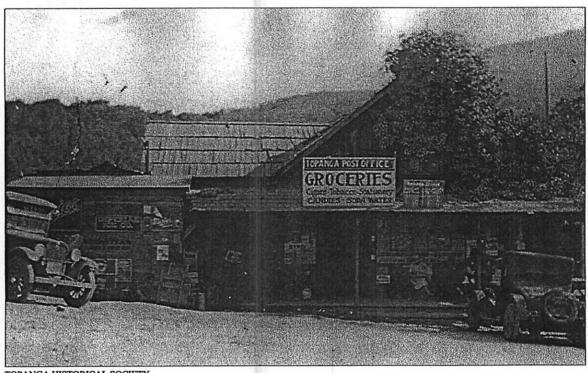
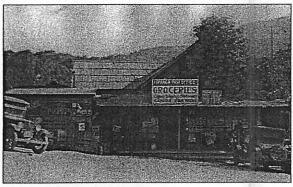
## SECTION 2 ECONOMICS



TOPANGA HISTORICAL SOCIETY

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# "We cannot live for ourselves alone. Our lives are connected by a thousand invisible threads and along these sympathetic fibers, our actions run as causes and return to us as results." — Herman Melville

#### GOALS:

- Integrate the economic concerns of private citizens (not just Topangans), and those of public agencies.
- Ensure that no existing life and property be placed at risk from hazards created by increases in peak flow runoff produced by new development.
- Identify and quantify the economic benefits of the natural resources in the Topanga Creek Watershed.

#### Introduction:

It is clear that understanding the relationship between long term ecological sustainability and economics is essential to the future of our watershed. Residents and agencies both need to evaluate the short and long term costs of actions taken that will impact the function of the watershed over time. While it is inherently difficult to place a dollar value on a view, or a creek, or a frog, or a tree, progress has been made in assessing the real world economic benefits provided by healthy watersheds in terms of avoided costs for stormwater conveyance, carbon sequestration, air pollution mitigation, energy costs and groundwater protection. The trees and natural vegetation of the watershed provide many of these benefits that can be economically assessed.

The challenge facing us is to identify the value of our "natural capital" and provide incentives for both property owners and agencies to realize the economic benefits of protecting the functional components of the watershed.

#### **ACTIONS:**

- 2.1 Work with existing and new businesses to solicit input in fostering voluntary implementation of watershed management guidelines.
- 2.2 Involve contractors and agencies in developing strategies for Best Management Practices.
- 2.3 Evaluate cost of lot retirement versus developing increased infrastructure to serve them.

Recommendations which require legal and political changes for implementation:

- 2.4 Protect creekside dwellers from "clouds" on property title, or unrealistic rebuilding requirements.
- 2.5 Support bond acts and other funding for public land acquisition.

#### Priority actions or research that still need funding or further investigation

- 2.6 Provide economic assistance to homeowners to upgrade old septics and graywaters to non polluting alternative varieties.
- 2.7 Identify economic benefits provided by trees and other natural resources so that real costs of projects' impacts can be evaluated.

#### References:

Condon, Patrick and Stacy Moriarty. 1999. <u>Second Nature: Adapting LA's Landscape for Sustainable Living</u>. TreePeople. Los Angeles, CA

Hawken, Paul, Amory Lovins, L. Hunter Lovins. 1999. <u>Natural Capitalism: creating the next industrial revolution</u>. Little, Brown and Co. Boston.

Honachefsky, William B. 2000. <u>Ecologically Based Municipal Land Use Planning</u>. Lewis Publishers, Boca Raton, FLA.

Moll, Gary, and Sara Ebenreck. 1989. <u>Shading Our Cities: A Resource Guide for Urban and Community Forests</u>. Island Press. Washington, DC.

Riley, Ann L.1998. <u>Restoring Streams in Cities: A Guide for Planners, Policymakers and Citizens</u>. Island Press, Washington, DC.

Wilson, Alex, et al. 1998. <u>Green Development: Integrating Ecology and Real Estate</u>. John Wiley and Sons, Philadelphia, PA.

#### SUPPLEMENTARY INFORMATION:

#### **Funding Possibilities**

Several possible funding mechanisms exist to finance elements of the Topanga Creek Watershed Management Plan. Among the most common are grants from government agencies, special assessments, bonds, and service charges that can be employed in combination or singly, for various features of the Plan. The methods used are generally selected depending on the scope of the program, the authority available through state or local statutes to impose a funding method, existing local policies and practices, the local political atmosphere, the severity of the flood hazard, and the cost and difficulty of the mitigation. Benefit Assessment Districts are another source of funds that could be specific to the Topanga Creek watershed. Economic and social benefits would include protection for life and property, reduced hazard from peak flow runoff, reduced erosion and sedimentation, improved water quality, improved scenic characteristics, improved recreational resources, and enhancement of water related habitats.

#### **Grants for Homeowners**

Funding to assist property owners in implementing recommended Best Management Practices is available through several grant sources, including Partners in Fish and Wildlife (U.S. Fish and Wildlife Service, <a href="http://partners.fws.gov">http://partners.fws.gov</a>) and through the Natural Resource Conservation Service. See Appendix A for more details.

#### **Los Angeles County support**

The elements of the Topanga Creek Watershed Management Plan deserve the support of Department of Public Works. This would include development of capital improvements such as construction of detention basins and bridge replacements, implementation of the maintenance BMP's, and design support for the some of the general engineering techniques for streambank stability.

#### **Economic Studies of the Environment**

The only study of the economic impacts on the environment in Topanga was done by Rosi Dagit, Senior Conservation Biologist for the Resource Conservation District of the Santa Monica Mountains. Her study entitled, "VALUE OF TREES AND RIPARIAN VEGETATION IN STREAMBANK STABILITY" was published in January 1996 and can be found in the Draft Topanga Creek Watershed Management Study.

She found that the trees and riparian vegetation serve a critical role in maintaining stream bank integrity, allow for ground water recharge, help dissipate and reduce flow velocity and are an invaluable resource for preserving the environment in the Topanga Watershed. Current management practices disregard common and well-understood industry standards for preserving trees during line clearance and construction activities.

There appear to be few procedures in place that attempt to incorporate engineering, hydrological and ecological concerns into the maintenance of the roads. Hence, Coastal Commission permits are submitted after the fact, the Environmental Review Board is rarely consulted and little effort is made to retain and preserve existing vegetation and minimize the channelization of the stream. Many sites identified as problems are well known. An overall management plan that uses a comprehensive hydrological survey, incorporates environmental constraints and attempts to solve problems drainage wide, rather than piece by piece is warranted. This could be presented as a program Environmental Impact Report and receive approval from both the ERB and Coastal Commission, as well as the community at large. By having a plan in place, emergency procedures could be defined and a long-term management plan be implemented. The economic benefits of this would be substantial.

The economic value of the trees is only partially represented by the International Society of Arboriculture valuation system. In fact, they are worth considerably more. They provide comprehensive slope stability, ground water recharge, velocity reduction and rainfall dissipation at no cost. The amount it costs to retain any portion of the stream channel after the vegetation is removed should also be considered the value of the trees and shrubs. When taken as a whole the value of the trees along the stretch of Old Topanga Canyon surveyed totals over 2.4 million dollars based on their condition in December 1995. Of this amount, the protected oaks contribute \$862,398.00. It would cost many times this amount to achieve the same level of stream bank protection as they currently provide.