

88-117 - Nov. 1, 1988

SECTION 1: EXECUTIVE SUMMARY

1.1. INTRODUCTION

In early November 1986, the Sebastopol City Council, aware of the increasing citizen interest and concern for the Laguna de Santa Rosa as an ecosystem of great biological and ecological importance to the Community, appointed a Citizens' Advisory Committee of sixteen persons. The committee was directed to look at ways to protect the Laguna de Santa Rosa and to make recommendations to the City Council (Council Policy No. 55, November 1986).

This is our report to the City Council and the Community. An executive summary is given below, with brief description of the Committee's procedure, the history and biology of the Laguna, a summary of conclusions and recommendations, and maps. Following this section, sections 2,3, and 4 give more details of the subcommittee's findings and recommendations.

1.2. DESCRIPTION OF PROJECT

The committee's charge was divided into two general efforts:

- 1) Actions the City of Sebastopol could take to protect and preserve those lands bordering the Laguna which are directly within the City's sphere of influence, and
- 2) Coordinating discussion and initiating cooperation from local, state, and federal agencies with assistance from non-profit organizations and private interest groups in developing a Comprehensive Regional Management Plan for the Laguna Environs.

The Committee operated through four sub-committees: Fill, Wildlife and Vegetation, Water, and Government Relations. The Committee members interviewed numerous local, state, and federal agencies as well as private groups and individuals, and held numerous work sessions. The sub-committee reports are included, and contain much of the information on which the recommendations are based. The full Committee met seventeen times to review progress and hear presentations. Several field trips were conducted. During the course of the year, the committee also served to advise the City on current issues such as fill violations in the Laguna and use of appropriate plant species in the park adjacent to the Laguna channel.

The Committee located many of the existing reports on the Laguna, in particular, we referred to the environmental study completed in May 1977 by Sonoma State professors, other advisors, and students. We also referred to the report of the Board of Supervisors' Laguna Study Committee. Both reports have been updated by our interviews and research. The Committee's final report was reviewed by all members, and all conclusions and recommendations were voted on.

1.3. ECOLOGY

Rather than reiterrating the environmental assessment of the Laguna given in the 1977 study, that study is incorporated herein by reference as an important basis for the committee's study. While that report gives a more complete description of the Laguna, we include a brief summary here of ecological and historical data as well as throughout the report.

As a beginning, the term "Laguna" is defined in several ways. Our Laguna de Santa Rosa is technically just that - a Laguna: neither river, nor pools, nor flood plain, nor marsh, nor vernal pool - but with characteristics of all, plus other characteristics, and a distinct type of watercourse related physical feature, but a rare one. In this report, the term "Laguna" means the entire ecosystem, including the channel, the riparian* zone, the marshes, the vernal pools, and the low-land grasslands contained within the 100 year flood zone, (below the 76' elevation contour). When the text refers to the Laguna channel alone, it will be so stated.

As the second largest freshwater marsh in Northern California, second only to Clear Lake Marsh, it extends for approximately 14 miles from Cotati/Rohnert Park north to the Russian River with the flow of water in this direction (see map 2 page 8). The Laguna drainage basin or watershed is approximately 162,560 acres with a flood basin encompassing 7,000 acres. The flood basin has a storage capacity of 80,000 acre-feet of water (Bob Morrison Sonoma County Water Agency personal communication), a critical factor for down-stream communities in time of flood. In 1964 it was determined that the storage capacity of the Laguna reduced the flood crest at Guerneville by fourteen feet (Sonoma County Flood Control and Water Conservation District, 1965).

Providing as it does several sub-ecosystems, the Laguna supports a wide variety of flora and fauna, including 235 listed species of birds, 20 species of mammals, 200 species of plants, 16 species of reptiles and amphibians, and approximately 20 species of fish (Sonoma State, 1977). An updated fish species list is included as an appendix.

Riparian zones have long been recognized as having the richest areas of wildlife habitat in California, both in numbers and diversity. Unfortunately the majority of the wetlands have been damaged or destroyed, and according to The Nature Conservancy, in

1. Riparian:

pertaining to the banks and other adjacent terrestrial (as opposed to aquatic) environs of freshwater bodies, watercourses, estuaries, and surface-emergent aquifers (springs, seeps, oases), whose transported freshwaters provide soil moisture sufficiently in excess of that otherwise available through local precipitation to potentially support the growth of mesic vegetation.

California we have lost over 95% of our riparian forests* (California Nature Conservancy 1987). However, there are areas remaining which retain wildlife habitat, and other areas which could be restored.

1.4. HISTORY OF THE LAGUNA

We find the first important entry of Western man into the area in the early 1800's. The Pomo Indians had been living in relative balance with the environment for generations. The vast plant and animal resources easily supplied their food and fiber needs.

Spanish ranches were established beginning about 1833, and soon lead to conflict with the Indians. In 1837 a small-pox epidemic substantially reduced the Pomo numbers, giving the Spanish a stronger foothold. Soon after this, the Spanish began to feel the pressure of American settlers from the East. The struggle for control ended in 1848 when California became a U.S. territory.

Development of the Santa Rosa Plain and the Laguna area proceeded rapidly after the 1850's with Santa Rosa established as the County seat in 1856. Wagon trails connecting the Russian River to San Francisco Bay passed near the Laguna, providing an outlet for produce from the area. The railroad was completed in 1870, connecting Santa Rosa to the South, and providing an outlet for the large quantities of hay, grain, fruit, beef, and dairy products produced in the area. Farmland and orchardland was developed and marginal lands were artificially drained to lengthen the workable growing season.

Better transportation and new technology encouraged rapid development in the area around the Laguna. Since the 1940's, Southern Sonoma County experienced explosive growth which continues now in 1987. Much of this growth is a reflection of similar explosive growth in the San Francisco Bay Area. The once predominantly open and agricultural land bordering the Laguna is subject to increasing development pressure as the neighboring cities of Santa Rosa and Rohnert Park expand to the West. It has been conservatively estimated that 85 to 90% of the original riparian forest along the Laguna channel has been eliminated by human activity.

: Riparian Forest:

A plant community that includes those woody plant species that typically occur in wet areas along streams or marshes. The tree species generally require water in excess of what is normally available without the stream, marsh, or high water table.

1.5. SUMMARY OF CONCLUSIONS

Briefly summarized, the major problems encountered by the Committee fall into four categories as follows:

1. Filling-in of the flood basin, both legal and illegal, caused mainly by urban expansion. Substantial flood storage capacity has been lost and natural vegetation patterns altered since western man entered the area, approximately 150 years ago.
2. Loss of riparian vegetation in the Laguna Basin due to urbanization, agricultural operations, and channel alterations.
3. A widely varying water supply, in quantity and in quality, caused by precipitation patterns, accelerated run-off from hard-surfaced areas in the growing communities, waste-water discharges, and the run-off carrying nutrients and toxins from adjacent farms and urban areas.
4. While several governmental agencies have an interest and authority over Laguna management, no one agency has final and complete authority or adequate monitoring programs, nor do they work in concert.

1.6. GENERAL RECOMMENDATIONS

1. The City should urge the County to develop a Laguna Land Use Management Plan.
2. The City should support a strong County Riparian Ordinance.
3. The City should annex or purchase lands along the Laguna within the Sphere of Influence in order to provide more responsible use than would otherwise occur.
4. Communicate the City's present responsible actions (such as management plan, wetland ordinance, etc.) to the Army Corps of Engineers, EPA and State agencies, and indicate that the City supports strong action by those agencies.
5. Designate a City staff person to insure that City employees are aware of the authority and responsibility of other agencies. Obtain written opinion from City Attorney on whether City can issue permits for projects which have not received the approval of other agencies where those agencies have jurisdiction.
6. Designate and/or hire City staff person to actively monitor the Laguna to detect problems such as pollution.

illegal fill, loss of vegetation, or violation of laws, ordinances, or city policy, and follow up on violations which have been cited by this committee.

7. Continue an active Laguna Advisory Committee to insure implementation of these recommendations and assist staff in obtaining information about Laguna ecology as well as legal or governmental regulatory information.

8. Sebastopol residents need to be informed and educated about the Laguna and the City Council needs to develop a wide base of public support for the protection of the Laguna.

1.7. LIST OF SPECIFIC RECOMMENDATIONS BY SUBCOMMITTEES

Wildlife and Vegetation Subcommittee

1. In order to enhance public access and appreciation of the Laguna, the City should construct a Nature Trail and overlook as an adjunct to the Laguna Youth Park (Linear Park). This should also be part of the development of a public education program about the Laguna.

2. As part of the local planning process the City should consider vegetation preservation and require mitigation for vegetation and habitat loss when development occurs within the portion of the Laguna within City limits or jurisdiction. Mitigation must be greater than one to one replacement of habitat and native vegetation. (Projects in the Bay Area have used as much as one to four replacement).

3. The City should develop well-defined and stated long range plans for City controlled portions of the Laguna. These plans must include protection and/or enhancement of the natural resources.

4. The City should recommend adoption of a strong riparian ordinance at the county level, and strengthen coordination between the city and county governments.

5. The City should become the lead agency to enhance and protect a Laguna Riparian Corridor.

6. The City should consider and plan for annexation or purchase of lands which lie within the Laguna as they become available for protection and, when feasible, recreation.

7. The city should maintain the riparian woodland as it exists, replant in disturbed areas, and/or allow natural succession to occur. A program to replant valley oaks and protect them from grazing should be implemented.

Water Quality and Quantity Subcommittee

1. The City of Sebastopol should take a lead role with the County in monitoring all water rights applications, construction applications, and fill applications within the Laguna, and to protest when appropriate.
2. The City should support continued and increased irrigation using advanced treated effluent from the sub-regional system.
3. A minimum target flow in the Laguna channel should be established, after consultation with responsible agencies, based on fish and wildlife requirements, to be used by decision makers.
4. Groundwater recharge information at hand should be summarized for land use planners, further study recommended.
5. The City should adopt a resolution (or other vehicle) strongly urging the County, Santa Rosa, and other agencies to consider the effects of any change in water quantity in the Laguna when making decisions regarding wastewater disposal and land uses. No actions should be recommended which would further dewater the Laguna.
6. Policies regarding an end to channelization and channel maintenance should be made official.
7. Pursue streamside fencing possibilities and riparian zone revegetation with the County Water Agency and others.
8. The City of Sebastopol should seek further cooperation from landowners regarding fencing off a minimum of 100 feet on each side of the riparian corridor to help control sedimentation, protect riparian cover, control surface water temperatures and prevent excessive animal wastes from reaching the stream (some sources of funding are listed later in this report).
9. The City should adopt policies requiring environmental impact report from those intending to place structures, paving, or fill within a zone of influence on the Laguna (to be determined).
10. The City should participate in the formulation of the regional wastewater management plan to ensure protection of water quality in the Laguna.
 - a. Require funding in such plans for continued inspection and monitoring of water quality by Regional Water Quality Control Board and the Department of Fish and Game.
 - b. Seek increased funding from the Department of Fish and Game, State Water Board or Governor for monitoring of

other discharges.

11. Encourage occasional spot checks or visits by the EPA without waiting for a specific complaint to look at point or non-point discharges.

12. The City should designate the staff person responsible for seeing that staff understands pollution potentials in activities under City control, the responsibilities of other agencies and sources of expert help.

13. The City should continue its program of collecting household toxins which is also an educational process for the public.

Fill Subcommittee

1. The city should consider annexation or acquisition of lands to protect the Laguna and to provide a buffer from encroaching cities to the East.

2. The City should enforce a strong policy of no development below the 76' elevation along the Laguna and its local tributaries.

3. The City should enforce a strong policy of no net fill below the 76' elevation along the Laguna and its local tributaries.

Government Relations Subcommittee

1. The city should begin study, planning, and implementation of a Laguna Linear Park in 1988.

2. The City's wetland ordinance needs to be enforced and may require refinement and strengthening.

3. The City government needs to know the authority of the many government agencies in regards to activities in the Laguna (hopefully this report will help) and pursue an active role in working with appropriate agencies.

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