SECTION 10 LOOKING AHEAD: Monitoring, Research and Restoration Programs



TOPANGA HISTORICAL SOCIETY



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"Chance favors the well prepared mind." – Louis Pasteur

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GOALS:

- 1. To identify sources of point and non-point pollutants entering the stream; to determine any impacts of these pollutants; and to recommend specific measures to eliminate or mitigate pollution problems.
- 2. To identify specific sites contributing to high levels of sediment and erosion flow into the stream. Evaluate and refine appropriate Best Management Practices.
- 3. To locate areas where slopes are unstable. Evaluate bio-engineering, gabion, and other environmentally sound solutions and recommend appropriate standards for specific sites. Perform a similar study for sites where grouted rip rap has been placed.
- 4. To identify all trees that are within the projected flood zone that maintain streambank stability. Determine possible remedial efforts that could improve existing tree health. Identify locations needing revegetation in order to enhance streambank stability.
- 5. To monitor the biodiversity of the watershed and identify potential indicator species which could alert us to major shifts or losses. To involve the community in maintaining diverse habitats to support the large number of plant and animal species within the riparian zone.
- 6. To identify areas impacted by invasive exotic plants and animals. Establish an eradication program.
- 7. To reestablish a functional lagoon at the mouth of Topanga Creek.

Introduction

Even though much research has been accomplished since the 1996 Draft Topanga Creek Watershed Management Study, a number of additional research and restoration programs should be carried out in order to accomplish the goal of thoughtful maintenance and environmental protection. Together, these programs should provide the data needed to make informed decisions about appropriate methods for protecting life and property, maintaining road safety, and preserving stream function and ecology. Funding for these studies will be sought from a variety of sources.

Archeological and Cultural Resources

10.1 Develop guidelines for identifying and preserving archeological and cultural resources within the Topanga Creek Watershed.

Economics

10.2 Develop guidelines for evaluating the real costs and benefits of implementing Best Management Practices that incorporate the values provided by the natural environment.

Flood and Fire Hazard Protection

- 10.3 Coordinate efforts with LA County Forestry and Fire Department to take next steps to implement and evaluate environmentally sensitive fuel modification strategies.
- 10.4 Implement a demonstration site of environmentally sensitive fuel modification strategies at Topanga Elementary School.
- 10.5 Identify possible alarms and warning signals that could be used during emergencies to warn residents of danger from fire or flood. (Work with Arson Watch and T-CEP).

Land Use: Grading, Drainage and Erosion Control

- 10.5 Install demonstration sites for innovative graywater and septic systems. Monitor effectiveness.
- 10.6 Install demonstration sites for innovative, integrated site design which maximizes on-site drainage retention, minimizes grading and provides extensive erosion control.
- 10.7 Evaluate effectiveness of various strategies for controlling erosion of fire roads and trails.

Natural Environment

- 10.8 Continued monitoring is needed in order to assess the benefits of Best Management Practices implemented and to ensure that natural processes are maintained to the optimal extent feasible.
- 10.9 Identify sensitive resources locations and strategies for protection.
- 10.10 Evaluate a variety of strategies for controlling invasive exotic species.
- 10.11 Evaluate the feasibility of restoring the historic lagoon at the mouth of Topanga Creek.
- 10.12 Identify and implement steelhead trout and tidewater goby habitat improvements.

Recreation

10.13 Evaluate the impacts of trail use related to erosion. Test a variety of solutions and Best Management Practices.

Transportation

- 10.14 Develop creative ways to slow down traffic through the watershed.
- 10.15 Identify road related impacts to Topanga Creek and implement Best Management Practices.
- 10.16 Develop proactive plans for repairing problem locations that impact creek banks.

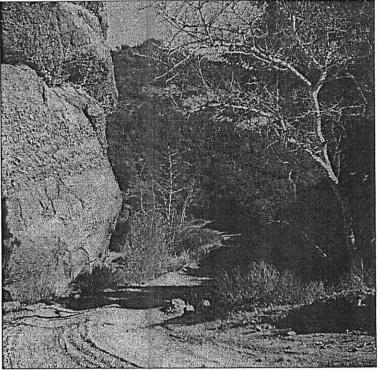
Water Quality

- 10.17 Identify sources of fecal bacteria using DNA fingerprinting and relate to synoptic studies of pathogenic viruses.
- 10.18 Implement Best Management Practices to improve water quality throughout the watershed, and especially at Topanga Beach.

MONITORING SUCCESS

The success of the Topanga Creek Watershed Management Plan will be evaluated every 5 years or more as needed by monitoring the following:

- Protecting life and property from flood, wildfire and earthquake hazards;
- Improving water quality at Topanga Beach and in the upper watershed;
- Eliminating upper watershed water quality "hot spots";
- Evaluating the effects of implementing recommended Best Management Practices;
- Institutionalizing Best Management Practices for Topanga with local and state agencies;
- Integrating the voluntary land use guidelines for Topanga into local planning documents;
- Maintaining viable populations of native flora and fauna;
- Restoring the population of endangered steelhead trout.



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