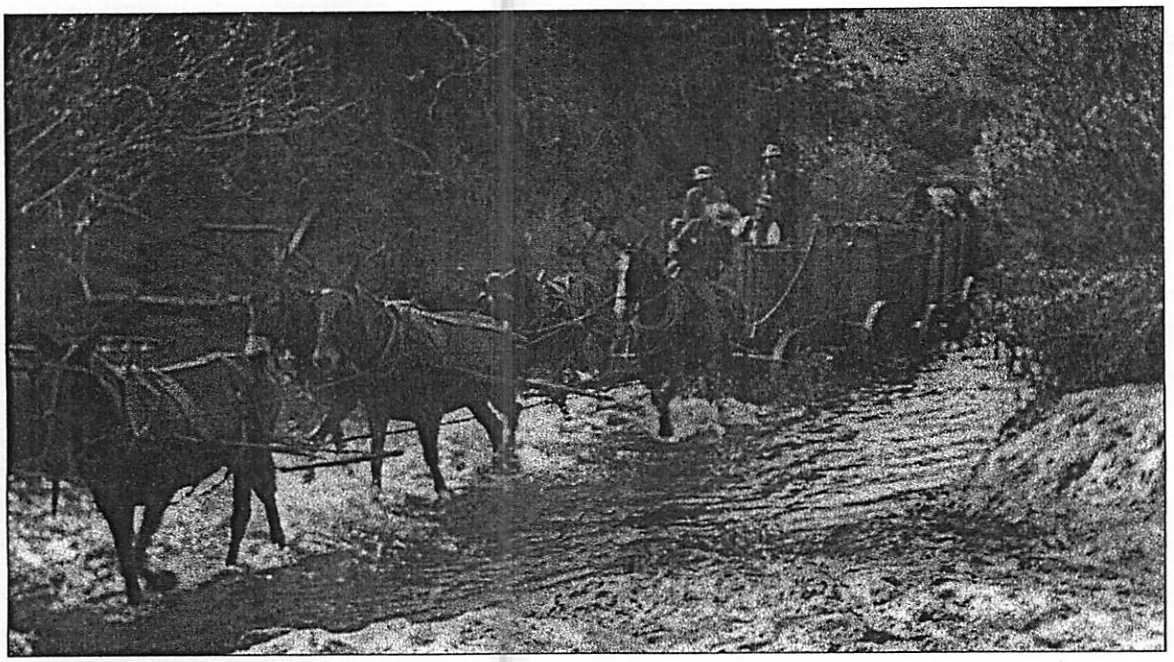
SECTION 8
TRANSPORTATION



TOPANGA HISTORICAL SOCIETY

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SECTION 8
TRANSPORTATION

"When we try to pick out anything by itself, we find it hitched to everything else in the universe."
– John Muir

GOALS:

- Preserve the integrity and safety of transportation corridors through a sustainable maintenance program that minimizes impacts to native biodiversity and natural processes.

Introduction

All the major roads in the Topanga Creek Watershed are immediately adjacent to Topanga Creek for much of their length. As of October 2001, it was estimated that over 30,000 car trips per day use these roads, especially as a cross mountain link from the San Fernando Valley to Santa Monica and the beaches. State Highway 27 (Topanga Canyon Blvd.) is under the jurisdiction of Caltrans, while all other roads are under the care of Los Angeles County Department of Public Works. It is clear that one of the main threats to the long-term ecological function of Topanga Creek are the roads and their related impacts.

Since 1996, members of the Topanga Community have been working closely with both LA County Department of Public Works and Caltrans to resolve long-standing issues concerning road maintenance and repairs in sensitive riparian areas. In Fall 2000, Caltrans embarked upon an Environmental Corridor Study to inventory the sensitive resources and provide guidelines for appropriate best management practices. We eagerly await the results of that study. LA County has redesigned several proposed road protection/streambank stabilization projects in the Old Topanga drainage to incorporate bio-engineered designs that will protect the integrity of the creek. They are also working with the community to design guardrails and other infrastructure that are in keeping with the rural nature of the watershed, while still meeting national highway standards.

More work needs to be done to ensure that these positive steps forward not only continue but get institutionalized, and become the standard of practice, not only in the Topanga Creek Watershed, but in all sensitive resource areas.

Finally, there is the possiblity that some of the bridges (Old Topanga Canyon and Topanga Canyon Blvd., Topanga Canyon Blvd. near Hidden Treasures) might qualify for historical status. Certainly the roads through Topanga Canyon have definite scenic value. Much of the length of Topanga Canyon Blvd. from the Top of Topanga all the way to the beach is surrounded on both sides by public parklands. The community will need to determine if these designations are worth pursuing and would convey additional protection to the watershed.

CULVERTS, BRIDGES AND STREAM CROSSINGS/REPAIRS

ACTIONS:

8.1 Implement proactive attempts to reduce road failures at known problem locations.

8.2 Any bridge repairs or replacements need to address the physical, aesthetic and environmental needs, and be consistent with, the community character.

8.3 Assess flood hazard to the County bridges along Topanga Canyon Blvd. and Old Topanga Canyon Road, and make appropriate emergency plans where required

8.4 LA County and Caltrans shall review proposed repairs to culverts and infrastructure throughtout the watershed with the community prior to final design and contracts.

8.5 Develop a comprehensive management strategy for culverts, bridges, etc. amongst all responsible agencies.

(5.44) Replace caissons, concrete retaining walls, and other support structures in accordance with BMPs to protect stream resources and prevent downstream impacts by altering flow dynamics. Use hydrologic model to estimate impacts. See also Streambank Protection.

Recommendations which require legal and political changes for implementation: None

LINE CLEARANCE/UTILITY MAINTENANCE

ACTIONS:

8.6 Reduce impacts to trees by coordinating line clearance pruning among all concerned agencies.

8.7 Prohibit line clearance pruning between January and April at known nest trees in order to protect nesting raptors.

(6.16) Prohibit topping (cutting trees straight across without regard to branch structure). See also Riparian Vegetation Protection.

(6.17) Apply directional pruning and crown reduction as pruning standards. Use International Society of Arboriculture standards for pruning. See also Riparian Vegetation Protection.

Recommendations which require legal and political changes for implementation:

8.8 Promote installation of underground utilities. Utility lines become hazardous during emergency evacuations.

ROAD SHOULDER AND STREAMBANK MAINTENANCE AND REPAIR

ACTIONS:

8.9 Develop new designs and approaches that preserve the natural setting of the watercourse while providing slope stability.

8.10 Cease the dumping of loose soil over embankments for road maintenance. See also Water Quality.

8.11 Minimize the removal of existing mature vegetation along road shoulders. See also Water Quality.

8.12 Identify sites for stockpiling native soils removed from the roadways during storm events. See also Water Quality.

8.13 Use only non-erodable approved materials to construct fills, backfills, embankment stabilizations, and road shoulders. See also Water Quality.

8.14 Prohibit importation of any fill debris material from outside of the watershed, unless tested and confirmed free of contamination, toxins and exotic invasives. See also Water Quality.

8.15 Develop a road management program for both public and private properties to correct existing adverse conditions at major sites of road induced slope erosion by construction, remedial drainage improvements, slope plantings or retaining structures.

8.16 Identify old roads to be retired.

8.17 Identify "normal" rate of sedimentation and determine whether road maintenance practices increase this process.

8.18 Identify amount and impacts of road spoils on creek habitat.

8.19 Scraping of the road shoulder needs to be done carefully so as not to destabilize slopes by removing the toe, and avoid roots of trees along Topanga Creek.

8.20 Change slope mowing maintenance practices to avoid shredding woody shrubs whose deep roots hold up slopes.

8.21 Require that all new roads with either cut or fill slopes be replanted or retained to prevent erosion.

(4.6) Establish and implement a cooperative program among all property owners and agencies involved for clearing stream obstructions. See also Flood Hazard.

(4.38) Continue management of road shoulder brush clearance for fire safety and line of sight without the use of herbicides. See also Fire Hazard.

(5.24) Erosion control should be performed only with porous material that allow infiltration of runoff. Energy dissipaters should be used to ensure that water velocities remain low. See also Erosion Control.

(5.26) Minimize erosion and sedimentation. Maximize sediment and runoff on-site. All drainage must be conveyed and released in a non-erosive manner at non-erosive velocities into natural channels or to an approved public drainage device, according to existing regulations. See also Erosion Control.

(5.32) Discourage the use of hardscape in the floodplain and along creek banks. Where grouted riprap exists, replacement with more appropriate bioengineered materials and solutions should be made over time. See also Streambank Protection.

(5.34) Use only bio-engineered methods and materials to construct fills, backfills, embankment stabilizations, and road shoulders. See also Streambank Protection and Stream Channel Maintenance.

(6.12) Prohibit placement of any materials within the protected zone of a tree, or a minimum of 10 feet from the trunk. See also Riparian Vegetation Protection.

(6.14) Creation of soil or asphalt berms to direct road runoff should avoid direct contact with tree trunks. See also Riparian Vegetation Protection.

Recommendations which require legal and political changes for implementation: None

TRAFFIC CONTROL AND PUBLIC SAFETY

ACTIONS:

8.22 Assess environmental impacts of increased traffic through canyon.

Recommendations which require legal and political changes for implementation:

8.23 Promote creation of alternative transportation (buses).

8.24 Improve pedestrian, equestrian, and bike safety throughout the watershed

References

Caltrans Roadside Vegetation Management Handbook

Caltrans. 1997. California Roads: A New Perspective

Caltrans Best Management Practices Manual

Caltrans Environmental Corridor Study of Topanga Canyon Blvd. (in progress)

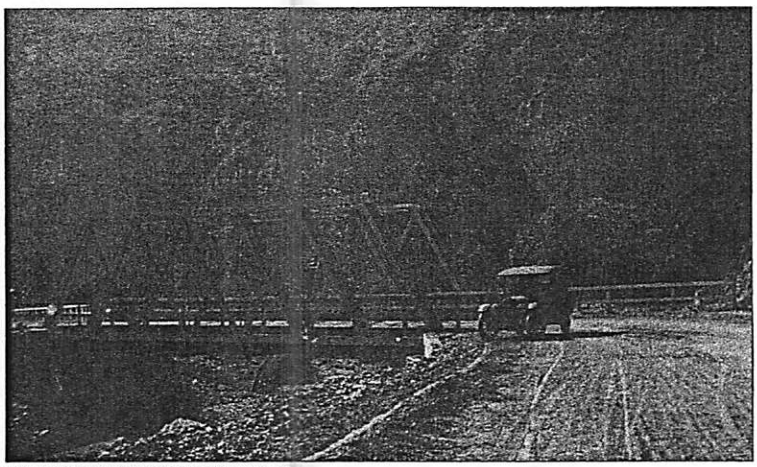
LA County Best Management Practices Manual

RCDSMM. 1999. Sensitive Species Inventory of Culverts and Infrastructure in the Topanga Creek Watershed. Prepared under contract for LA County DPW.

SCAG Transportation Plan for the San Fernando Valley

Supplemental Information

Addressing the environmental impacts of the roads and infrastructure in Topanga is an on-going challenge. Refer to the 1996 Draft Topanga Creek Watershed Management Study for a complete discussion of the history of the problem and the solutions proposed.



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