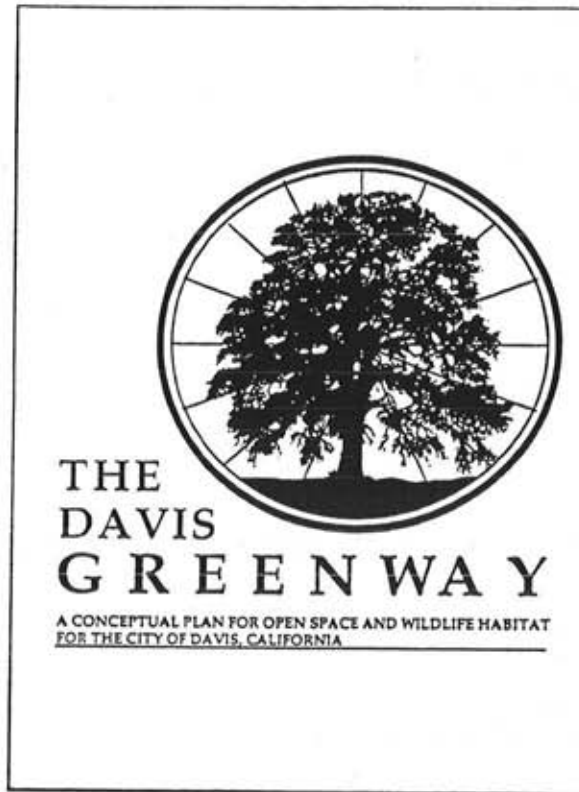


The Davis Greenway Plan
A Collaborative Planning Project Between the City of Davis
and the University of California, Davis



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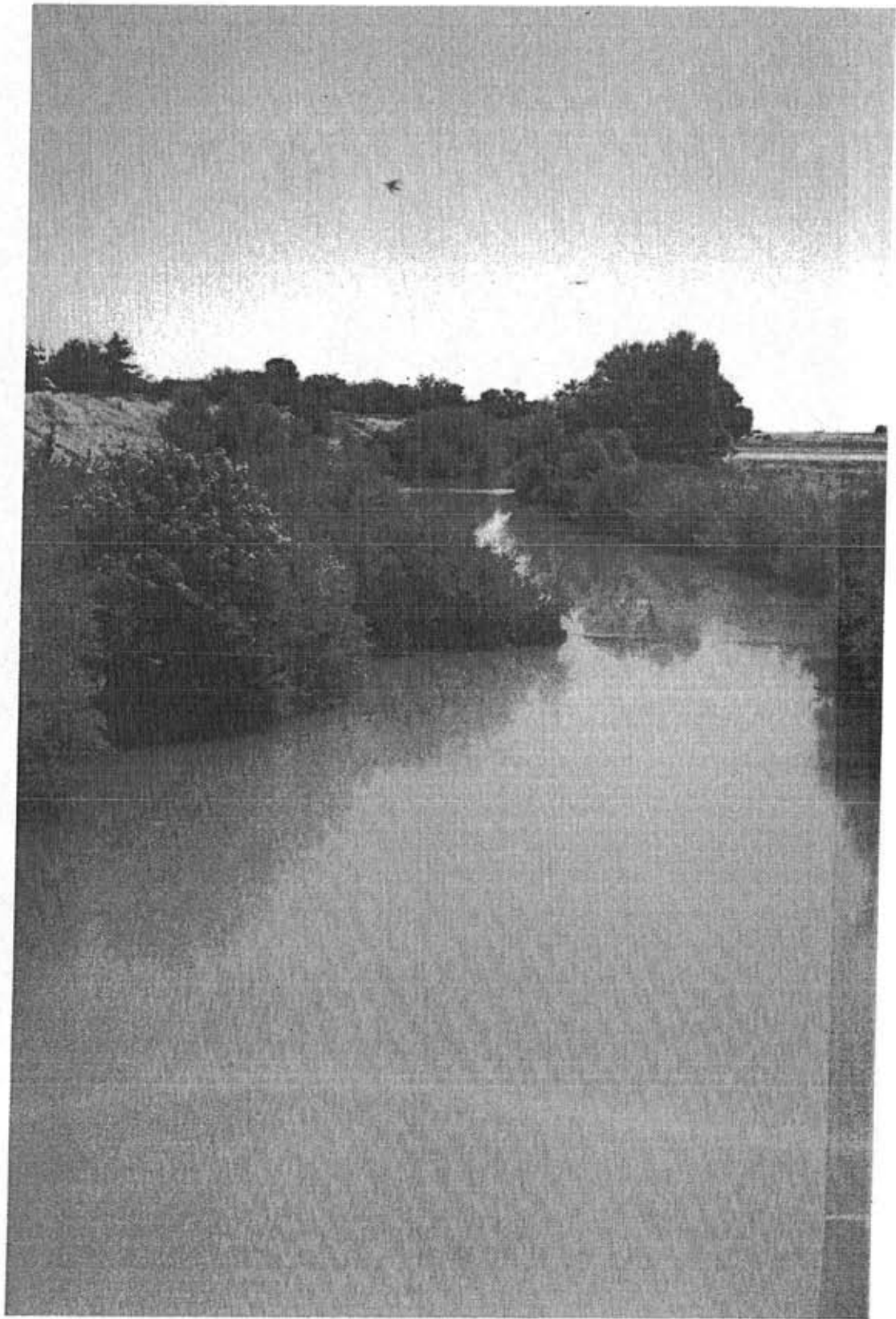
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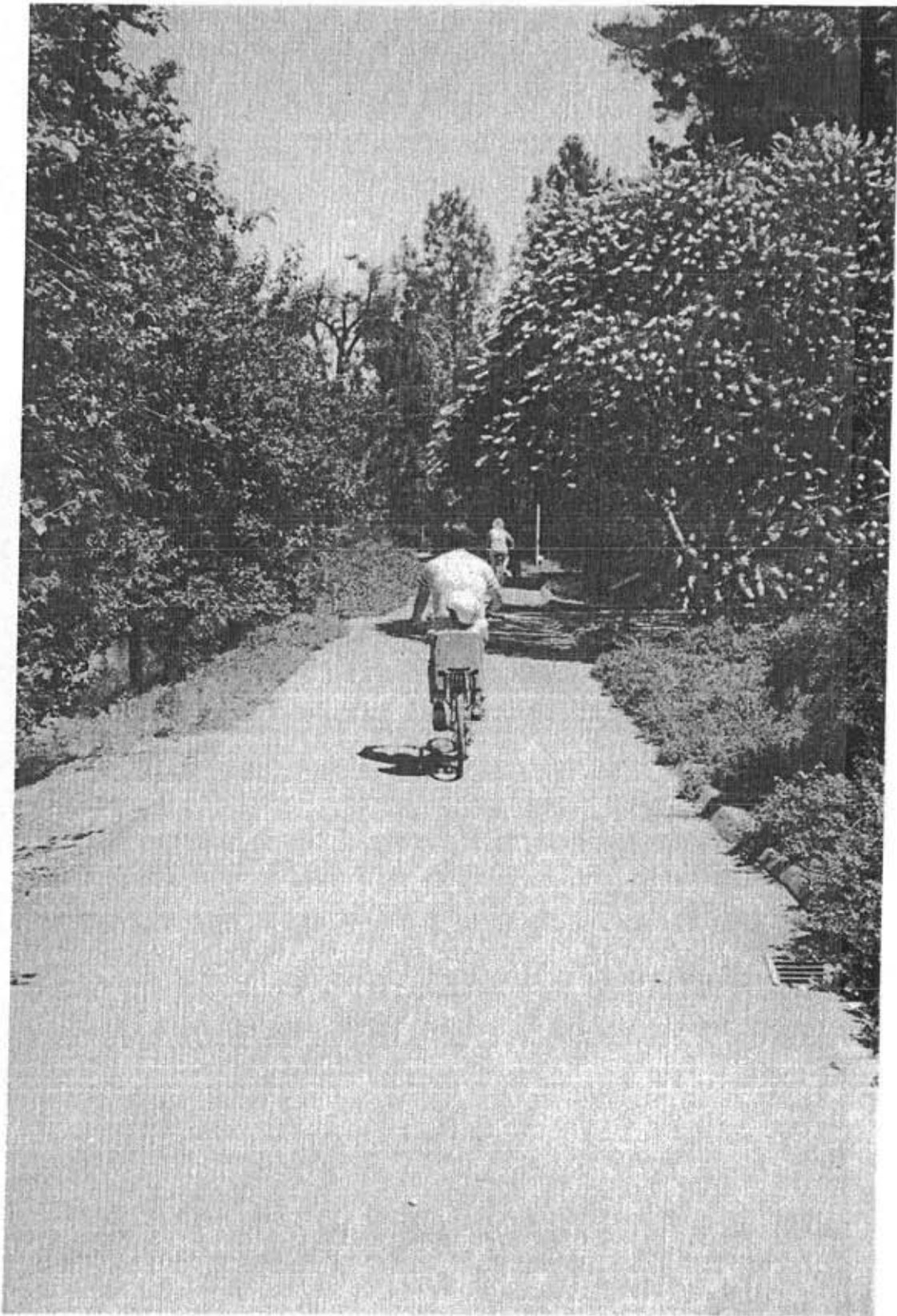
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THE DAVIS GREENWAY:
A Proposal for the Preservation of Open Space

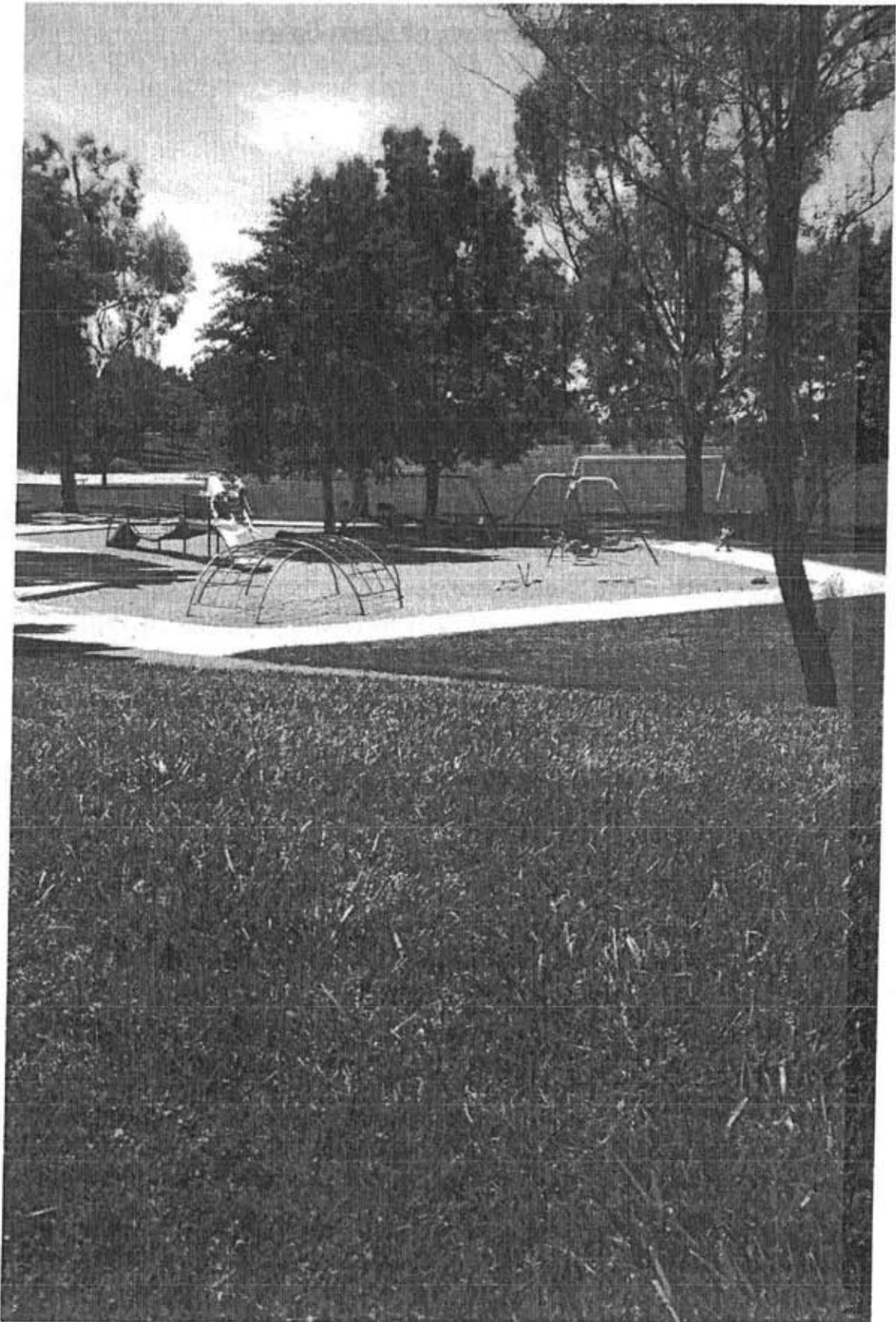
INTRODUCTION

"We recommend (that) communities establish Greenways, corridors of private and public recreation lands and waters, to provide people with access to open spaces close to where they live, and to link together the rural and urban spaces in the American landscape."

Americans Outdoors: The Report of the President's Commission¹

The United States is currently undergoing a period of rapid urbanization that is reshaping both the landscape and lifestyle found in today's urban environments. Cities like Los Angeles, 'sleepy hamlets' around the turn of the century, are now highly urbanized areas with population densities near 10,000 people per square mile. By the year 2000, approximately 80 percent of the 280 million people living in the United States will be living in cities. This rapid influx of inhabitants is sure to stretch the ability of a city's resources to provide for the population's needs in many areas. One resource that is already under intense stress is the open space and recreational areas available to the public. Most of our current resources in this category were created long ago, when the pressure for development and the price for land was not nearly so high as it is today. Hence, most of today's parks and open spaces are old (and given the current state of public budgets, probably "showing their age"), or they are not equipped as well as they should be (again, due to public finances). The result of this is easy to deduce: **more people will be attempting to use a resource that is one (or more) of three things: 1) out-dated, 2) poorly maintained, or 3) inaccessible to the majority of the public for whom it was created to serve.**

But what does this mean for the city of Davis, California? More than you might think! Currently, Davis is a city of 48,000 people² with a fair amount of open space and recreational opportunities available to its inhabitants. But many of these parks suffer from the inaccessibility and subsequent non-use alluded to above. And with Davis' current growth rate of 2.2 percent³, the



**Many public parks are largely under-utilized.
(Davis, California)**

population of Davis will reach 80,000 people shortly after the year 2000. What this rapid growth seems to mandate is an increase in the amount of open space available to the public in the future. But is it enough to consider only increasing the amount of open space, or should we consider the quality as well? If a large number of parks are unused, why even bother to create more parks? The answer here lies in the fact that increasingly more people are recreating closer to home, utilizing resources that they may have never known about prior to this trend of staying closer to home. But these parks will have to be more than just playing fields and hard-courts. They will need to be creative, adaptable, and accessible to more than just the people within a two-minute walk of the park. But can a creative, exciting alternative to the traditional park be created that can expand to meet future need, change with changing recreational demands, and solve the accessibility dilemma? Can all this be done, even when considering the difficulty municipalities have had in financing open space projects in the past? The answer to all of these questions is yes, and the solution can be found in the idea of the Urban Greenway.

WHAT EXACTLY IS A GREENWAY, AND WHAT CAN IT OFFER DAVIS?

A Greenway is a coordinated system of open space that links existing natural and cultural facilities using city streets, railroad rights-of-way, utility easements, and natural features such as stream corridors and drainage channels. Greenways can also provide corridors for wildlife habitat, as well as acting as a buffer zone between developments. Greenways offer many other valuable benefits as well, such as :

- 1) Providing the citizens of Davis with recreational opportunities ranging from quiet enjoyment of natural areas to hiking and bicycling;
- 2) Making available to school children and others, areas where local flora, fauna, and their ecological relationships can be studied;
- 3) Conserving open spaces in and around the Davis urban area;
- 4) Increasing the value of nearby property;

- 5) Preserving a means for the city dweller to have closer relationship with nature;
- 6) Complementing and connecting Davis' existing and future parks, improving the accessibility to these parks, and helping to increase the use of some of the lesser utilized parks;
- 7) Providing a safe alternative to the streets for pedestrians and bicyclists commuting between homes, schools, parks, offices, and commercial areas;
- 8) Increasing the economic base of the city by revitalizing the downtown area and attracting more tourists interested in experiencing Davis, its culture and its open space;
- 9) Helping to integrate the Davis open space system with the University's open spaces, creating a much larger network than either could create on their own, providing citizens and students with a myriad of choices for recreation.

These are only a few of the many benefits a Greenway can achieve, given the opportunity. Add to these a sense of civic pride stemming from the fact that a project could not happen without the support and help of many citizens, fostering a sense of ownership and achievement that already exists to a point in this city. Doing this could only serve to improve the image of Davis, which is one of community caring and involvement, while not implementing an idea such as this could mean the alteration of Davis from an open space community into a community of house upon house, development upon development. Greenways help strike a balance between open space and development, providing a coherent framework for the future while preserving some of the past.

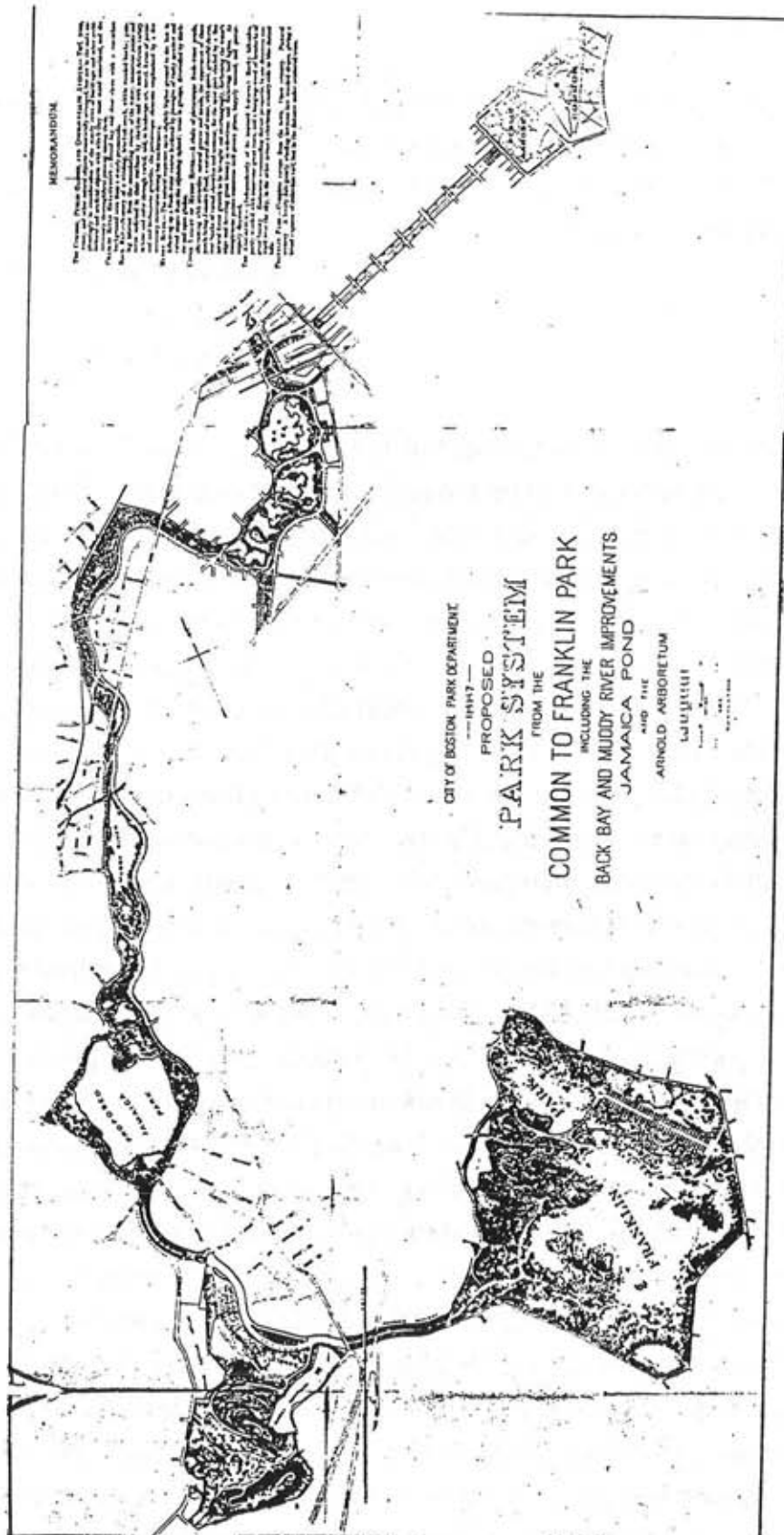
The main role of the Davis Greenway would be to provide linkages between many of the resources, both man-made and natural, that Davis has to offer. Instead of seeing Central Park separate from the Davis Art Center, or seeing Oak Grove Park separate from the University Arboretum, they could be seen as a part of the whole system, integral in the fabric which makes up Davis.

GREENWAY HISTORY

"To waste, to destroy, our natural resources, to skin and exhaust the land instead of using it so as to increase its usefulness, will result in undermining in the days of our children the very prosperity which we ought by right to hand down to them amplified and developed."

*Theodore Roosevelt
Message to Congress,
December 3, 1907*

The current concept of the Greenway is the result of, and a reaction to, the development, and subsequent redevelopment, of a once abundant supply of open space in a growing America. But this reaction is by no means a new method of dealing with the problems of overcrowding and over-development. One can trace the idea back to the linear parks popularized early in the development of the United States, during the first stage of urban development in the nineteenth century. Examples of early linear park systems include the Bronx River Parkway in New York City, the Rock Creek Park in Washington, D.C., and the Emerald Necklace in Boston⁴. The goal of these types of parks was to provide city-dwellers "a specimen of God's handiwork that shall be to them, inexpensively, what a month or two in the White Mountains or the Adirondacks is, at great cost, to those in easier circumstances."⁵ This idea was readily accepted by citizens and politicians, and the concept was soon adapted to many purposes, such as the creation of large, interstate, open space systems like the Appalachian Trail in the East, which stretches from Maine in the north to Georgia in the south; and the John Muir Trail in the West, which runs the length of the Sierra Nevada mountains. However, this idea of providing large tracts of open space that were easily accessible to many people seemed to give way during the housing boom that followed the Second World War. Large subdivisions were being haphazardly planned, with little regard for the farmlands and natural habitats they were destroying, as well as having little concern for the coordination of open space planning between neighborhoods. Development has continued to sprawl even to this day, aided by the development of the highway system which serves to encourage this type of "hopscotch" development by making it "easier" and "quicker" to travel farther⁶ (however, our extensive highway system is quickly becoming more congested, possibly making it more attrac-



Boston's "Emerald Necklace", designed by Frederick Law Olmsted in 1886.

tive to live and recreate closer to home—currently, 90 percent of the public spends 90 percent of their leisure time in cities (National Urban Recreation Study, 1978). As a result of all this development, “the quality of the outdoor estate (has become, and) remains precarious... We’re losing available open space on the fringe of fast-growing urban areas and near water. Wetlands and wildlife are disappearing.”⁷

To help re-establish some of the lost habitat and open space, and to preserve and protect what little of the original habitat is left, the concept of the modern Greenway has been developed. This highly effective and adaptable idea is beginning to gain wide acceptance throughout the country as a method of establishing large, innovative, accessible, and publicly popular parks which serve the public’s needs, as well as serving to enhance the city’s image as a community that values open space and recreation. The fact that the United States is urbanizing over 3000 acres of land per day and over one million acres per year⁸ seems to mandate that action be taken now to preserve open space and habitat in the future. In California alone, the population has grown from one million in 1900 to a projected 30 million in 1990, and possibly to 50 million by the year 2020.⁹ What this means, for Davis and for communities throughout the country, is that now is the time to begin planning for the future, regardless of how safe or open the current situation may appear. In Davis, for example, open space seems plentiful now. But if the population doubles by the year 2000, the current plan for open space in the future (see Davis General Plan-Open Space in Appendix C) may not be enough to accommodate the growing population, nor will it be accessible to the majority of the public, due to the increase in the amount of traffic predicted. A Greenway can provide the framework for a successful open space element in the future for Davis, and to do so would place Davis at the forefront of recreational planning, as it was when it created the bikelane system throughout the city, the most ambitious system of alternate transportation up to that point in time. That is the type of forward thinking that is required now to assure Davis a future of accessible and successful open space and wildlife habitat.

GREENWAYS IN OTHER CITIES

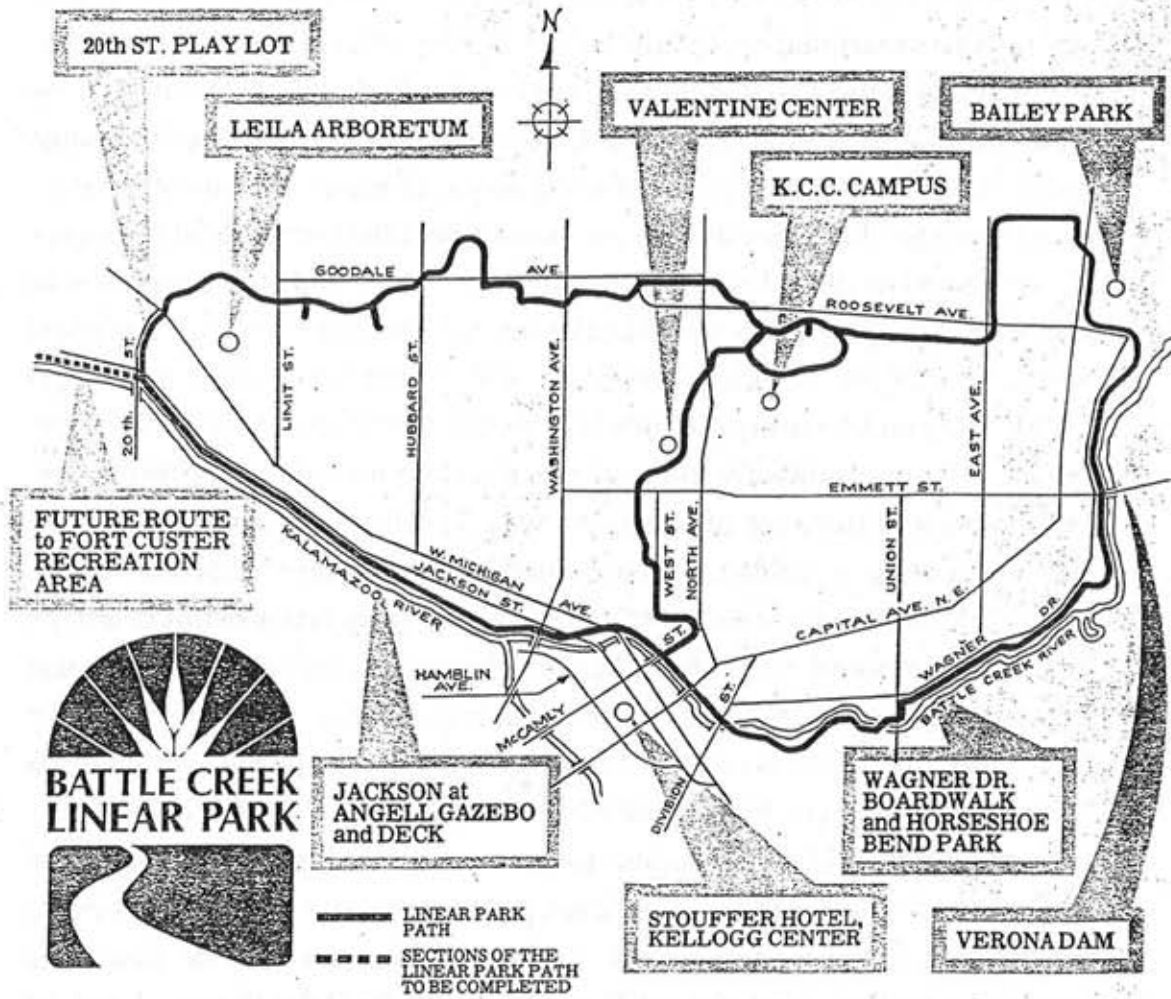
As stated previously, the Greenway is not a new concept. Currently, there are approximately 150 communities developing proposals for Greenway systems, and approximately 50 cities that are currently implementing them. Most of these Greenway systems are very different from one another in form, location, or method of implementation; however, one thing remains constant throughout all of them: "that they provide access to natural areas, and improve recreational opportunities for city residents."¹⁰ They have also served to enhance the image of these various cities, and to help preserve open space in these times of increasing pressure to develop land. The following are some examples of successful Greenway projects being implemented across the country:

Battle Creek, Michigan's Metropolitan Linear Park is an eleven mile system of paths that run through the city, linking together playlots, parks, hotels, and habitat with the city's Central Business District. It was created by putting together unused city land, flood plains, a railroad right-of-way, and easements from private owners. Along the trails there are shelters, scenic overlooks, benches, and picnic areas, all of which encourage a great amount of use and civic pride in a state that is under severe economic duress.

The system was developed using funds provided by local, state, and private sources, including a Kellogg Foundation grant, which pays for a youth work program that has provided most of the labor for path construction and landscaping. The city provides planning and engineering services, and is responsible for maintenance and police patrol.

The project has been constructed in different stages to allow for available funding, easement and land acquisition, and to allow for flexibility in design, should the city's future needs or recreation habits change. This is one reason that this Greenway is considered a successful design. Another is the amount of public input utilized in all stages of design development and implementation, fostering a sense of ownership by the citizens. This support is critical, to this project or any such project, if the Greenway is to grow and be successful. Eventually, this park hopes to include 26-28 miles of paved trails, extending from the downtown to outlying areas and features such as the Binder Park Zoo. This, in fact, may soon be realized. The main phase of the Metropolitan Linear Park system is scheduled to be completed in 1988. (For more information on this and other Greenway systems, please see Appendix D).

Denver, Colorado's Platte River Greenway is an exciting Greenway



BATTLE CREEK LINEAR PARK, BATTLE CREEK, MI

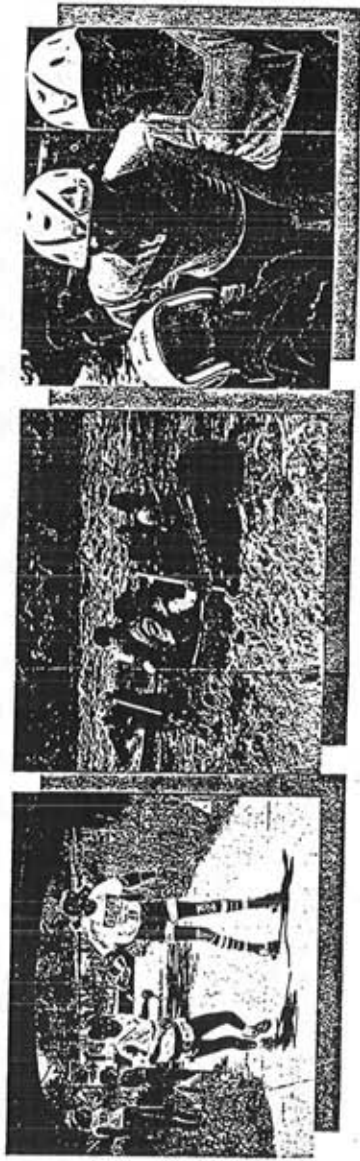
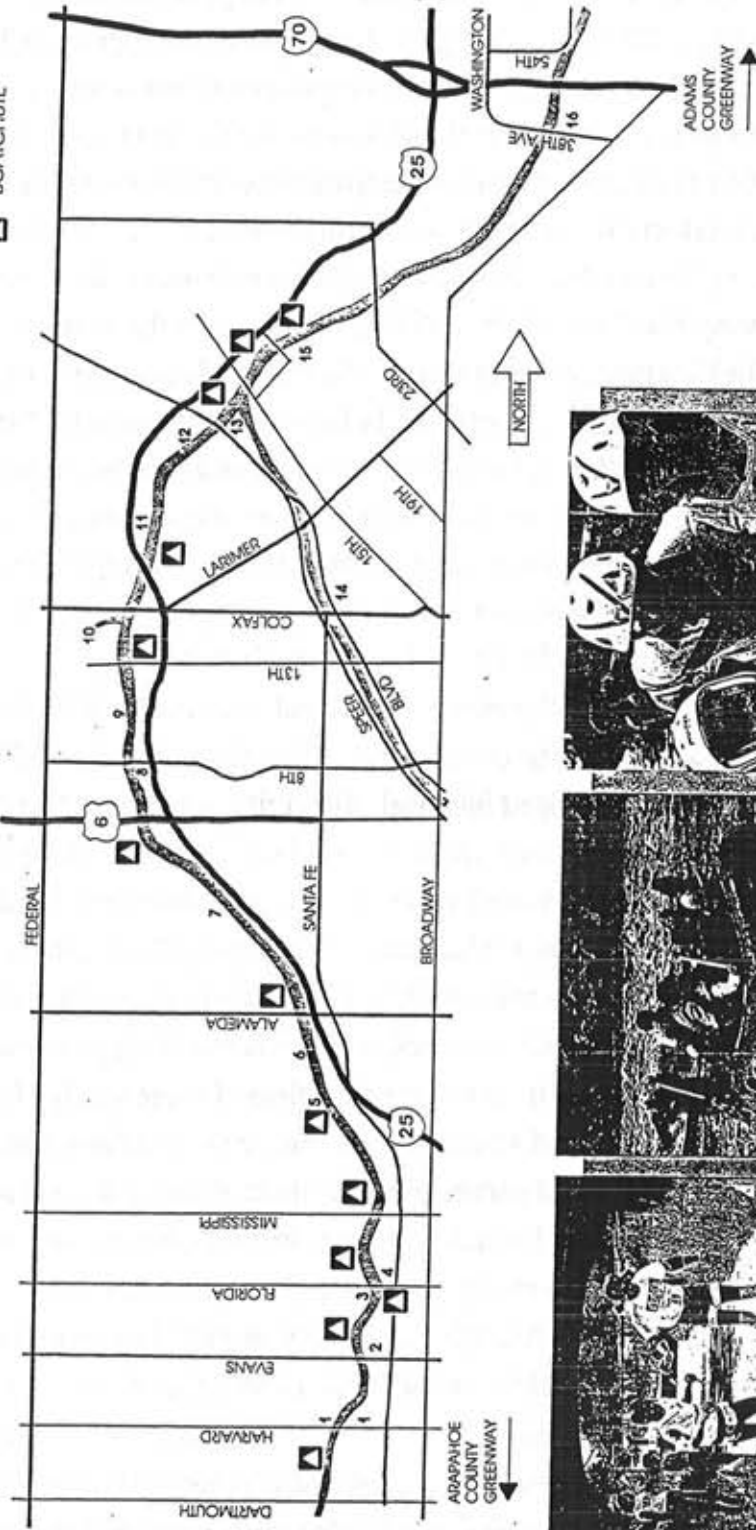
system located along the banks of the Platte River and Cherry Creek, both of which run through Denver and were, at one time, both extremely polluted and avoided. Through the work of a mayorally-appointed committee, and with the support of all the communities concerned, they began to clean up the Platte, and created a system of trails and waterways that extend nearly fifteen miles through the heart of Denver. Funded by public monies and private donations (from the Gates Foundation, the local Pepsi-Cola bottling plant, local banks and businesses, etc.), the Platte River Greenway includes a wide variety of recreational opportunities, from public plazas and parks to white-water courses and "boat chutes" to the Habitat Park, which features native Colorado plants and animals along the creek. Bike trails line the banks, connecting the different areas, offering access to many citizens who, just a short time ago, had very little in the form of positive recreational resources.

Started in 1974, this system is now well established, and it provides an excellent example of the opportunities for linkages between many different and diverse types of outdoor recreation, while at the same time improving in both quality and quantity the riparian environment in the Denver metropolitan area.¹¹ Community involvement was also instrumental in the implementation and maintenance of this Greenway, helping to make this project a successful and enjoyable resource valued by the people of Denver.

Raleigh, North Carolina's *Capital Area Greenway* is one of this country's most ambitious and successful urban open space systems, combining stream habitats with parks and open spaces, creating a system that will eventually total 200+ miles of Greenway trail system. Currently, the Capital Area Greenway consists of 50 miles of trails, 30 of which are paved for biking.

Begun in 1974 as a response to increasing development pressure, the goal of the project was to keep development away from environmentally sensitive areas, as well as out of floodplains,¹² and to provide places for passive recreation along the creeks and rivers of the Raleigh area. Land for the Greenway system, which now consists of approximately 600 acres, is acquired by the city through ownership donation, or as a condition of a City permit review process (example: developers will dedicate land for greenway when subdividing property, or when seeking a zoning change. These parcels are dedicated either in fee simple or as an easement on the property).¹³ As with most other successful Greenway projects, the Capital Area Greenway is succeeding due in large part to the community support it has received. The Citizen Advisory Committee, community groups, and local coalitions have all helped raise the public's awareness of the Greenway, through organizing

- | | | |
|-----------------------------------|--------------------------|------------------------|
| 1. Frontier Park | 7. Valeride Park | 12. Fishback Landing |
| 2. Pasquini's Landing | 8. Frog Hollow Park | 13. Confluence Park |
| 3. Ruby Hill Park | 9. Weir Gulch Marina | 14. Cherry Creek Trail |
| 4. Overland Pond Educational Park | 10. Lakewood Gulch trail | 15. Riverfront Park |
| 5. Vanderbilt Park | 11. Gates-Crescent Park | 16. Globoville Landing |
| 6. Johnson Park | | |
-
- | | | | | | | |
|------------|-------------------|---------|----------------|-----------|--------------|-----------|
| | | | | | | |
| PLAYGROUND | PICNIC FACILITIES | PARKING | DRINKING WATER | RESTROOMS | BOAT LANDING | BOATCHUTE |



PLATTE RIVER GREENWAY, DENVER, CO

hikes, cleaning creeks, and building foot trails. The end result has been beneficial to all concerned—the environment, the developers, and the people of Raleigh—giving the city a sense of civic pride in their achievement.

Tulsa, Oklahoma's *Tulsa Trails* and the *Garden City Multipurpose Stormwater Retention Pond* were responses to recurring problems in flood plain areas (the "100 year" flood occurs, on the average, every four years¹⁴). The Tulsa Trails are a system of maintenance trails along the city's creeks and streams, which at very little additional cost can also serve as a recreational greenway for the city's inhabitants. These corridors also serve as linear parks preserving the flood plain, wildlife habitat, and the mature riparian vegetation. The Greenway serves to link schools, parks, neighborhoods, water, and habitat, providing the people of Tulsa with a resource that serves not only a recreational service, but also an ecological and functional service as well (by not building in the flood plain, and by encouraging the preservation of these flood plains as open space and habitat, the city of Tulsa stands to reduce to a large extent the 4 billion dollars per year spent to repair flood damages, while also reducing the air and water pollution¹⁵).

Also in Tulsa, the small community of Garden City has taken advantage of an opportunity created by a disastrous flood in 1986. During this flood, waters raced eight feet high through a neighborhood of older, moderately priced homes that were scheduled in the future for clearance and industrial redevelopment by the Tulsa Urban Renewal Authority¹⁶. But due to the potential dangers inherent in developing flood plains, what followed the flood of 1986 was the creation of a multi-purpose stormwater retention pond and drainage system to help solve the flooding problems in this area so that the remainder of it could be redeveloped more safely. In addition to the drainage channels and storm sewers that were installed, the water retention pond that was created serves many functions other than storm water management. These uses include scenic overlooks, hiking and biking trails, opportunities for nature study, as well as providing habitat for an endangered species of Least Tern. Additionally, the pond will be stocked with *Gambusia*, a fish to aid in mosquito control. As indicated here, this one project (as well as the Tulsa Trails project) will help meet the objectives of many agencies and groups in the Tulsa area in an ecological, economical, and beneficial manner, while providing the residents of Tulsa with a recreational amenity sure to enhance their city's image.

These are but a few of the projects currently under implementation;

many other successful examples exist in cities such as New York (Staten Island Greenbelt), Oakland, California (East Bay Regional Park), and Yakima, Washington (Yakima Greenway). In most cases, the perceived need for the preservation of open space in a growing community was realized early on— however, the form they all took varied to fit their individual circumstances and needs in the manner best suited to their city and its' residents. The key to success in all of these was community approval and assistance in all phases of Greenway development. Citizen involvement builds a sense of ownership, a sense of pride, in their achievement, and insures that this type of open space will remain for the future generations of Raleigh, Denver, and all the communities willing to put forth the effort in the preservation of urban open space.



CAPITAL AREA GREENWAY SCHEMATIC PLAN, RALEIGH, N.C.

DAVIS, CALIFORNIA - A BRIEF HISTORY

"Davis was founded in 1868 as the Davisville rail depot, but the more significant date is 1906, when the University of California established the State Agricultural Experiment Station on 778 acres. In the 1920's a Bachelor of Agriculture degree was offered by the University of California at Davis in conjunction with U.C. Berkeley. Following designation as a general campus in the 1950's enrollment grew rapidly and professional schools were added during the next two decades. Although remaining outside the City's corporate limits, the University's development has driven population growth and has shaped the community's identity and values.

Between 1950 and 1987 the average annual growth rate was 6.4 percent per year as urban population grew from under 5,000 to 48,700. The relationship between UCD enrollment and total population has remained fairly steady for the last 20 years, with the ratio of city population to UCD enrollment generally around 2:1. In 1986, 94 percent of the 19,300 UCD students and half the 8,500 full-time faculty and staff lived on campus or in the city....

The 6,200 non-UCD full-time jobs in Davis are mainly in services and retailing; manufacturing employment averages 700. About 6,300 Davis residents commute out, while 5,600 jobholders commute in. In the city of Davis median age in 1980 was 24.6 (compared with 29.9 for California) and 4.2 percent of residents were over 65 (compared with 10.2 percent for California).

Davis is known for bicycles, energy conservation, and a preference for slow growth... Its notable physical characteristics are small scale in relation to UCD, innovative neighborhood design, a traditional downtown, an absence of large shopping centers, and a green, tree-filled look."¹⁷

Throughout its history, Davis has been a leader in innovation and community support in the areas of open space, recreation and environmental concerns. During the 1960's Davis implemented the most ambitious bicycle lane project to that date, providing an alternative to auto traffic that has taken hold to the point that Davis is known as the "bicycle capitol of North America". Other innovative ideas include the creation of Village Homes, a residential development planned around open space, while providing solar access for all the residents. This "environmental approach to development, spurred by the environmental movements of the 60's and 70's, has shaped Davis into the community that exists today. The majority of the citizens of Davis still support their beliefs, as evidenced by the number of Sierra Club members residing in Davis (highest per capita in the nation).



VILLAGE HOMES, DAVIS, CA

Another indicator of public involvement and concern in the continuing development of Davis has been in the political arena, centered around the issues of open space preservation (Measure S, June, 1986), and slow growth (Measure L, June, 1986). Both measures have had and will continue to have significant consequences for the future of Davis. Measure L called for Davis to grow "as slow as legally possible." This measure, approved by 58% of the vote, will continue to affect Davis as it moves toward the year 2000 by helping to limit the type of growth that has destroyed the character of many communities throughout California and the United States.

Measure S will also affect Davis in the future. Proposed by a citizen action group called Save Open Space (S.O.S.), Measure S sought to preserve an area in downtown Davis (the Arden-Mayfair site) adjacent to Central Park that was slated to be developed as a mall/shopping center. S.O.S. wanted the site to be preserved and developed as an extension of Central Park. A compelling grass roots effort succeeded in stopping the scheduled development by a vote of 58% to 42%, and preserved the space for the creation of an enlarged park. This mandate, although site specific (it applied only to the Central Park issue), could serve as an example of how far the people of Davis are willing to go to preserve and enhance the character of their city through the preservation of open space. While the group S.O.S. was formed solely for the purpose of preserving the Central Park space, the leaders have indicated that the group, or another similar organization, could and should be utilized in the future to maintain a level of public awareness concerning similar issues of open space preservation (such as a Greenway system).

In December of 1987, the latest General Plan for the City of Davis was approved by the city council after a ten month preparatory period. This General Plan, a replacement for the General Plan of 1973, has been the subject of some controversy, due mainly to the rapid development of the Plan and the limited amount of public input that was acquired in the process. The 1973 Plan evolved over a 2 1/2 year period, and was the work of "eleven citizen's committees composed of 120 Davis residents assisted by City staff."¹⁸ The 1987 Plan was prepared "by consultants and staff in accord with tentative decisions made by the city council following consideration of Alternative Sketch Plans."¹⁹ However, the resultant document is a comprehensive plan that has some real visionary possibilities. Many areas within the General Plan mandate the preservation of open space and wildlife habitat in the Davis planning area. These will be discussed in greater detail in the following sections.

In addition to the Davis General Plan, the University is currently developing its Long Range Development Plan (LRDP). The Davis General Plan takes into account, as it must, the effect the University has on the city. It is a substantial one. However, the LRDP is not yet finalized, and many changes have been made since the approval of the Davis General Plan in December of 1987. Changes include: the ultimate size of the campus, open space, agricultural land uses, and many more. These changes will affect the General Plan, as well as the community itself. As a result, the University will need to work with the city increasingly in the future, to maintain the strong connections that have contributed so positively and economically. This, too, is covered in the Davis General Plan, Section 2-7B, which outlines the need to "express the interdependence of Davis and UCD in the design of the city and of the campus."¹⁹

The next few years will be critical in the development of Davis. Decisions made now can either help or hinder the ultimate outcome of the growth and development that the city of Davis is undergoing. The opportunity for innovation and creativity in urban design that currently exists, however, may not be there within the next several years. Development can proceed very rapidly, and without a strong commitment to community image and character, this could serve to transform Davis into another sprawling city. However, the opportunity does exist now to plan the future development of the city of Davis in a manner that is innovative and exciting and to design a city around its open space, rather than developing the city and then randomly placing parks and open space where there is perceived need of leftover space. Creative planning can add to Davis' image, enhancing it, providing the citizens of Davis with both a city and a way of life. The idea of a Greenway system for Davis is one way this could be accomplished.

"Negative constraints...inhibit creative solutions that come from a fully integrated marriage of ecology and design. Design must go further and ask: 'How can human development processes contribute to the environments they change?'"²¹

THE DAVIS GREENWAY

"The city that has places for foxes and owls, natural woodlands, trout lilies, marshes and fields, cultivated landscape and formal gardens, old as well as new buildings, busy and quiet urban spaces, is a more pleasant and interesting place to live in."²²

This proposal for the Davis Greenway is unlike most Greenway projects across the country, not in its purpose but in its overall design. The purpose of Greenways, as stated earlier, is to preserve open space and wildlife habitat in urban settings, while also providing linkages between both cultural and natural areas. While most or all Greenways achieve this goal, the Davis Greenway offers an opportunity to create a multi-layered system of open space and habitat in and around the community that will meet the needs of a growing population and that is economically beneficial to the community's public as well as private sectors. With the Downtown areas serving as the "hub", this ring of open space would serve to link the Downtown area to the University, the University to West Davis, West Davis to the Davis Art Center, the Art Center to South Davis, and all of the aforementioned to the existing parks and wildlife habitat areas in and around Davis. This will enable residents to travel, on bike or on foot (or on horse in some areas), all day long, experiencing a wide variety of recreational opportunities that are not currently taken advantage of.

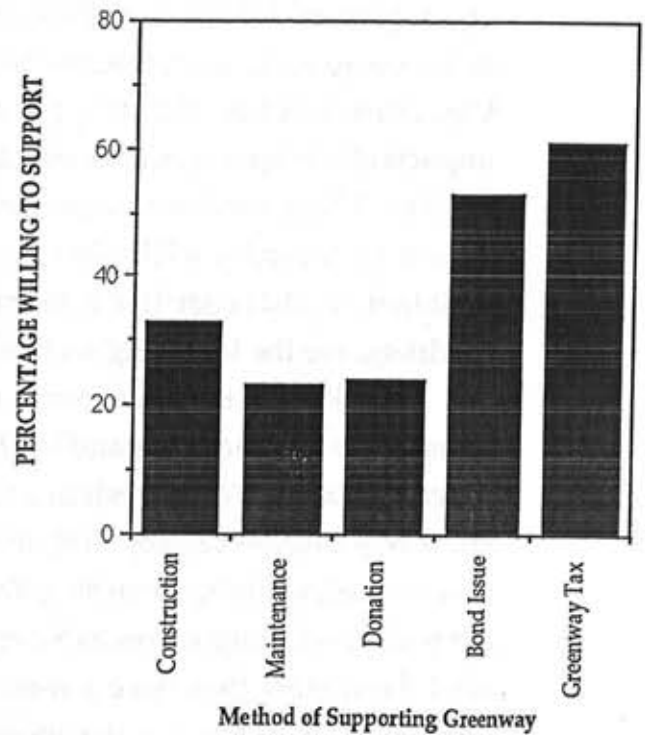
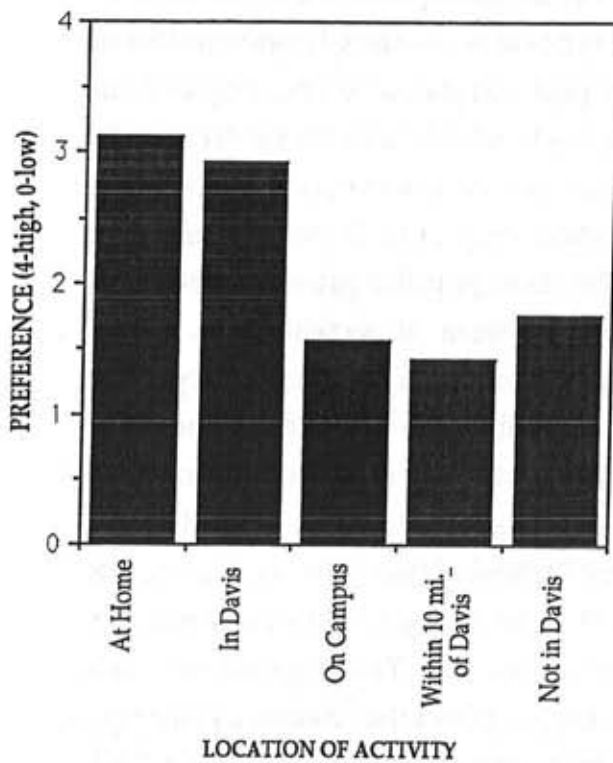
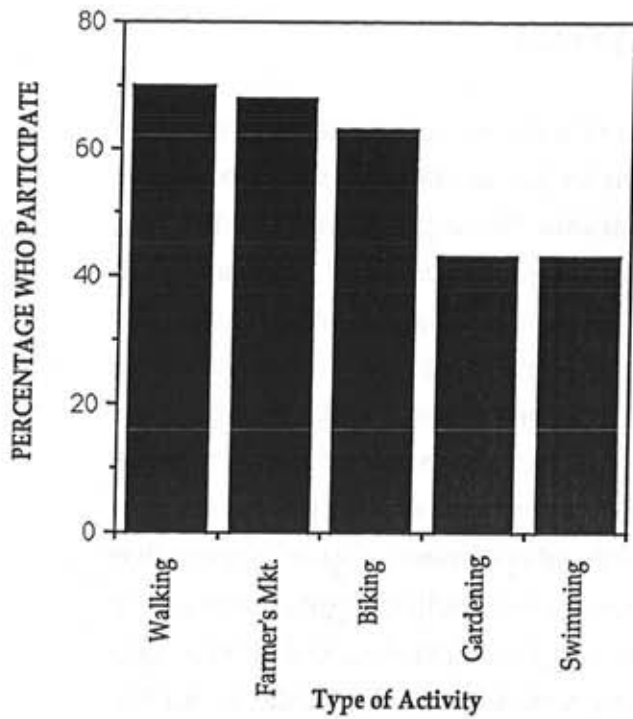
The city of Davis has within it a well-developed park and recreation system that provides open space for its citizens. However, many of Davis' parks are unused or underused, due in large part to problems with accessibility and programming. In a 1977 study on the Neighborhood Parks: The Nonuse Phenomenon, Dr. Seymour Gold found that one of the most significant environmental factors contributing to nonuse in parks was poor accessibility.²³ This concern was also expressed in a survey done recently on Recreational Habits in Davis.²⁴ This survey also indicated that the main reason people did not use the parks was that there was nothing to do.²⁵ Both these problems could be overcome in the implementation of a Greenway system. In a community that is so environmentally aware, an idea such as the Greenway could take hold quickly and become a major asset to the community- socially, economically, an environmentally.

RATIONALE FOR A GREENWAY SYSTEM

The case for the implementation of a Greenway system in Davis is a strong one, given the current situation in the areas of development and growth. From an environmental standpoint, the rapid growth of this and surrounding areas could severely impact many aspects of environmental quality, especially in the conversion of agricultural lands to urban uses.²⁶ The current General Plan will cause the conversion of 1900 acres of prime agricultural land to urban uses.²⁷ While development of these lands may seem economically attractive, the image and character of Davis will be severely altered if this type of conversion takes place without some thought as to how to replace or preserve the feeling of openness or spaciousness that Davis currently has. The idea of a Greenway could help mitigate the negative impacts of lost open space preservation along corridors that ring and run into the city. These corridors might range anywhere from 50' to 1000' in width, providing diversity while also preserving the open feeling Davis needs to maintain its character (for a more detailed description of the Greenway corridors, see the following section).

Looking at the issue from a recreation standpoint, there is a tremendous desire for innovative and exciting types of recreational opportunities in the city of Davis. While Davis has many parks, as stated before, most of them are sorely under-utilized. Still, most people who live in Davis recreate in Davis.²⁸ Yet, while between 80 to 87 percent of those surveyed said they used the parks and campus spaces for recreation, only 21 to 29 percent said they used them more than once a week. The most popular place for people to recreate is at home, yet the most popular form of recreation in Davis, according to those surveyed, is walking for pleasure. This discrepancy could indicate several things, one being that accessibility is a key factor (possibly greater than indicated in the survey) or two, that there is a need for more areas to participate in passive recreation. This idea seems to be reinforced by the fact that, of those surveyed, 100 percent indicated that they would use the Greenway for walking (74%), biking (72%), picnicking (54%), or any number of other activities appropriate to the Greenway. The respondents also indicated a strong (90%) willingness to help support the Greenway through taxation, bond issue, donations, or in helping to maintain or construct it.²⁹ All of this data alone seems to indicate a strong desire for this type of system to be implemented. But there are many additional reasons as well.

Economically, the idea of open space preservation seems like a costly



Results from the Recreation in Davis Survey, administered in May, 1988. (For a more detailed examination of the survey and the methodology used in distribution, see Appendix F.)

route to take in city planning. However, the opposite seems to be true. While it is difficult to quantify the benefits of open space in a dollar amount, it is possible, and the results have surprised many. Several empirical studies have been done concerning "the economic impacts and benefits of urban open space (Schroeder, 1982). Empirical work by Correll, Lillydahl, and Singell (1978) found that proximity to greenbelts in Boulder, Colorado directly increases property values. In a study of urban parks, Hammer, Coughlin, and Horn (1974) determined that homes closer to a city park sold for higher prices than similar ones located further from the park."³⁰ Many developers have argued against open space because of its non-profit generating nature. However, this research serves to disprove that claim, and in Raleigh, North Carolina, home of the Capital Area Greenway, developers that once argued strongly against the creation of the Greenway are now completely in favor of it. Many have realized larger profits, and all are providing a much-improved environment that can serve as a showcase development for their firm. In fact, the development community in Raleigh, together with the City, has co-written a new facility fee program that establishes fees and sets guidelines for subdivision and site plan applicants (see Appendix D).

The benefits of open space are many and these need to be addressed in conjunction with the capital costs of implementing this type of project. Benefits can be either quantifiable, such as user satisfaction, energy conservation, use of local parks, tourism, and increased land values, or non-quantifiable, such as improvement of mental and physical health, reduction in levels of air and noise pollution, increased opportunities for the disadvantaged, and increased community identity and imageability.³¹ Utilizing the most conservative quantifiable benefit estimates for a system of open space like the Davis Greenway yields a significantly favorable benefit/cost ratio for this investment in the future. The estimated economic benefit of a Greenway in Davis is approximately \$1,067,50.00 per year, or \$26,676,250.00 over a 25 year span. The costs associated with the implementation of such a system could vary a great deal, due in part to the method utilized to acquire the necessary land. Supposing a \$500,000.00 per year capital investment (for land acquisition, construction of trails, etc.), and maintenance costs of \$100,000.00 per year (trail maintenance, cleanup, etc.), the total expenditures per year total \$600,000.00 per year, leaving a \$620,500.00 economic benefit from which the city stands to benefit from in many ways. The projection of expenditures is probably high (given that the City of Raleigh, North Carolina spends ap-

proximately \$100,000.00 per year on its Capital Area Greenway), but it does serve to make a point- that an open space system like a Greenway could contribute a significant amount to the economy of Davis. (for a similar example of benefit/cost analysis, see the S.O.S. information in Appendix E.)

ECONOMIC BENEFITS OF A GREENWAY SYSTEM

Economic Development (Market Values).....\$660,000.00

- 50,000 population x 33% users x 20 visits/year = 330,000 visits
- 330,000 visits x \$2.00 per visit = \$660,000.00 spent in Davis on food, supplies, or equipment used in the Greenway.

Increase in Property Values (property tax revenue).....\$17,050.00

- 17,051 single family units in Davis (ultimate number as per 1987 General Plan)
- 17,051 x 2% (homes affected by Greenway system) = 341 units
- 3410 units x \$200,000.00 assessed value = \$68.2 million. Assuming a ten percent increase in assessed values projects an additional \$6.82 million tax base. The City of Davis receives \$2.50 in property taxes per \$1000.00 of assessed value. A \$6.82 million increase in assessed values will yield \$17,050 in additional property tax revenue.

Tourism (non-residents).....\$60,000.00

- 10,000 visits/year x \$3.00/visit = \$30,000.00. Assuming a multiplier effect of \$2.00 generated for every dollar spent projects a market value of \$60,000.00/year.

Energy Conservation (residents).....\$330,000.00

- 330,000 visits x \$.50/visit = \$165,000.00 energy savings in transportation cost by using the Greenway instead of a regional park for day use.
- 330,000 visits x \$.50/visit = \$165,000.00 energy savings in space heating and cooling while using the Greenway instead of staying at home. The combined total of \$330,000.00 energy savings becomes disposable income, adding to the Davis economy.

TOTAL ESTIMATED ANNUAL ECONOMIC BENEFITS.....\$1,067,050.00

TOTAL ESTIMATED ECONOMIC BENEFITS x 25 years.....\$26,676,250.00

(Format adapted from the S.O.S. proposal for the Arden-Mayfair proposal)



Users of the Greenway could spend up to \$660,000/year for food, equipment, or supplies in Davis.

THE DAVIS GREENWAY: DESCRIPTION OF ELEMENTS

The Davis Greenway can best be understood by examining the different elements it contains. The Greenway can be divided into four main categories of elements- Greenstreets, Ring Greenway, Connector Greenways, and Natural Habitat, While they all contain many of the same features, they also differ in many areas as well, such as use, function, or size. However, it is important to remember that together they constitute a formidable open space system that could work towards assuring the future residents of Davis the same opportunities for open space, recreation, and habitat preservation that many of today's residents enjoy, or possibly take for granted.

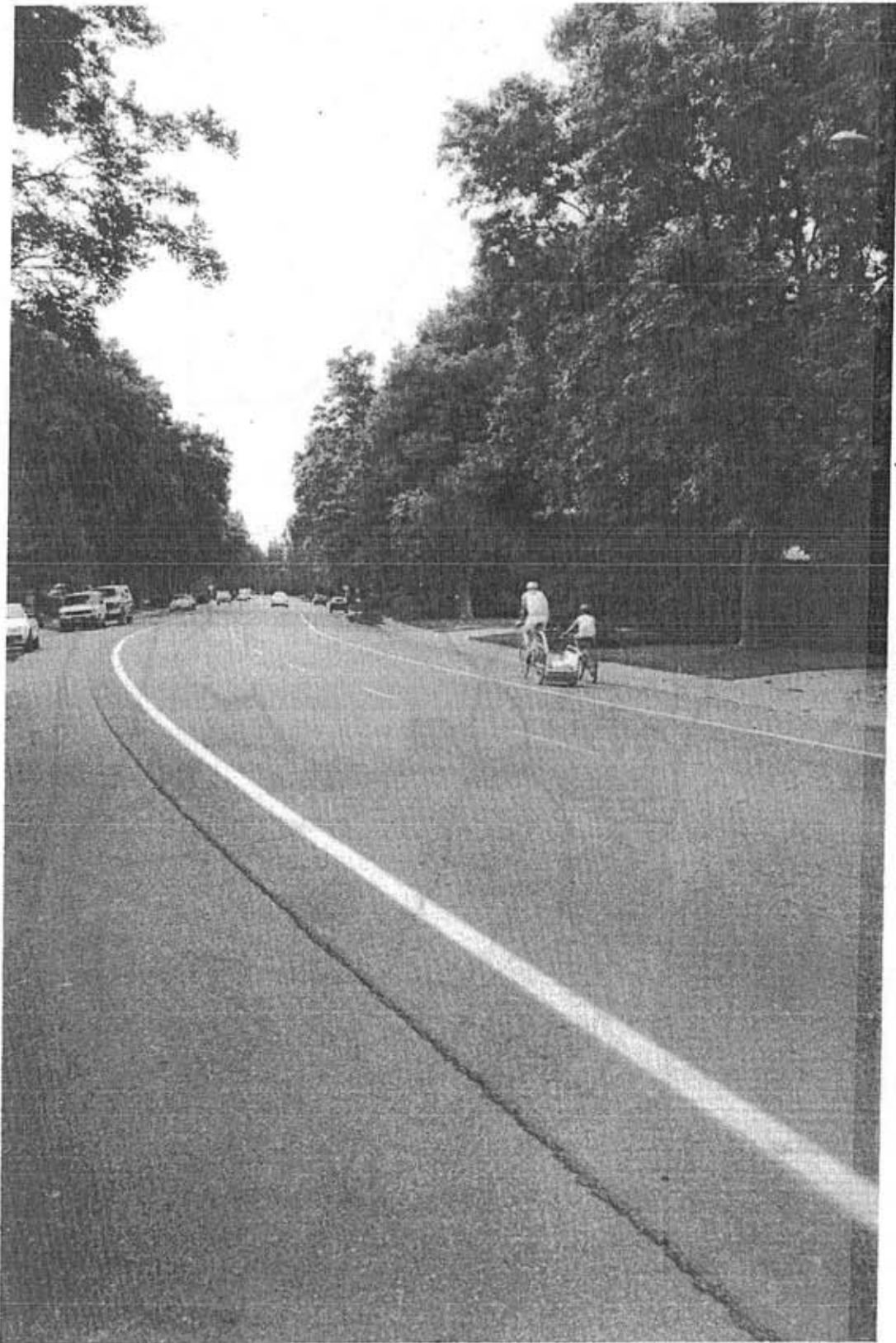
GREENSTREETS

*"Movement is the essence of streets, but they also serve broader functions which have often been lost in the modern emphasis on rapid passage through the city."*³²

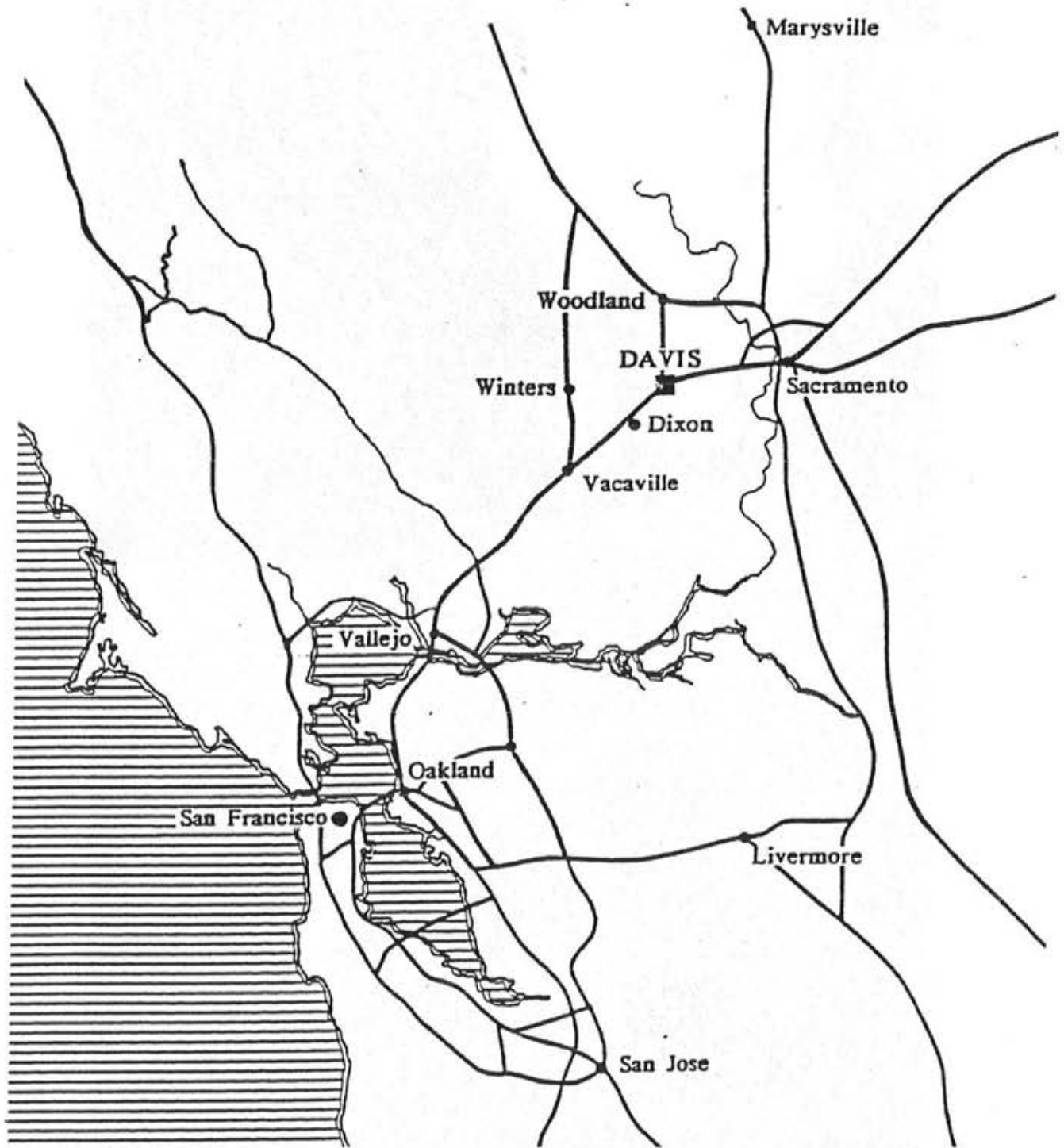
*"Streets provide us with the essential freedom of movement on which city life depends. They make and reveal the city. But in the rush to connect, we have ignored their other functions. Should we not reinvent the street to reflect the reality of mixed uses?"*³³

The concept of Greenstreets fits well into the fabric of Davis, given that a part of the image which the city projects is that of a green, tree-filled community.³⁴ The Greenstreet portion of the Greenway utilizes the existing bike lane system, and over a period of time will add to it signage which serves to direct people to other potential linkages in the overall Greenway system. This signage might include directions and distances to nearby parks or points of interest, information on historical sites, community gardens, or interesting wildlife and habitat information, or simply a logo identifying the street or trail as a portion of the Greenway.

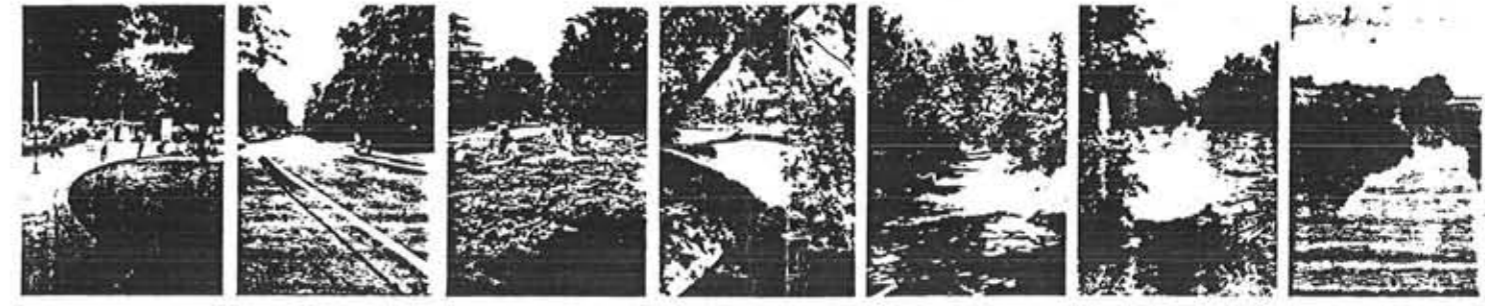
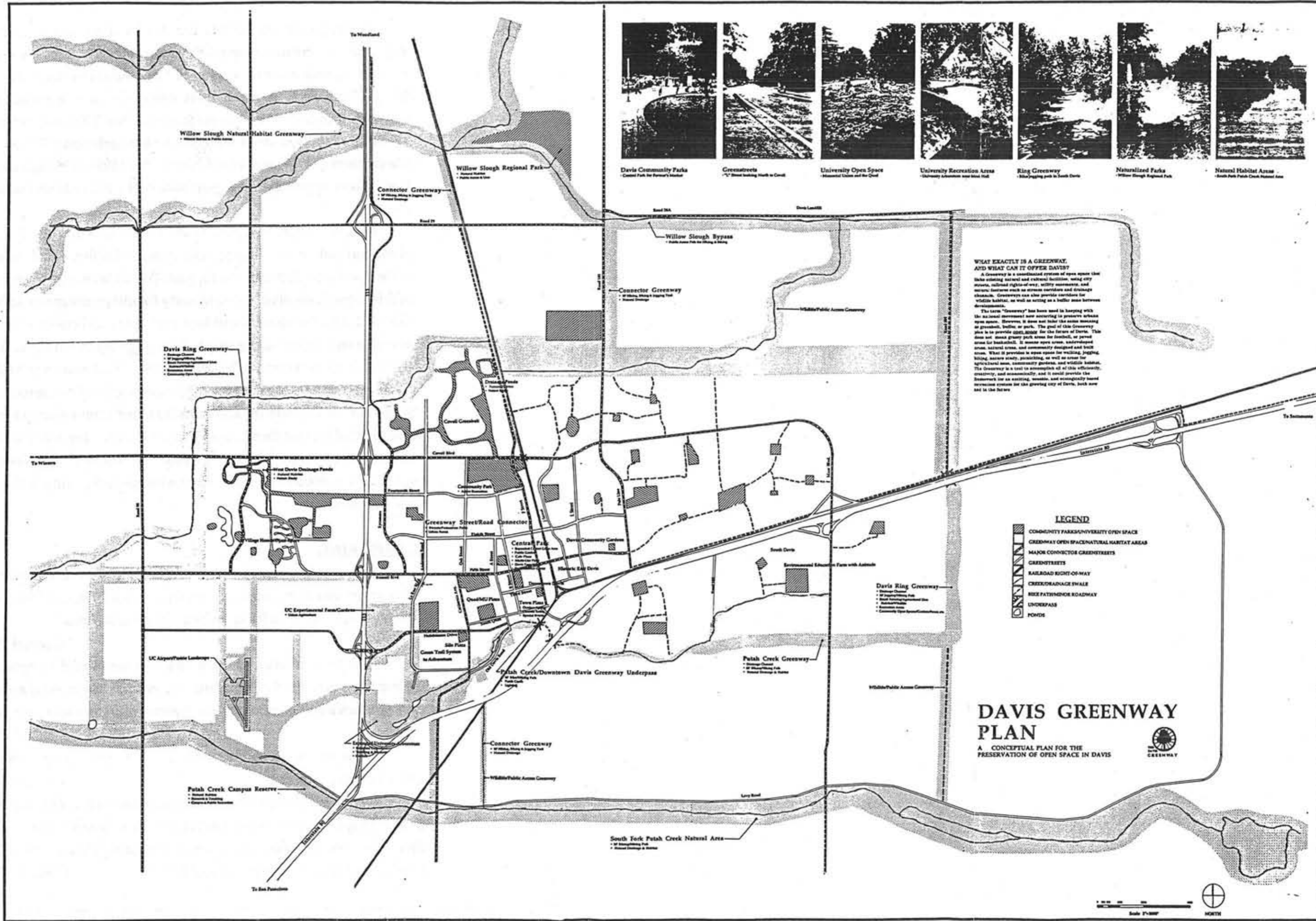
In examining Greenstreets, a hierarchy of usage is clearly seen. The main Greenstreets (noted on the plan with a heavy, dotted line) are the most heavily utilized for bicycle, as well as automobile, traffic. While this pattern of use is sure to continue, it is important to develop alternative routes to be used in the future, due to the expected increases in traffic flow on some of these streets.³⁵ Alternatives could include the development of Greenway bike lanes on less-travelled streets (such as Oak Street), or the creation of trails alongside streets (such as the path running east-west along Covell from Route 113 to Pole Line Rd).



Greenstreets (L Street, looking north to Covell)



Regional Location of Davis



Davis Community Parks
 Greenstreets
 University Open Space
 University Recreation Area
 Ring Greenway
 Naturalized Parks
 Natural Habitat Areas

WHAT EXACTLY IS A GREENWAY AND WHAT CAN IT OFFER DAVIS?
 A Greenway is a coordinated system of open space that links existing natural and cultural resources, using city streets, railroad right-of-way, utility easements, and various features such as stream corridors and drainage channels. Greenways can also provide corridors for wildlife habitat, as well as acting as a buffer zone between developments.
 The term "Greenway" has been used in keeping with the national movement here according to preserve unique open space. However, it does not label the entire network as greenway, buffer, or park. The goal of this Greenway plan is to provide guidelines for the future of Davis. This does not mean greenway paths are for footpaths, or paved areas for bicyclists. It means open areas, undeveloped areas, natural areas, and community designed and built areas. What it provides is open space for walking, jogging, biking, nature study, picnicking, as well as areas for agricultural uses, community gardens, and wildlife habitat. The Greenway is a tool to accomplish all of this efficiently, creatively, and economically, and it could provide the framework for an existing, sensible, and ecologically based recreation system for the growing city of Davis, both now and in the future.

- LEGEND**
- COMMUNITY PARKS/UNIVERSITY OPEN SPACE
 - GREENWAY OPEN SPACE/NATURAL HABITAT AREAS
 - MAJOR CONNECTOR GREENWAYS
 - GREENSTREETS
 - RAILROAD RIGHT-OF-WAY
 - CREEK/DRAINAGE SWALE
 - BIKE PATH/BIKE ROADWAY
 - UNDERPASS
 - PONDS

DAVIS GREENWAY PLAN
 A CONCEPTUAL PLAN FOR THE PRESERVATION OF OPEN SPACE IN DAVIS



An important element in the design of a Greenstreet is the use of vegetation to create canopied thoroughfares that are more aesthetically pleasing as well as more energy efficient. Aesthetically, a canopied street, like College Park, is much more enjoyable to ride on during the hot summer months, when temperatures in the 100's are not uncommon. Environmentally, a street with adequate vegetation will not only inhibit the creation of "the urban heat island"³⁶ as Michael Hough describes, but it will also support a diverse population of wildlife absent in so many cities.

Unfortunately, many of Davis' streets are currently far from canopied, and unless some design changes are implemented, more of these wide-open asphalt swaths will appear (West Davis is an excellent example of this-along Lake Blvd.). One remedy for this problem would be to set the sidewalk and the street about four feet apart and create a "treelawn" or planting strip closer to the street. Bringing vegetation closer to the street will not only help canopy the street faster, it will also serve to slow traffic down (an example of this at the neighborhood level can be seen on Purdue Street in Davis, where the residents installed round planters in the street and planted trees in them, hoping to slow traffic down and to shade their street.). A recommendation to design streets in this manner in future subdivisions could truly enhance the image and quality of Davis' streets and bikelanes.

GREEN RING

"Create public access for community and noncommercial open space and recreational uses (e.g. community gardens, urban forests, and biking, jogging, hiking, or equestrian trails) on periphery of the urban area."

General Plan, 2.1 L

"Plan for completion of Davis as a city surrounded by agriculture and openspace uses, rather than a continuously expanding segment of a metropolitan area in which all cities eventually are expected to grow to meet their neighbors."

General Plan, 2.2 A

"Where feasible, create open space between urban and agricultural uses to provide a visual edge."

General Plan, 2.2 F

"In order to allow efficient cultivation, pest control, and harvesting methods to be employed on agricultural land, require those property owners wishing to develop to provide a buffer or other means of mitigating the adverse effects of urban development on adjoining agricultural land."

General Plan, 3.2 D



Path along the North Fork of Putah Creek, in South Davis

The 1987 Davis General Plan clearly states that a buffer “ring” around the urbanized area is a long range goal. However, the actual Plan shows some areas that are not protected as open space buffer, which means that the open space around the city would be fragmented and therefore less accessible. The idea of a Ring Greenway is exactly what the General Plan calls for, but it will probably be the most controversial element of the Greenway because it departs somewhat from the General Plan. As shown on the Greenway plan, the Ring Greenway is made up of many different elements, including the University Arboretum, the drainage swales and ponds in West Davis, the North Fork of Putah Creek as it runs through South Davis, and along the drainage channel in North Davis. While the Greenway plan follows the General Plan in most instances, there are two areas in particular that deviate from the General Plan- the portion north of Covell and west of Route 113, and the area north of the Mace curve to Road 105. The main reason for this alteration was discovered in a discussion with Thomas Lumbrazo, the Community Development Director for the City of Davis. He intimated that the creation of large tracts of open space along Covell Blvd. west of Route 113, and along Mace Blvd., would be unacceptable because of the amount of work that is scheduled to occur along these two stretches of road over the next several years. Widening the roads, new sewer systems, and the costs involved in completing these will override the need for open space along these newly improved streets. As a response to his reaction, the Ring Greenway was relocated north, creating more of an identifiable and contiguous “ring” around the north side of the city.

Many different types of open space, from agricultural lands to biking/hiking trails to wildlife habitat, could be implemented in the Green Ring element of the Davis Greenway. Because of its proximity to future development, some care must be given in the specific planning of areas so that areas of wildlife habitat are protected adequately while still allowing for many different types of activities, such as picnicking, biking, jogging, nature study, or horseback riding. The drainage swales and ponds that exist in this element of the Greenway offer some of the best habitat and nature study opportunities in close proximity to Davis, as does the riparian corridor of the North Fork of Putah Creek in South Davis. These two habitats are wonderful opportunities for environmental education, passive recreation, and other non-intrusive forms of leisure.

CONNECTOR GREENWAYS

"A policy in Britain aimed at reducing maintenance costs permits less grass maintenance of verges on the motorways. Properly managed to succeed naturally and develop variety, they assume the character of wildlife corridors. This has been found to have benefits in a more varied open space network, an increase in natural plant and animal diversity, and an altogether more pleasing visual character at less cost in money and energy." 37

The Connector Greenways play a key transitional role in the overall scheme of the Davis Greenway. They serve as an extension of the Greenstreets concept, except that they are farther from the core of the city, and that they have more of an opportunity to be in a naturalized state. The Connector Greenways can assume several forms- it could be a strip of undeveloped roadside (Road 99 to Woodland) where a trail built alongside the road has a negligible impact on wildlife while improving the



Connector Greenway (Road 98, looking north)

access and safety for Greenway users. Or it could be a drainage swale (the swale that runs from the I-80 overpass to the South Fork of Putah Creek along the property-line of the University) that offers a less improved, more natural landscape that approaches "habitat" more closely than the roadside does. Whatever their character, they serve several main purposes, among which are- 1) a linkage between the city and the Ring Greenway and the Natural Habitat areas in the Willow Slough and Putah Creek reserves, and 2) providing wildlife corridors to provide cover, food and habitat as the animals move about. The latter, wildlife corridors, is similar in concept to the idea of "browseways" utilized by the U.S Forest Service to provide improved habitat and cover for wildlife, particularly deer.³⁸ This is one of the central ideas of the Greenway system—not only does it provide linkages and opportunities for recreation, but it also provides habitat for many types of wildlife at the same time. This ideal is consistent with the environmental image Davis wishes to portray, and the city could profit from it in many ways, economically, culturally, and environmentally.

NATURAL HABITAT AREAS

"Protect and preserve existing natural habitat areas within parks."

General Plan, 3.4 A

"Preserve and protect natural habitat areas."

General Plan, 6.1 A

"Require development to be set back from creeks and channels where wildlife habitats exist. Limit activities within the setback area to trails and other uses that would not affect the adjacent natural habitat area."

General Plan, 6.1 B

"Encourage the University to preserve natural habitat areas on campus."

General Plan, 6.1 E

"Encourage management of storm-retention ponds, drainage ponds, channels, and other appropriate areas as wildlife habitats."

General Plan, 6.2 E

The Central Valley of California, once home to a myriad of wildlife, is now struggling to provide enough habitat for the comparatively few number of indigenous animals that still inhabit the area. The amount of wildlife habitat that has been lost over the years is staggering. For example, before man arrived in California, wetlands habitat comprised over five million acres in the Central Valley alone; today, there is approximately 86,000 acres left, or just under 2% of the original amount.³⁹ Many other important habitats have gone this way as well, including riparian habitats, of which the South

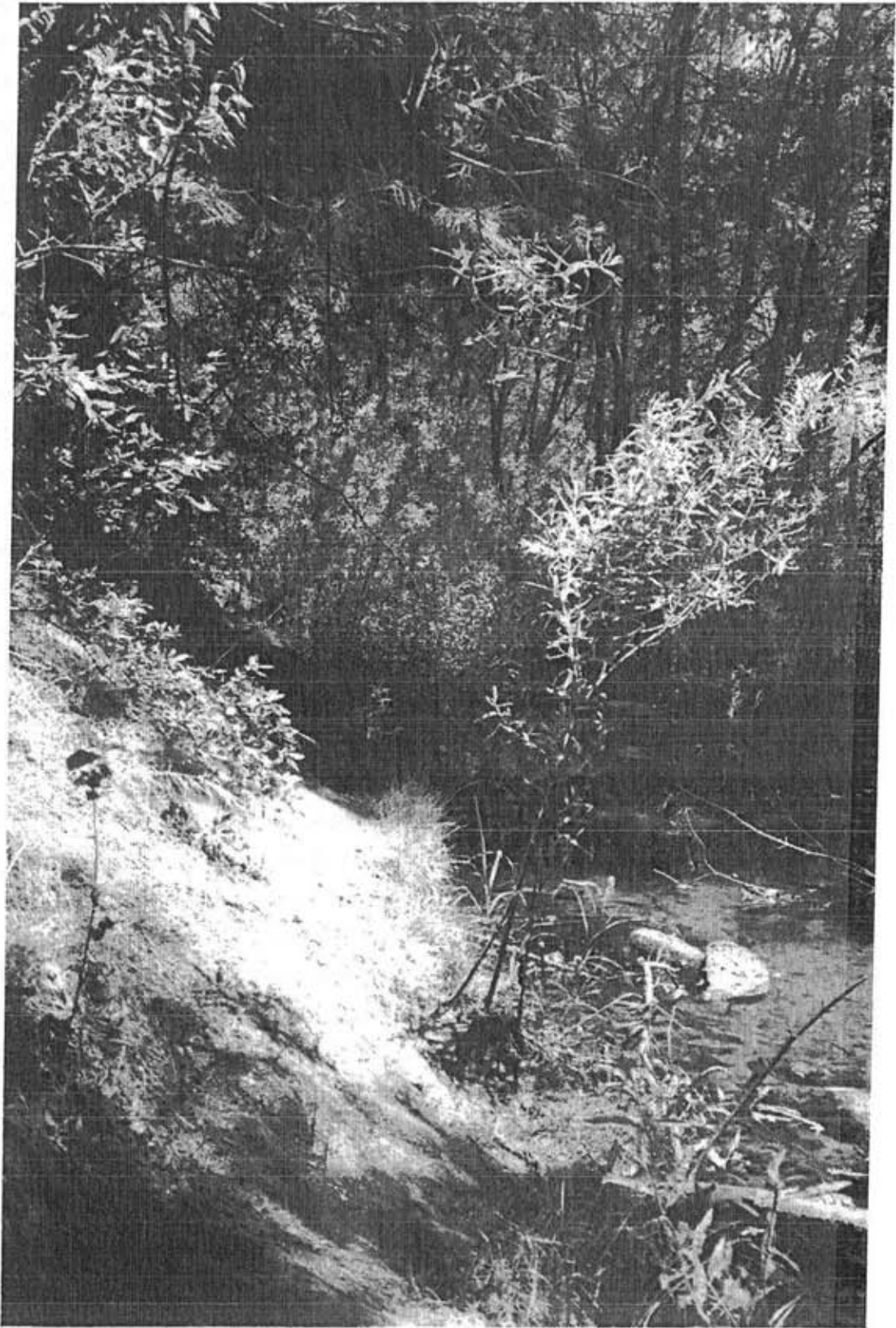


Willow Slough, riparian habitat north of Davis

Fork of Putah Creek and the Willow Slough are prime examples. "The statewide threat to riparian habitats...is acute; less than 1% of California's historic riparian vegetation remains intact."⁴⁰

In response to this threat, the city of Davis can act to preserve much of the existing riparian habitat along the two corridors mentioned above by incorporating them into the Greenway plan. The University is currently investigating the possibility of purchasing the south bank of Putah Creek (UCD currently owns only the north bank in the Putah Creek Reserve area). These two corridors, as well as the smaller habitats provided by drainage channels and ponds, are home to many species of animals found nowhere else in this area. In fact, riparian habitats have more avian species diversity than any other habitat type. In addition, there are several Endangered Species that live in these riparian habitats, such as the Swainson's Hawk. Unfortunately, most of the habitats that raptors like the Swainson's Hawk prefer are the same areas that humans prefer as well. As a result, most of the raptor species residing in these areas must be carefully considered and evaluated as to their response towards human activity. During the spring this is especially crucial, due to the laying of eggs and the subsequent incubation period. Many raptors will abandon their clutch if disturbed too much.⁴¹ However, this could present an excellent working laboratory for raptor research by groups such as the UC Raptor Center or the Davis Audubon Society. By identifying specific nesting locations, areas of the Greenway in close proximity to the nest could be cordoned off, or activity in these areas could be restricted. The idea of signage could help in this area as well, serving to protect the nesting wildlife, while additionally educating the public on wildlife and the environment. This is the principle idea behind outdoor education, providing a learning experience that the student benefits from now, while the environment will benefit in the future. Both the Willow Slough and the Putah Creek habitat areas can provide this type of opportunity.

An opportunity to see open space/habitat preservation may be afforded in the near future with the creation of the Willow Slough Regional Park. This park will be much different than traditional "lawn and trees" park. This park will be a habitat park, with facilities for hiking, biking, picnicking, and nature study. When completed, it could serve as a model for other areas where natural habitat may be combined, even enhanced (by providing more resources utilized in range and habitat management), by its exposure to low-impact, passive forms of leisure and recreation.



Riparian habitat, North Fork of Putah Creek

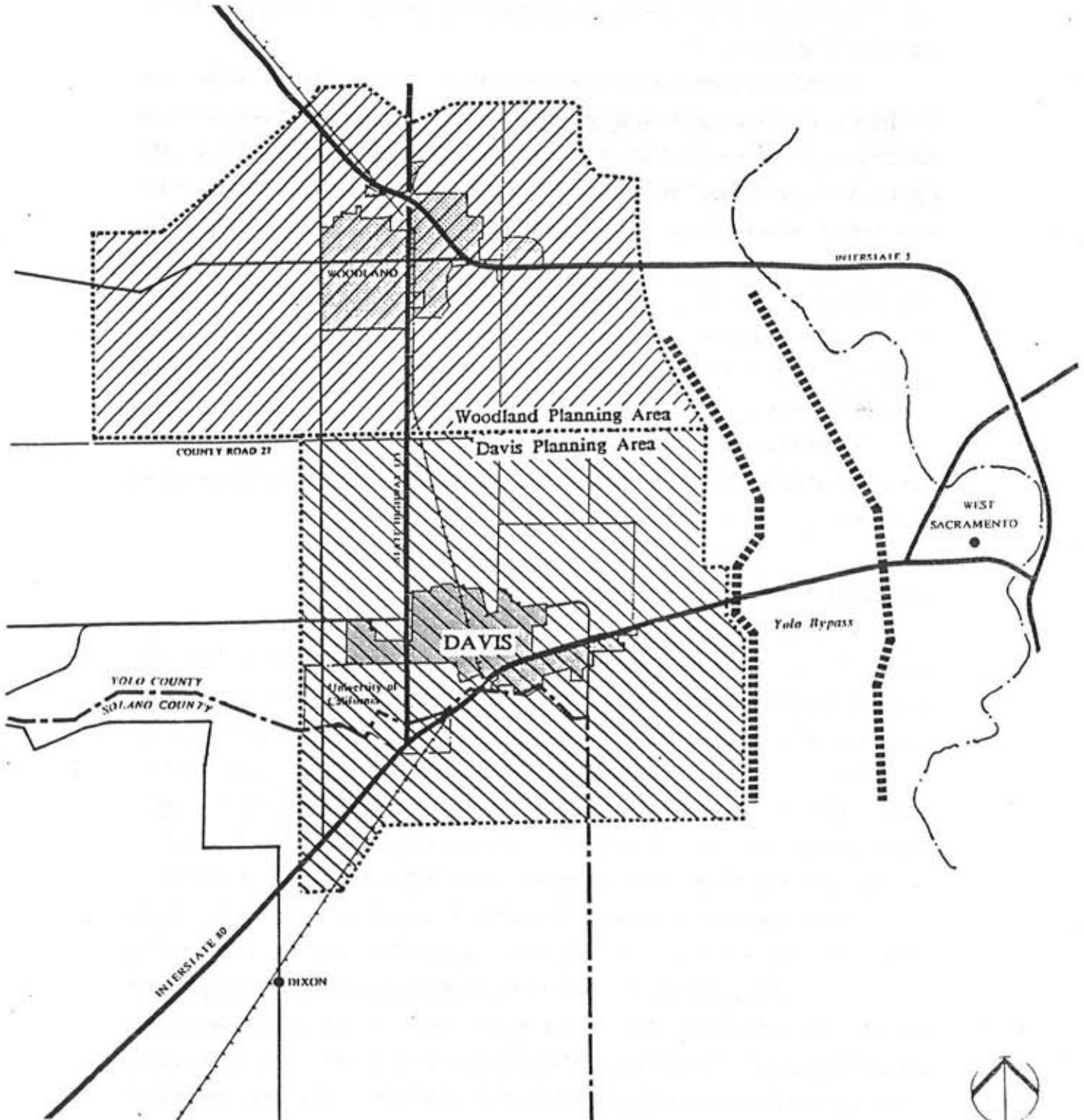
THE GREENWAY: DAVIS AND BEYOND

"Imagine walking out your front door, getting on a bicycle, a horse, or a trail bike, or simply donning your backpack, and, within minutes of your home, setting off along a continuous network of recreation corridors which could lead across the country...Greenways are your vehicle for this imaginary trip of the future, reaching out from communities all across America to link cities, towns, farms, ranches, parks, refuges, deserts, alpine areas, wetlands and forests into a vast and varied network of open spaces." ⁴²

The Davis Greenway has the potential to become the "hub" of a larger, more extensive system covering the northern valley and foothill areas, and, looking far into the future, possibly connecting up to a regional, or even national, system of open space, as alluded to in the above excerpt from American's Outdoors. While this idea may seem far fetched, it may be more realistic than you realize. Currently, there exists a bike trail that parallels I-80 from Davis to West Sacramento. This trail then links up in West Sacramento with a trail that leads to the American River Parkway, which contains some 30 miles of bike lanes and trails between Sacramento and Folsom. If you were to combine the linear miles of the parkway, the distance between West Sacramento and Davis, and the linear miles contained in in the Davis Greenway (not including Greenstreets), the number would be in the neighborhood of 95 linear miles of trails—one way. A small example when you consider the implications of a national Greenway system, but it is a start.

The Davis Greenway could begin to link areas of the Central Valley together, utilizing open space and trails to provide the framework for a truly regional recreational resource- truly regional because the park would, in essence, extend to everyone's front porch. Using the Greenway, one could travel from their home in Davis, stop by the Farmer's Market on their way out of Davis, ride the Willow Slough to the West Sacramento Greenway, pick up the American River Parkway and arrive at Folsom Lake around two o'clock (depending upon when you start). Not only does this provide an enjoyable recreational resource, but it also serves to preserve open space and wildlife habitat. The benefits of such a regional system could be astronomical, both in economic terms, and in quality of life, for an area of California whose growth rate far exceeds the average. As the Sacramento metropolitan area continues its rapid pattern of growth, the quality of life and open space preservation issues will become increasingly important. The city of Davis can be the role model for this entire area, and at the same time, while enhancing and improving the quality of life in other communities, helping

enhance its own quality of life by expanding the idea of publicly accessible open space throughout the region. (For an example of communities working together to form a regional Greenway system, see Appendix D, Issue Paper #3 under the Capital Area Greenway. The city of Raleigh, N.C. is working with three other counties to establish a much larger open space system than any one of them could achieve on their own.)



Regional Context, Davis/Woodland/West Sacramento

IMPLEMENTATION

"There is a prevailing opinion among conservation-minded people that man's influence on the land is inherently destructive. There is no question that to a large measure this view is well-founded. The blunt statement of the manager for State Parks in New York that open space is like virginity-once lost it can never be regained-rings true when we are faced with the destruction of priceless landscapes in the face of urban development." ⁴³

The city of Davis is at a critical point in its history. The transition from small town to urbanized setting brings up many critical questions concerning patterns of growth, ultimate size, and community image. Throughout this discussion concerning the creation of a Greenway system for Davis, it has been shown how well the concept of a Greenway fits Davis' current situation in helping to provide a framework for a carefully thought-out and ecologically sensitive long-range development plan for both the city and the University. By combining the open space resources of both entities into an overall conceptual plan, both the students and the citizen's of Davis will benefit, as will the city and the University.

A question now arises, however- a question concerning the conversion of what seems like an idealistic dream to many into a reality. How could a Greenway be implemented in Davis?

GREENWAY PLANNING: AN OVERVIEW

The process of Greenway planning is based upon the idea of landscape preservation, and it is during this process that "people can address the future use of large, diverse landscapes of more than local significance."⁴⁴ During the planning process, as many groups as possible should work together in the formulation of goals and objectives, groups including, but not limited to, local, state and federal agencies, private organizations, and landowners. These groups can draw off each others areas of expertise so that the final set of goals and objectives are as comprehensive and broad-based as possible.

In the preparation of the goals for the project, the organizing committee should seek out as much public input as possible, so as to insure public awareness and support for the Greenway throughout the planning process and into the actual implementation phase. Having gained the necessary information, an outline for general goals of the Greenway project should be issued. Examples of these types of general goals are: 1. *The development and initiation of timely and specific local government and voluntary private landowner*

actions to help conserve, enhance and use the resource values of the landscape area;
2. *The preparation of a conceptual long-term strategy for encouraging water and land use practices which are compatible with the area's resource values and consistent with traditional land uses.* ⁴⁵

The importance of community involvement during the entire process cannot be overlooked. A project that attempts to move ahead without information from the public sector is doomed from the start. These are the future users of this resource, they are the one of the two most important aspects in the creation of a Greenway; the other is the environment, wildlife, and their habitat.

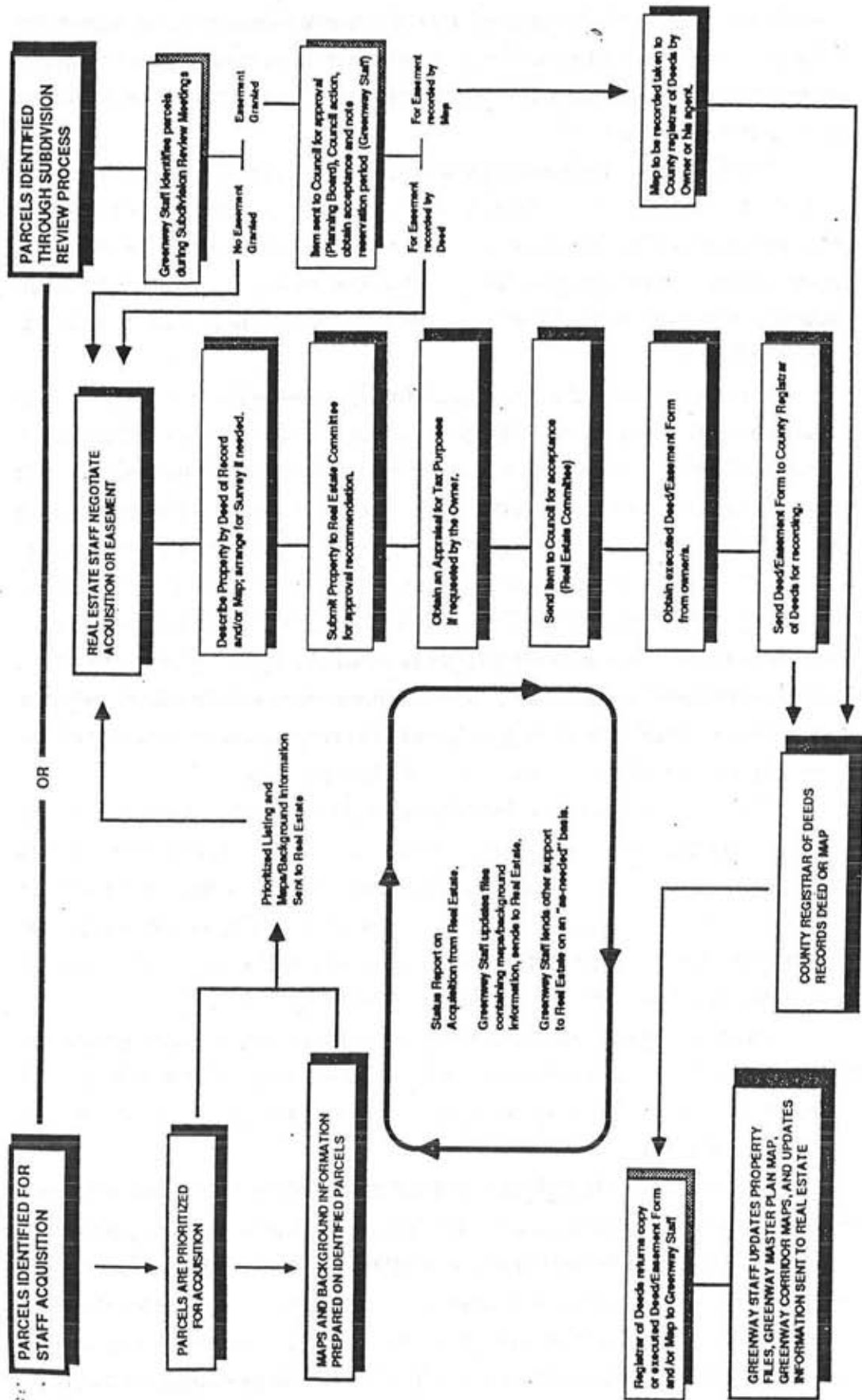
Having developed a set of goals for the Greenway, the next step is to actually initiate the project. Utilizing as many of the groups and agencies mentioned earlier as possible, a conceptual plan should be developed. It is crucial that any plan that is developed is considered a "proposal", not a finalized plan. The idea of a static document, one that is not able to change to meet changes in needs, will severely limit the popular support that a Greenway needs to survive. The conceptual plan should be discussed as often as possible, with as many people as possible, again, to maintain a high level of community involvement. The ultimate result will be a final proposal that: 1) has a broad base of support, and 2) is responsive to as many of the concerns, both political and environmental, as possible.

Following this, a Public Involvement plan should be formulated, as a means of building a true constituency for the Greenway. At this time, citizens are asked for more input concerning more specific information on the Greenway, its form, function, and uses, as well as asking what role, if any, they might take in the actual implementation of the Greenway (this worked well in Battle Creek, MI and in Denver, CO-see Appendix D).

The next steps include Site Analysis, an inventory of existing features, resources, and values, and Issues Analysis, based upon information gained through the Site Analysis concerning resource issues, public attitudes, and potential problems.

At this time, a "Regulatory and Administrative Alternatives Assessment"⁴⁶ needs to be made, examining "a variety of private laws, programs, regulations and techniques (that) are available to conserve most landscape areas....The identification and assessment of regulatory and administrative alternatives is important to the project because it can improve decision-making by allowing the sponsor to explore a wide range of actions and then select the most effective and appropriate ones."⁴⁷

Greenway Acquisition Procedure



Land Acquisition Model, Raleigh, N.C.

As a result of this decision-making, an implementation strategy begins to take shape, one that includes "programs which encourage resource conservation and enhancement on an areawide basis, as well as including specific programs for designated landscape areas."⁴⁸ Given this criteria, alternatives should be examined to determine which ones are most applicable to the project. The type of action/program needed, the Agency or organization which will implement the action, the time frame, conservation areas, groups which are likely to support the idea- all of these are questions or programs requiring a carefully thought out answer that meets the specific requirements of the project.

The two final steps in Greenway planning include a political assessment of "individuals in the area that have, or have the potential to have, an influence over future land use decisions."⁴⁹ While this may be difficult to do (partly because it is mostly intuitive), it can be crucial in determining who your friends and opponents are. The final step, prior to the actual implementation, is to develop a strategy for the implementation. This should take into account all "the goals, objectives, concerns, and recommendations"⁵⁰ The final implementation strategy should, if the previous work was thorough enough, be specific in its guidelines and recommendations, so that the finished Greenway will reflect all of the concern and hard work that went into the preparation of final plan.

IMPLICATIONS FOR DAVIS

There are many conservation alternatives that could be successful in any given situation; however, there are some that have proven to be more successful than others. For the city of Davis, several opportunities exist that could make the Davis Greenway a reality.

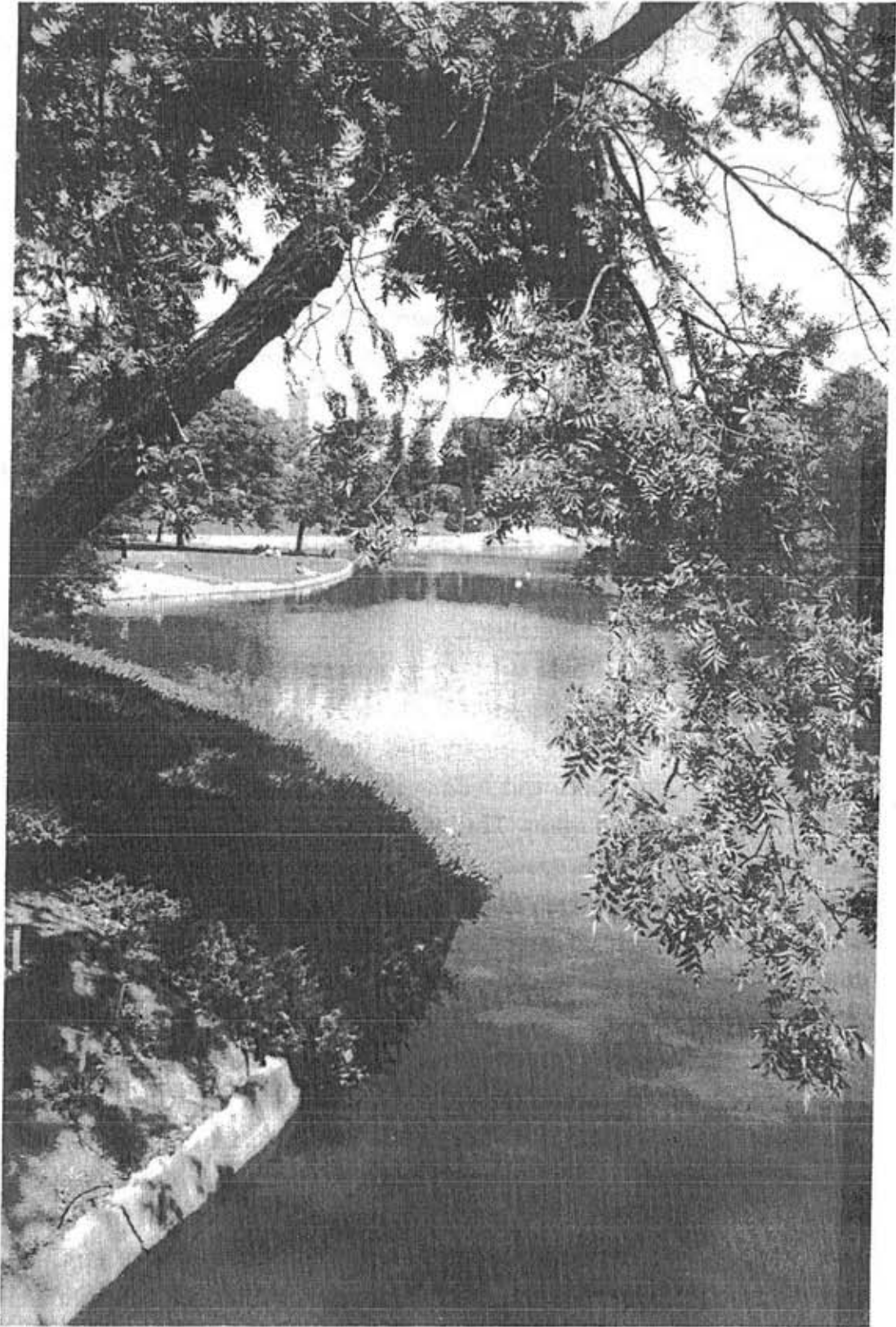
First, there is already an existing Land Trust in Davis that could work with the City to protect and preserve the necessary open space outlined on the proposed conceptual plan. The Land Trust, as a non-profit organization exempt from taxation under Section 501 (c) (3), can provide cost effective and non-government alternatives to private landowners, while also protecting and preserving open space and/or habitat. The Davis Land Trust could be an effective mechanism in acquiring open space land for the Greenway.

With the passage of Proposition 70 on June 7, 1988, the city of Davis is scheduled to receive approximately \$2 million for land acquisition. These funds could provide the beginnings of a Greenway, or open space, fund for the city. Aside from the money, what Proposition 70 illustrates is that the

outdoors is very important to the citizens of this state, and that they are willing to pay for its protection. In the survey on recreation in Davis, 93 % of those surveyed said that they would support the Greenway in some way, and of those, 61% said they would approve a small Greenway tax, and 53% indicated that they were in favor of a bond issue to raise revenue for the Greenway. This would seem to indicate that the public sector in Davis believes in the concept of a Greenway, and that they would be willing to pay for it.

Other alternatives might be to apply for a Community Development Block Grant (CDBG) for open space acquisition, or to work with private interest groups such as the Sierra Club, the Nature Conservancy, Ducks Unlimited, or the Audubon Society in a fund-raising or sponsorship manner. There is a limited amount of federal funds (aside from the CDBG) at this time, however, this could change with a different administration in the White House. There are some Federal agencies that can help, such as the Rails-To-Trails program that turns abandoned railroad rights-of-way into trails and wildlife corridors. Should Southern Pacific ever abandon their routes through Davis, it would be highly advisable to pursue those lands as potential open space/habitat.

When the Greenway finally reaches the point where it is on the verge of becoming a reality, the community should be given the opportunity to actually help in the construction of the various portions of the system. This idea has been extremely successful in other communities, serving to foster a sense of ownership of the Greenway. Community involvement, as stated several times before, is the real key to a successful Greenway system. All of the hard work, research, and time spent on developing a Greenway system will be for nothing if the citizens don't feel that they were allowed any input into the development of the system. And if they don't use it, it could well be lost to development in a much shorter time span than it took to create.



The University Arboretum, U.C. Davis campus

SUMMARY

"TRANTOR—...At the beginning of the thirteenth millennium, this tendency reached its climax. As the center of the Imperial Government for unbroken hundreds of generations and located, as it was, toward the central regions of the Galaxy among the most densely populated and industrially advanced worlds of the system, it could scarcely help being the densest and richest clot of humanity its Race had ever seen.

Its urbanization, progressing steadily, had finally reached the ultimate. All the land surface of Trantor, 75,000,000 square miles in extent, was a single city. The population, at its height, was well in excess of forty billions..." ⁵¹

This excerpt from Isaac Asimov's Foundation is obviously a science fiction fantasy (or nightmare). But if you use your imagination to try and imagine some actual place fitting the above description, you probably would imagine a place that you would not want to frequent very often, much less live there. But this is fiction- extremely high densities, no room for outdoor recreation, no room for vegetation...

The citizens of Davis value open space and recreation, as well as wildlife habitat and the environment. However, unless some decisions are made fairly soon by both the City and the University concerning the preservation of open space and habitat in the future, the opportunity will expire, not to be offered again. The idea of a Davis Greenway, even though not a new concept in open space, can serve to ease the burden of decision by setting a framework for open space in the future that is both visionary and flexible-visionary in that it can provide for the needs of many future generations, and in the sense that we as a population saw the value of open space and wildlife habitat while there was still some left; and flexible in that the overall plan is meant to respond to changes in need and recreational use patterns. These are all critical factors which serve to indicate that the idea of a Greenway for Davis could be a viable one—now, and into the future.

The idea of the Davis Greenway can now go one of three ways—one, it could be forgotten, debunked, or thrown away as a "pipe dream" that could never happen; two, the idea could be the subject of debates and discussions over the coming years, possibly until it becomes too late or unfeasible to accomplish; or three, it could be picked up and further developed into a more concrete plan of action, aiming for actually implementing such a system. This last option is the one to choose if open space and habitat, quality of life and

city character are important. The third option is also a challenge—a challenge to those who care enough about the future development of Davis, and of cities in general, to take this forward and apply the concept in practice. It is a viable idea, possibly a timeless idea, and it should be passed on to other professionals, communities, and citizens, so that they can make their choice as well.

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