



TUMWATER PARK PRELIMINARY PLAN

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TITLE: The Tumwater Park Preliminary Plan

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History
Statement of Goals
Biota
Action Plan and Implementation

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ABSTRACT: This report describes the need for park-type recreation. It outlines how a workable design was reached with methods for its implementation. The plans describe site location, suggested types of recreation, and list priorities for development of the area. Descriptions of the biota as well as anticipated problems in management are discussed. Plan implementation includes projected projects, costs, and future utilization of the area.

THE TUMWATER PARK PRELIMINARY PLAN
The City of Tumwater, Washington

Prepared for the
Tumwater City Council

The preparation of this preliminary plan was financially aided through normal program funds of the Political Ecology Coordinated Studies Program at The Evergreen State College.

Prepared by
Political Ecology Park Group
The Evergreen State College
Olympia, Washington
June, 1972

The Evergreen State College

June 2, 1972

Tumwater City Council
Tumwater City Court House
Tumwater, Washington

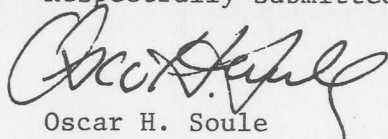
Gentlemen:

We are pleased to submit this Preliminary Plan for the Tumwater Park site. This report contains a chronicle of our activities leading to the present report as well as our considerations for future plans for the Park. We have attempted to answer all the charges brought forth in the resolution of April 4, 1972.

We hope this effort can provide the guidelines which will lead to the successful completion of a much needed recreational area in Tumwater. However, we stress that this should be done with the intent of preservation of the Park as a natural biological unit. It is anticipated that this report will also serve as a stepping stone for future, more comprehensive reports and as an initial statement which may help interest financial support outside of City funds. Lastly, we hope the plan at this stage will elicit help from the general public and other agencies which will insure the success of the venture.

The activities of the Political Ecology students at the Park site and with the people of Tumwater have been extremely rewarding. The public officials, especially the Mayor and Council and the City Engineer - John Robischon, have made major contributions to the success we have had. The genuine enthusiasm shown by the Mayor and Council to the students has been one of the key factors in the finishing of this task. Special recognition is in order here.

Respectfully submitted,



Oscar H. Soule
Member of the Faculty

OHS:pv

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
Analysis	1
Investment in the Future	2
POLITICAL ECOLOGY	4
HISTORY	6
STATEMENT OF GOALS	7
For the City of Tumwater	7
For the students of Political Ecology	7
BIOTA	9
ACTION PLAN AND IMPLEMENTATION	12
Introduction	12
Preliminary Activities	12
Phase I	17
Phase II	27
Phase III	33
Budget	34
APPENDIX A	

LIST OF PLATES

<u>Plate</u>		<u>Page</u>
1	Geographic Location	13
2	Vegetation Types	15
3	Trail Development	21
4	Park Facilities	25
5	Shelter Design	30

INTRODUCTION

With the expanding urban population, opportunity for the city dweller to enjoy and appreciate the natural environment decreases. Yet, such deprivation can easily be avoided through careful planning and development. Measures geared toward preservation of the beauties of nature can help modify the pressures increasing at all community levels. The "city park" is one obvious means of fulfilling this goal.

Analysis

In February, 1972, the Tumwater City Council, in conjunction with the Political Ecology program of The Evergreen State College, authorized the formation of a project group to develop a preliminary proposal suggesting the conversion of the Watershed area of Tumwater into a natural park. In April, 1972, a resolution from the City Council charged this park group with providing an inventory; defining priorities; and making specific recommendations for action and the plans to implement them. The project group consisted of nine students and one faculty member. The ten members put forth more than twelve hundred hours of investigatory research and labor in compiling the preliminary phase of this proposal.

The members of the project group were able to put to use academic skills and knowledge gained through the course. The project itself was a valuable learning experience providing an understanding of the skills necessary in the development and functioning of a park; the use of local and state agencies in seeking information; and the concepts and format essential in preparing this type of proposal. It was also a productive contribution to the city of Tumwater.

It is becoming evident that the continual increase of population is bringing about a depletion of our natural resources. This means that careful evaluation should be made in the use of these resources. A plan should be employed that produces a minimal amount of degradation to the

INTRODUCTION

environment, while insuring whatever type of productive developmental alterations necessary. The development of proper park and recreational facilities is essential to the stability of a growing community like Tumwater.

The accepted standard for recreational development is ten acres per thousand population. The proposed park site provides a maximum of twenty-two acres, while the working area of the park will be less than 1/4 of that. With a population of 5,573, the city does not have adequate recreational park facilities of the type we have set out in this report. The following report is a suggestion as to the implementation of three phases leading to the development of the proposed natural park. Preliminary estimates show that the park by the completion of Phase I will accommodate 100 people per day.

Investment in the Future

The unique characteristics of the proposed park site dictate several conditions which should be met in order to preserve the environmental quality of the area. These protective measures will assure its role as an ecological park as prescribed in the Council's resolution.

The small area of cleared land excludes the possibility of intensive recreational construction such as sport fields. The large areas needed for such construction would compete with areas planned now for playground equipment and picnic sites.

Several nature trails can be built on pre-existing trails and roads with a minimal amount of clearing to insure convenient access. Picnic tables with covers would eliminate the need for large buildings for shelter.

The appointment of a Parks and Recreation Commission should be considered to deal with the growing needs of the community. Further a Parks Supervisor should be appointed to serve as a communications link or liaison between the community and the Commission.

INTRODUCTION

A Park Supervisor could further aid the community by coordinating efforts of civic leaders and school officials in the cooperative use of existing recreational facilities. This is in keeping with Mr. Thorsen's recommendation in the Tumwater 2020 report.

As the population of Tumwater grows, the need for park areas will increase. Additional land more suitable for extensive development should be acquired for ball fields, tennis courts, swimming pools, etc. The wellfield site, due to periodic flooding, is clearly unsuitable for these purposes.

However, its value as a "green area" cannot be underestimated. The people of Tumwater need a haven of peace and solitude, just as they need ball parks. It will also have great educational benefits to a growing metropolitan area where it may be necessary to travel miles to find an undisturbed forest area.

In summary, the park should be maintained in as nearly a natural condition as possible. The suitability of the site as an environmental retreat is clear. In this way it will be of greatest benefit to the people of Tumwater.

POLITICAL ECOLOGY

Political Ecology was one of the basic coordinated studies at the Evergreen State College, Olympia, Washington. The program was concerned with the worldwide ecological crisis with which we are faced. Lasting one year, the course dealt with many areas of thought under the umbrella theme of ecology. The ecological crisis was studied from the aspects of biology, sociology, political science and law, economics, philosophy, and American historical and literary ideas. The program included approximately one hundred students and five faculty members.

Main activities during the year have been the seminars. There were two principle types of seminars; the book seminar and the resource seminar. About twice a week, groups of twenty students met with one of the faculty to discuss the reading for the week. Among these were Aldo Leopold's A Sand County Almanac, Rachel Carson's Silent Spring, Franz Kafka's The Trial, and David Ehrenfeld's Biological Conservation.

Approximately once a week the whole program met to hear a lecture by one of the program's faculty or a guest lecturer and/or see a film. Usually later in the week the lecturer met with groups of students in the resource seminars to go over or expand on the subject of the lecture.

The areas of study were divided between the three quarters. During the first quarter we concentrated on the basic concepts of ecology. During the second quarter we studied anthropology and economics. The last quarter was devoted to law, politics, and ethics.

For on the spot, real life experiences each student undertook one or two projects. The majority of the students in Political Ecology were involved in a comprehensive study of Hood Canal. Some individual projects included researching the Dakotah Indians in South Dakota, preparing a study of the effects of a proposed railroad classification yard, a study of the Nisqually Delta, and certainly the preparation of the Tumwater Park Preliminary Plan.

POLITICAL ECOLOGY

Political Ecology was a program designed to provide a basis for students interested in biology, political science, sociology, or philosophy. More importantly it provided the students a broader understanding of the environmental crisis and gave them the necessary knowledge needed to do something about it, whether as professionals or as citizens.

The Tumwater Park Project, as a real life experience, has given the nine participating members from Political Ecology the chance to use some of the skills they have learned this year and also develop new ones. It is these experiences that help to make the program and the school the unique system of learning that it is.

HISTORY

In 1927 the City of Tumwater purchased the water works plant owned by the Tumwater Power and Water Company. This private utility served all of the Tumwater area. The city also purchased forty acres of land owned by John McAleer. The springs on this property were to be the new source of water for the city. The purchase price of the land was five thousand dollars.

The McAleer Springs located in the Northwest Quarter of the Southwest Quarter of Section thirty-five, Township Eighteen North, Range Two West. In 1929 the McAleer Springs were condemned by the State of Washington because of contamination.

The City of Tumwater then decided to drill a well. Being fortunate they struck an abundant source of artesian water. This was the City's first well, and this water has been used as a source of water for the city since 1929.

Twenty of the city's forty acres were sold to Fred Palermo. These twenty acres are now a residential area.

The City of Tumwater over these past years has used only about five acres of their twenty acres for the city's water needs, and the other fifteen acres have been unused. The park that is now being planned is the first planned use of this area.

STATEMENT OF GOALS

The need for park development is a national problem. However, it may be best solved by action at the local level. The Tumwater City Council has recognized this and moved in the direction of alleviating the problem. Our plan attempts to outline the best possible use of the Tumwater Watershed while at the same time maintaining the best physical environment possible. Such a program should be based on a Statement of Goals which will lead to the accomplishment of these goals.

For the City of Tumwater

This will be the first park for Tumwater. A need has clearly developed for additional recreation facilities to accommodate a growing population of 5,573. In an April 4, 1972 resolution the City Council defined proposed goals.

The first goal is to establish a comprehensive working plan for recreational development of a parcel of land known as the Tumwater Watershed. Recreational development, a generality, will be defined by the plan.

The resolution further states a desire for a multi-phase plan that lists priorities, cost projections, and a timetable. The preliminary nature of this report necessitates flexibility in this plan. These goals are not unreasonable and it is our hope that the plan will fulfill them as well as implement their understanding and action.

For the students of Political Ecology

The students participating in this project have a plurality of goals. The first view of such an undertaking is as an educational experience in which students and others involved might achieve a working knowledge of planning a park through the gamut, from an announcement in seminar to the completion of the plan.

STATEMENT OF GOALS

A second goal of the students is to acquire a feeling for dealing with city agencies and cooperating in a progressive manner with city government.

A final goal is the design of a park, in a phased plan. This will entail mapping vegetation, surveying, soil testing, costs, priorities, and of course the carrying capacity of the land as well as other activities.

The completion of this goal will indicate success, and with appearance of mistakes - our strengths and weakness - what we have learned. The park will accommodate the people of Tumwater and the students in a most beneficial way.

BIOTA

The plant community in the City of Tumwater Water Shed has been evolving toward its present stage for at least the last 13 million years. It represents inputs for adjacent biotic communities for the north, south and east. The continual changes in composition of this group of plants and animals have been influenced by mountain formation, glaciation, proximity of the ocean and climatic change. However, the influence of man, starting approximately 10,000 years ago and intensifying to its present level over the last two hundred years, places the remaining balance in a precarious position.

At this point in time the Tumwater Watershed represents the Pacific Northwestern region of the Pacific Northwestern flora. Here dense coniferous forests with species reaching gigantic proportions are common. The shaded ground is densely covered with mesophytes and the open areas are often choked with an impenetrable undergrowth of shrubs. In addition, the proximity of the Deschutes River and its periodic flooding creates a unique marsh habitat.

The wooded region of the Watershed is dominated by the following conifers: Douglas Fir (Pseudotsuga menziesii), Western Red or Giant Cedar (Thuja plicata) and scattered Western Hemlock (Tsuga heterophylla). The large flowering trees include Red Alder (Alnus rubra), Big Leaf Maple (Acer macrophyllum), Vine Maple (Acer circinatum) with scattered Dogwood (Cornus nuttallii).

The shrub and small tree component of the Watershed includes: Red Flowering Currant (Ribes sanguineum), Oregon Grape (Berberis aquifolium), Red Huckleberry (Vaccinium parvifolium), and Devil's Club (Oplopanax horridum). In more open or disturbed areas shrubs such as Salmonberry (Rubus spectabilis) and Indian Peach (Osmaronia cerasiformis) are common and in more highly disturbed or cleared areas Himalaya Blackberry (Rubus procerus) and Scotch Broom (Cytisus scoparius) are very abundant.

BIOTA

The herbaceous members of this community (herbs; plants that die back to the ground yearly) are extremely numerous during the spring. Two-leafed Solomon's Seal (Maianthemum dilatatum) and Pacific Bleeding Heart (Dicentra formosa) literally carpet the forest floor. Trillium (Trillium ovatum) and many of the ferns show as conspicuous parts of the lower vegetation. In the more moist areas Skunk Cabbage (Lysichitum americanum).

This plant community, although much disturbed by man, contains features which are still unique to the Northwestern United States, features which are highly educational, and features which can lend themselves to moderate use and appreciation by the citizens of Tumwater.

The animal life of the general region of the Watershed has been decimated even more thoroughly in recent history than the plant life. Of the large common mammals only the Black-tailed Deer (Odocoileus hemionus) remains. The smaller and more elusive mammals such as the Douglas Squirrel (Tamiasciurus douglasii), Townsend Chipmunk (Eutamias townsendii), the White-footed Mouse (Peromyscus maniculatus) the Western Big-eared Bat (Corynorhinus rafinesque), will probably be found.

Also mammals more closely associated with the activities of man such as the Eastern Cottontail (Sylvilagus floridanus), the House Mouse (Mus musculus), and the American Opossum (Didelphis marsupialis), might also occur.

Other forms of animal life also are dependent on the Watershed. Numerous frogs, toads, and snakes coexist with the myriad of insect forms. These groups represent part changes in composition of the community. Finally the varied avifauna should be considered a vital asset to the park. Birds are generally the most popular animals to observe in the type of setting the park will have to offer. There has been interest expressed

BIOTA

at least two levels to pursue ornithological studies on park land. Representations of diverse types of birds from wading birds to predatory birds to hummingbirds can be recorded for the park. The ground nesting of a mallard this spring is fresh evidence of unique and vital features to be found in the Watershed.

The City of Tumwater has the opportunity to develop these living resources and make them available to the citizens of the Community. Care must be taken to insure this is done wisely and the development of the Tumwater Watershed into a park as outlined in this preliminary plan is movement in this direction.

ACTION PLAN AND PROPOSED BUDGET

Redevelopment of the Tumwater Watershed into an educational-recreational park in harmony with the natural resources of the area can best be accomplished in a stepwise progression. These steps number four. The first consisted of preliminary activities which took place between February 5, 1972 and June 19, 1972. The second step, or Phase I, is scheduled from June 19, 1972 to September 1, 1972. The length of Phase II is dependent on several factors such as outside funding, establishment of Park Commission or Superintendent, and preparation of a formalized development plan. Phase II could begin immediately after Phase I and should begin no later than one year after the completion of Phase I. The duration of Phase II is variable, but could be considered at six months to two years. Phase III is dependent on the completion of Phase II.

Preliminary Activities

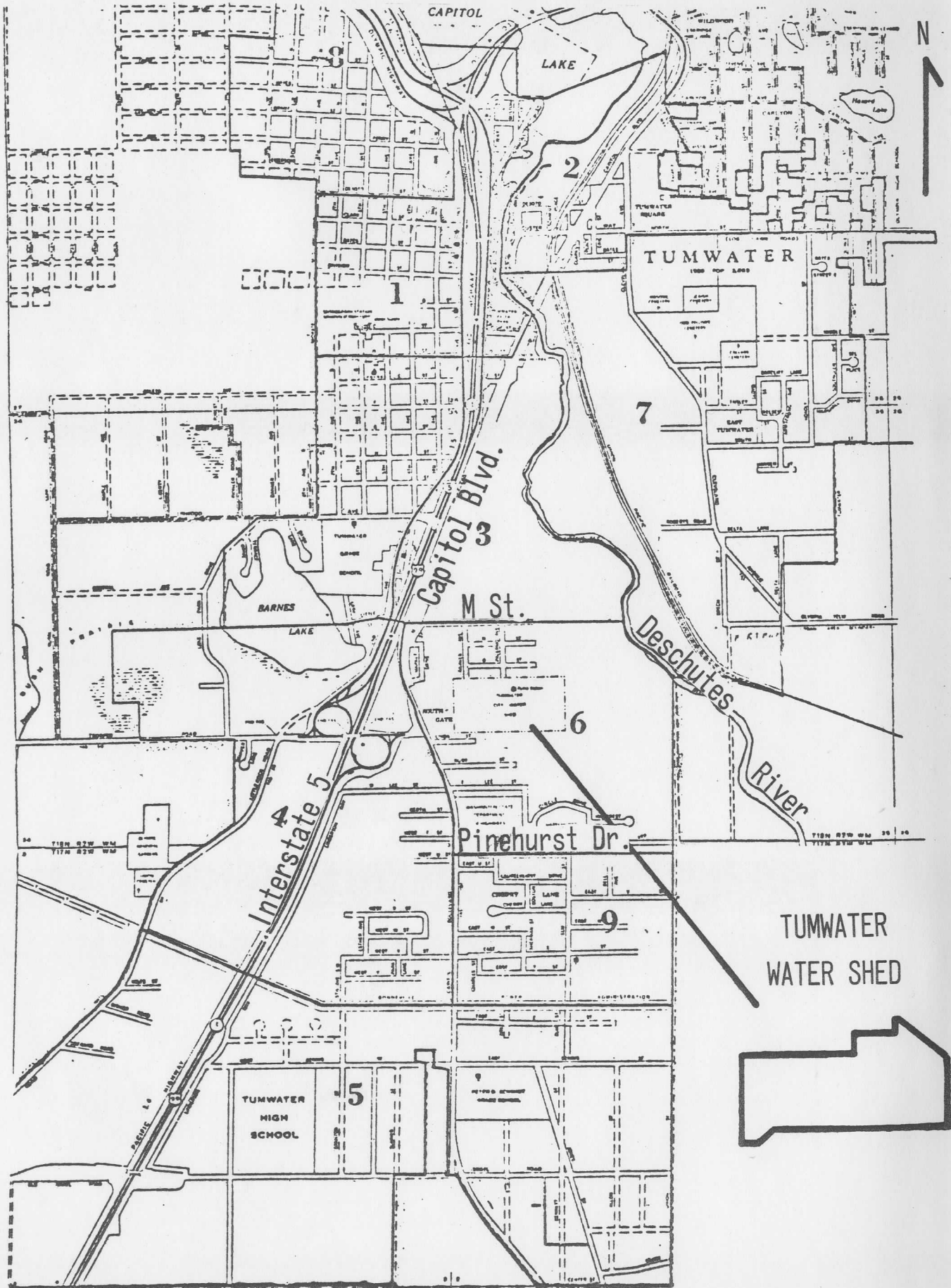
The Preliminary Activities, February 4 - June 19, 1972, were initiated privately. Once a working base was established, formal contact and support (non-financial) was cleared. The present Preliminary Plan is a result of that activity. All expenses accrued in the Preliminary Activities were paid out of program funds in Political Ecology at The Evergreen State College.

Activity - Site selection

Cost - ----

Description - Hosted by councilman Larry Nicholson and accompanied by Superintendent of Public Works Jim Brown, councilman Richard Nichols, Evergreen State College faculty member Oscar Soule, and Evergreen student Tom Boley toured in early February, 1972 several potential park sites in Tumwater. By mid-February, a nine-member student group selected the Tumwater Watershed as the site with the most potential as a city park (see Plate 1).

OFFICIAL MAP FOR CITY OF TUMWATER



ACTION PLAN AND IMPLEMENTATION

Activity - Census of the potential park site

Cost - \$30.00

Description - From late February until early April a general biological and physical census of the Tumwater Watershed was conducted by the Political Ecology group. This resulted in concensus decision as to which areas in the Watershed were most suitable for use by the city (see Plate 2).

Activity - Presentation to the Tumwater City Council of Park Concept

Cost - -----

Description - On April 4, the findings of the Political Ecology group were presented to the Tumwater City Council to see if there might be interest in the development of a natural environmental park. The Council passed a resolution calling for a preliminary plan for such a park in the Watershed by June, 1972. (See Appendix.)

Activity - Description of Facilities in the Watershed

Cost - -----

Description -

Pump Houses

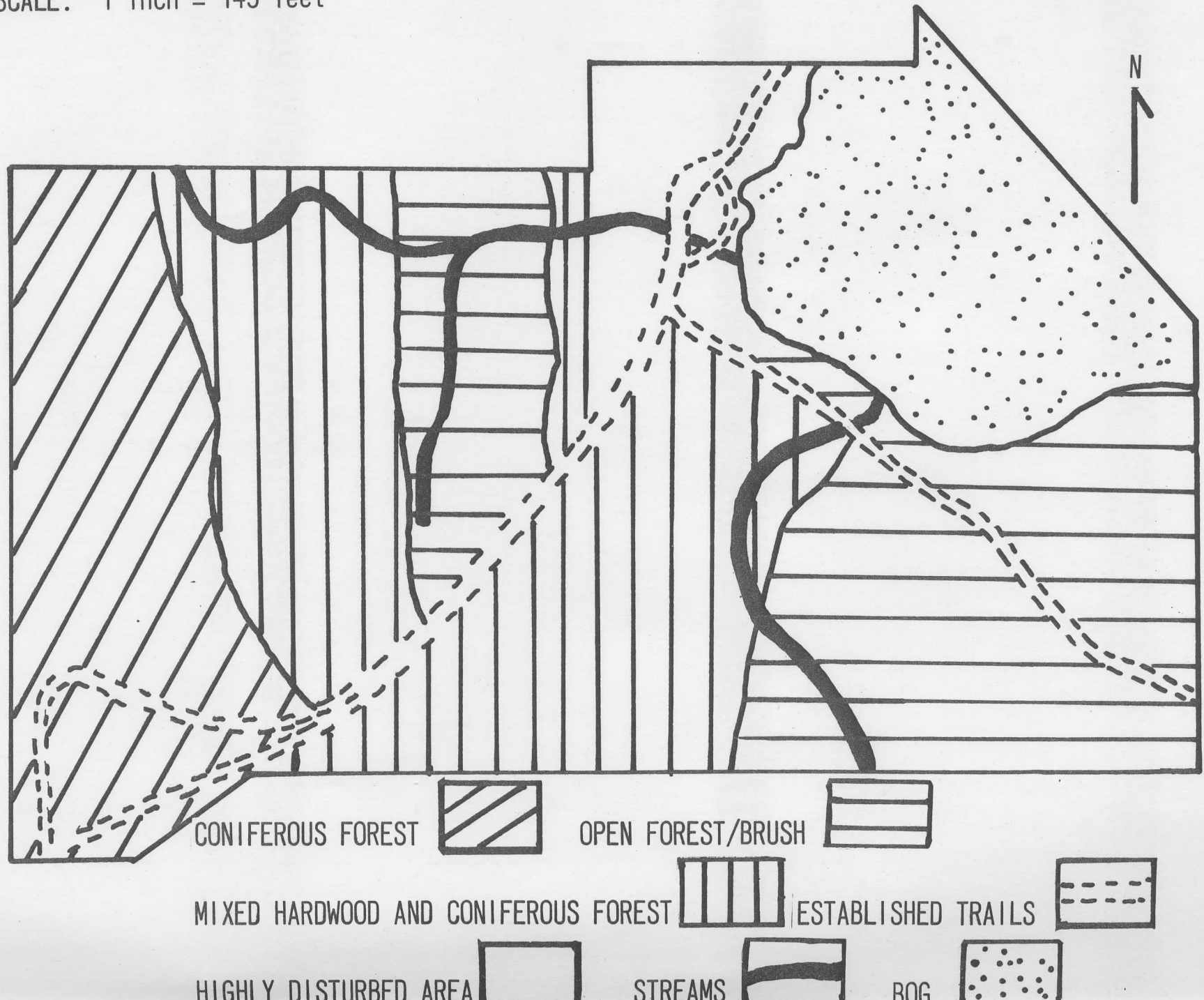
At the present time there are five buildings standing on the City of Tumwater Watershed. Four of these buildings are pump houses. We recommend that these buildings continue in their present use. We also recommend that during a later phase these buildings be painted a less distinctive color in keeping with the general character of the future park. Should it be deemed necessary by the City Council or later park plans, consideration should be given to placing chain-link or wooden fencing or shrubbery around the pump houses.

Maintainance Shop

The single large building on the park site is presently used as a workshop and storage building for large equipment by the City of Tumwater. It is anticipated that the building will continue to be used in this capacity. During the development and expansion of the park itself,

TUMWATER WATER SHED

SCALE: 1 inch = 145 feet



ACTION PLAN AND IMPLEMENTATION

the working space should be made available to the park crew in addition to normal city employee use.

At such time that this large building is no longer needed or is no longer adequate for present uses, we recommend that consideration be given to conversion of this building into an interpretative nature museum or development of the building into another role supportive of the activities designed for the park.

Present Roads

Inventory. Currently there are two roads in the Watershed. They form a "Y" in the north-central section of the Watershed near the well houses. One arm of the "Y" leads to the southwest corner of the Watershed (see Plate 2). It is currently used for foot traffic and will continue to be used for such. The other arm connects with the golf course at the eastern side of the park near the south eastern corner. This road will need improvement. Presently this road receives some truck traffic. The present preliminary plan calls for almost 90% of this road to be used for foot traffic. This is not incompatible with limited truck use.

Development. Therefore we recommend that the City of Tumwater and the Tumwater Valley Corporation decide on their future needs for this road. If there is not a clear need for maintenance of this road for limited truck activity, we recommend that the road be used solely for foot traffic. In this category it would be surfaced and maintained as described in the section on train construction.

The road forming the base of the "Y" and connecting with O Street on the north side of the Park near the northeast corner is presently used for limited automobile and truck traffic. We recommend that the City of Tumwater retain this status and maintain the road in its current condition.

Activity - Concern Over Pollution of Water Supply

Cost - -----

Description - A firm statement is necessary to reassure those concerned over the fouling of the City's water supply that this will not happen. Development of a natural, recreational area in the form of the Tumwater

park will not subject the water supply of the city to any undue environmental pressure.

The City water supply now comes from a series of artesian wells which are maintained by the city. The very nature of an artesian well makes water supply for practical purposes immune to the type of soil and water pollution that may result from development within the park. Water rises in an artesian system due to the pressure exerted upon it from within. Thus, in the case of Tumwater's water supply, this internal pressure forces the water to within 12 feet of the ground surface. Here the water is within the protection of the well casing, where it is pumped to the surface. The only way for the water supply to be fouled would be for the pollutants to enter the artesian system across the internal pressure gradient. This is unlikely enough to be considered impossible.

It should also be stated that the potential for pollution at any level will be minimal during the entire development of the park. Care will be taken at all stages to keep the disturbance of the area minimal initially in the areas of public usage, as well as later with the provision of public facilities such as toilets and parking.

Activity - Preparation of Preliminary Plan for Tumwater Natural Environmental Park

Cost - \$70.00

Description - The different aspects of park development as called for in the resolution (see Appendix) were divided among the Political Ecology group. These were researched with the potential of the Watershed and the desires and capabilities of the City in mind. This is to be presented June 19-20, 1972.

Phase I

Phase I is the projected second step, a series of steps, in securing a natural environmental park for the City of Tumwater in the present Tumwater Watershed. It is anticipated to take from June 19-September 1, 1972.

Activity - General Survey

Cost - -----

Description - A general or physical survey of the Watershed is essential to establish the true boundaries of the park. It is also necessary for estab-

ACTION PLAN AND IMPLEMENTATION

ishment of future projects and development within the park. This survey can be done by the park crew during the time allotted for Phase I. It can be done under the direction of the City Engineer with the tools and equipment presently on hand. This activity should be given highest priority.

Activity - Soil Survey

Cost - -----

Description - To insure proper use of the park area a soil survey is essential. This aids in the determination of the type of trail construction needed. It is also required in the consideration of toilet facilities specification. The survey will show the quality of soil in terms of need set by various demands. Compactness, grade of gravel (if present) and depth of hardpan will be determined.

The Soil Conservation Service in Olympia, Washington carries out these surveys as a public service. Early contact with this agency is important to insure prompt service. The park group will contact Mr. Charles Lineberry, 943-7200, ext. 373, to set a date and arrange for proper handling of the soils.

Activity - Funding

Cost - -----

Description - Acquisition of monies in addition to those budgeted by the City Council is needed to insure full development of a natural recreational park in Tumwater. The most prominent granting bodies for these kinds of monies are the Interagency Committee for Outdoor Recreation (IAC). These grants are made through the U.S. Department of the Interior, Bureau of Outdoor Recreation. Another major source of grants is from the U.S. Department of Housing and Urban Development, Open Space Land Program. In addition to these standard granting agencies, certain park developments for specialized groups such as the blind or the aged may be supported elsewhere. It would be appropriate to anticipate support in ratios of 1:1, 1:2, and 1:3.

The park group is prepared to initiate activity to find the monies for which Tumwater is qualified and how Tumwater can go about getting them. This is an extremely important part of Phase I because it can greatly stimulate later activities.

ACTION PLAN AND IMPLEMENTATION

Activity - Clean up and Restoration

Cost - -----

Description - Development of a park on the Tumwater site will necessitate cleanup and restoration to make it safe and functional for public use and to create an area which is aesthetically pleasing to the visitor.

During Phase I clearing of the two proposed trails and existing trails can be completed.

During Phase I the open space, or cleared central area near the entrance to the park, will be cleared of debris. This can be hauled away, or in some cases, burned.

During Phase I a general litter and waste clean up will be required.

During Phase I trees leaning at a dangerous angle or obviously deceased and weakened trees will be marked for removal. Large masses of brush will be removed where they are obstructions.

During Phase I that city equipment and material stored in the open space will be moved to less obvious areas in the park. Discussions will take place as to what material should be saved.

It is anticipated that the summer park crew can direct and implement this activity.

Activity - Trail Construction and Development

Cost - \$900.00

Description - Development of the Tumwater Watershed is being planned as a natural, recreational area. Possibly the most important feature of this type of environmental park is the nature trail system. Two trails are being planned now, although more may be added in the future. Trail construction and development includes preparation of the trails, placement of benches, and placement of litter receptacles.

Trails

There are two trails; one to be located in Park Section A and one in Section B (see Plate 3). Each trail possesses unique features including vegetation types.

Trail A. The soil in area A becomes soft in wet weather. Therefore it is recommended that this trail be planked to insure its year-round availability. This will also lessen the environmental pressures of the

ACTION PLAN AND IMPLEMENTATION

foot traffic. This more moist region of the park has a more fragile biological aspect to it, yet it also has greater regenerative capacity. Therefore use of this area is in keeping with the guidelines set out in the resolution of the City Council. Should a gravel based trail be constructed in this area, its closure would be recommended during much of the year.

Trail A should be planked supported by cement bases every four feet. This will provide a secure foundation for the beams and supply maximal strength to the trail.

Trail length = 337 feet
 Planking cost = \$300
Support cost = \$150
 Material cost = \$450

Trail B. The soil base for Trail B is quite firm. It is recommended that gravel be used for the trail material. The vegetation in this area is also less fragile, not requiring the protection of the planking.

Trail length = 900 feet
Gravel Cost = \$3.50/cubic yard
 Material cost = \$250

The labor and equipment to define and construct trails A and B should be available during the summer months of 1972 to the City of Tumwater.

Benches

Benches should be located along the trails. The sites for these locations were chosen to allow closer observation of the natural attributes of the trail system and to provide visitors a chance to rest at various points. Seven benches are planned (see Plate #3). The benches will be cedar planks secured in standard cement frames.

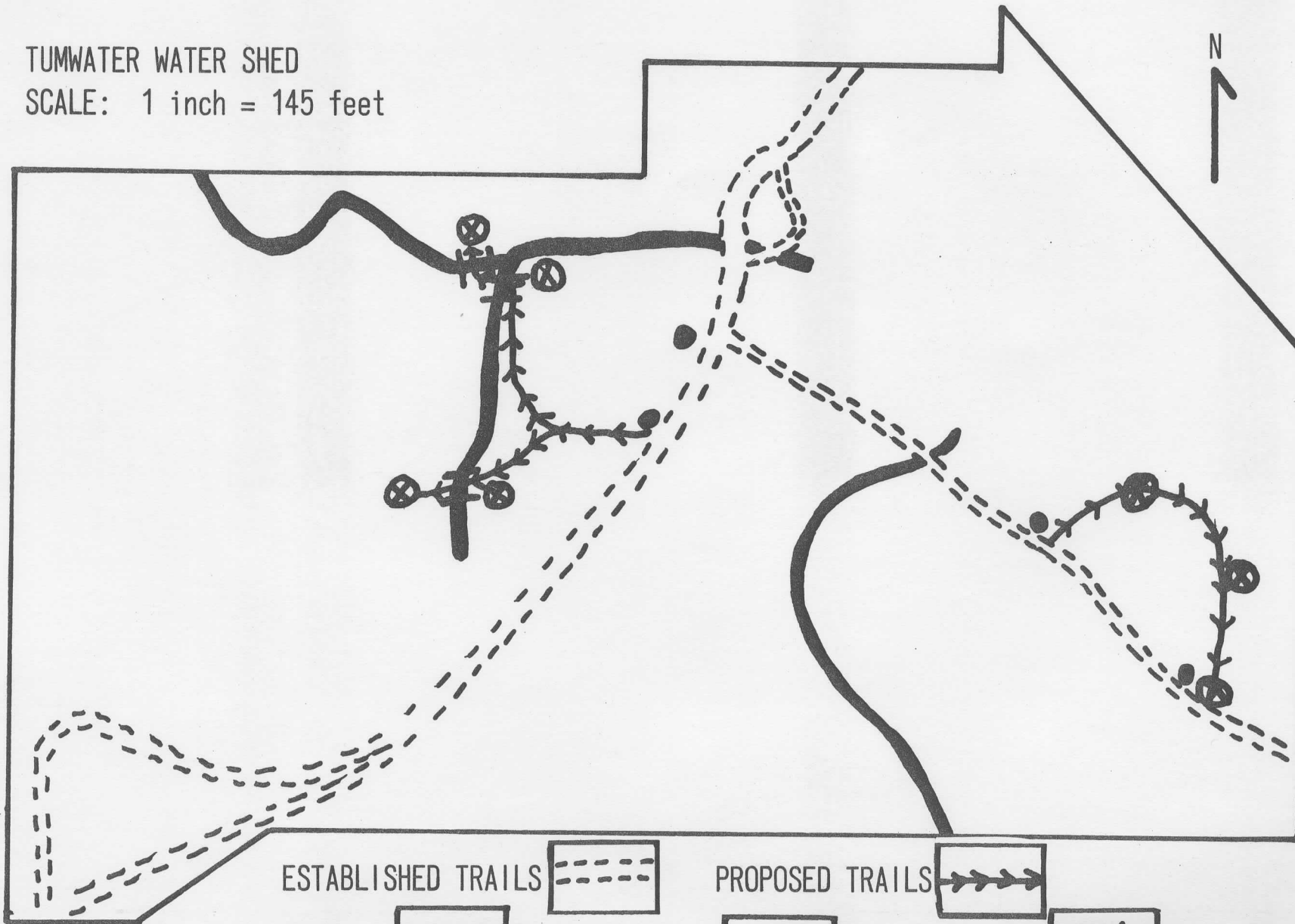
Cedar Bench Planking (2"x6") cost = \$2.25/bench (7 benches)
Bench Frame Cost = \$15.00/pair (7 benches)
 Material Cost = \$120.00

Signs

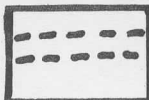
There should be signs along the trails pointing out the various vegetation types and components. Signs are an important part of every

TUMWATER WATER SHED

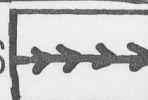
SCALE: 1 inch = 145 feet



ESTABLISHED TRAILS



PROPOSED TRAILS



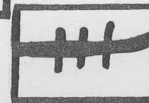
STREAMS



BENCH SITES



BRIDGES



GARBAGE CANS



ACTION PLAN AND IMPLEMENTATION

park. They supply information about items in the park which are of interest to the visitor. Signs need not be unattractive and confusing. They can be made to blend in with the surroundings, yet still be informative and easy to understand. One all-weather bulletin board should be placed near the point of origin of the two trails. This will provide public information on usage regulations in the park as well as trail information. Trail signs can be made of hardwood with routed letters. These are inexpensive and weather well.

Wood sign cost =	\$15.00
<u>Bulletin Board cost =</u>	<u>\$25.00</u>
Sign Material Cost =	\$40.00

Activity - Local Participation

Cost - -----

Description - Successful establishment and development of a recreational area such as the "Tumwater City Park" requires, among other things, local participation. Participation can come in the form of money, ideas, and physical support. All of these areas should be explored during all phases of the development of the park and used to their full advantage at the opportune times.

During the initial phase(s) of park development, it is recommended that specific tasks and activities be considered in terms of various local service organizations. Preliminary maintenance and physical modification planned and directed of park personnel might well benefit all parties concerned.

Other group activities can be considered in late phases of park development which deal with special interest groups in the local area. Here advice and assistance, for example, in the areas of gardening, horticulture, bird watching, and general wildlife can often be provided by local experts with a sense of local participation. This should be explored thoroughly since often this support can be backed financially, ideologically, and physically by the specialized interest groups.

Finally, public participation should be encouraged as one input toward support for present and future development of the park. This can take many forms, such as questionnaires, surveys, and polls. These should be considered carefully by park personnel and city officials.

ACTION PLAN AND IMPLEMENTATION

Activity - Security

Cost - -----

Description - In order to keep vandalism down as much as possible, certain security and prevention measures are necessary. At the same time, these measures should not interfere with the activities the park was intended to provide.

Anticipating vandalism will help to minimize it. Any building on the site should be built as strongly as possible but at the same time as cheaply as possible. Bricks and concrete blocks would seem to be the best materials for any structures that are to be built in the park. But bricks and concrete, when damaged, are almost impossible to mend without leaving some visible patchmarks. Wood, on the other hand, can be replaced without leaving any signs of the vandalism and is easier to repair. Any vandalism that does occur should be repaired as quickly as possible because leaving signs of vandalism often encourages more destruction to the structure.

Motorcycles are often a problem in parks of this nature. They are also extremely difficult to control without making the park less usable for others. By obstructing the trails with periodic logs or other materials, the handicapped would be prevented from using them. Also, the motorcyclists usually just go around the barriers destroying surrounding vegetation. Consequently, the general practice in most parks of this type is to create and post rules against the use of motorcycles in the park and enforce the rules whenever possible.

The city of Tumwater has certain ordinances that will limit the kinds of domestic animals that will be allowed in the park. Dogs will have to be on leashes and be licensed. Horses, sheep, cattle, etc., will not be allowed as the park is within one hundred and fifty feet of private residences. These ordinances are to the benefit of the park as these animals could cause quite a bit of damage to the vegetation in the park.

As in most towns, the park will most likely be patrolled by the city police on their regular rounds of the residential area that surrounds the park. This would not add any noticeable cost to security for the park. The park will also be "patrolled" to some extent by the people that live

ACTION PLAN AND IMPLEMENTATION

around the park as most of the park equipment will be in view of the surrounding houses. The cost of having some sort of paid employee to supervise or guard the park would be more than the amount of vandalism that will probably take place.

In a later phase of the park, a seven hundred and fifty foot chain link fence (six feet high) could be constructed across the west side of the park (see Plate #4). An estimate of the cost of the materials for this fence is \$1450.00.

Activity - Toilets and Drinking Fountains

Cost - -----

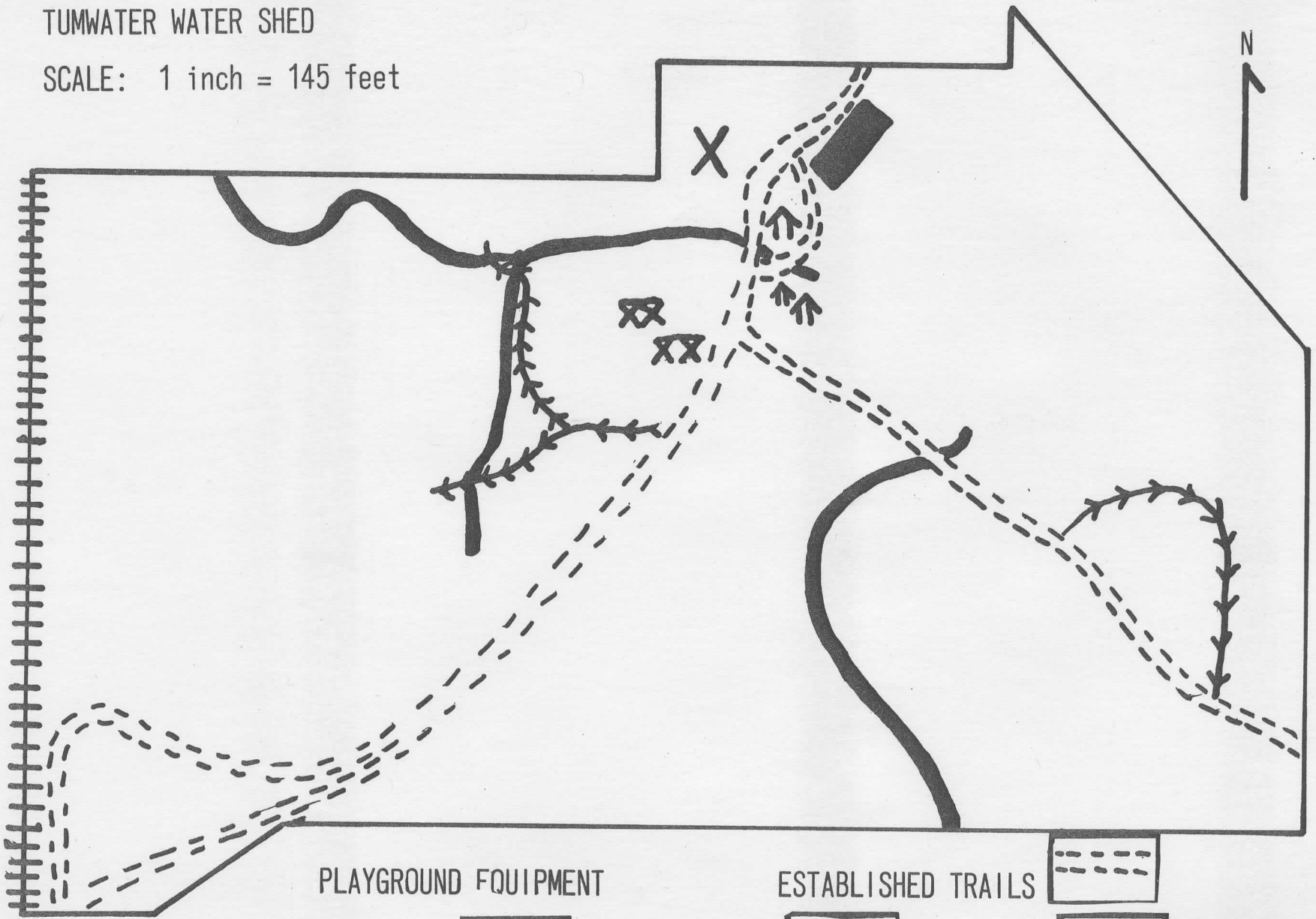
Description - In the planning of a public use area it is important to consider public health requirements, as well as public demands and needs.

The subjects of public toilets and drinking fountains are covered by Washington State Board of Health standards, as well as county and city ordinances. The importance of these toilets and fountains is understood. However, the type of toilet facilities to be provided depends heavily upon the results of the soil survey. The matter of drinking fountains also is dependent upon further investigations. The point should be made clear here that the park can be developed as described in Phase I and opened initially without these features. However, this area must be investigated fully to meet later requirements.

Washington State Board of Health Standard 72.050 (Toilets and Hand Washing Facilities) states (4b) "For Parks - the number of toilet units in parks shall be sufficient to adequately meet the demands of users." Minimum demands are placed at one toilet for each 25 female "users" and one toilet and one urinal for each 40 male "users". The Thurston County Health Department must make a site visit before and after completion of the toilet facilities. It is anticipated that the local use of the park by the citizens of Tumwater will allow initial development of the parksite without toilet facilities. Pending the results of the soil survey, specific recommendations will be made as to the type, cost, and location of toilet facilities and drinking fountains on the park site.

TUMWATER WATER SHED

SCALE: 1 inch = 145 feet



PLAYGROUND EQUIPMENT

ESTABLISHED TRAILS

BUILDINGS

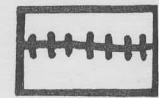
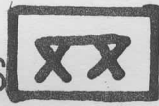
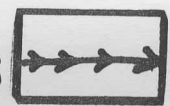
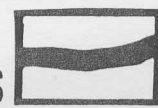
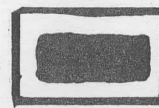
PARKING LOT

STREAMS

PROPOSED TRAILS

PICNIC SITES

FENCE



ACTION PLAN AND IMPLEMENTATION

Activity - Maintenance

Cost - -----

Description - With development of the park there will be maintenance duties to preserve the appearance of the area. After Phase I is completed there is need for maintenance of trails and grassy open areas, as well as disposal of litter in the park.

Such duties will not require the city to hire employees to maintain the park, but through budgeting of time, those already employed by the city could fulfill the maintenance responsibilities for the park. At this time, the city is cutting the grass in the open area and this can continue to be done. The trails need simple attention, but must be kept cleared, clean and safe for park use. And with litter receptacles located throughout the park, it is necessary for disposal of accumulated waste. Present city activities and hiring policies presently in use in the watershed area should be adequate for this activity.

After increasing development of the park new maintenance needs will arise. Our suggestion for handling this future situation would be hiring of a supervisor of parks or creation of a park commission. Such positions could better evaluate and remedy later issues arising from further park development.

Phase II

Phase II includes the more ambitious development of the Tumwater Watershed. Two of these items, playground equipment, and parking, involve the expenditure of large sums of money and thus may be contingent upon the securing of grant funds. The other items are considered important, but possibly not feasible during the time allotted for Phase I.

Activity - Playground Structures

Cost - \$1000-\$1500

Description - The proposed natural, recreational area is approximately twenty acres consisting of a diverse flora and fauna. The first park in Tumwater should complement and enhance the site's aesthetic, as well as utilitarian, value. Augmenting the natural balance is the concept behind development within the area. To this end we should continually guard the natural systems within the park and also blend any necessary structures as closely as possible into the surrounding environment.

Objectives

In deciding the type of playground structures best suited for the park several factors were kept in mind:

- 1) the necessity of structures which complement the park and are aesthetically pleasing
- 2) the need for creative play that children will enjoy
- 3) the necessity of budget approval

Location

Construction and erection of playground structures requires a large open area (see Plate #4). Such an area now exists near the O Street entrance to the Watershed. It measures approximately 150 feet by 200 feet and lies immediately to the west of the road leading to the well houses. This area would require no further clearing. It is also large enough to accommodate other development suggested for this part of the parksite (picnic tables and shelters).

Designs and Designers

Three major equipment designers were examined in the preparation of this statement. Miracle Equipment Company, Grinnell, Iowa; Timberform, Nieder Meyer-Martin Company, Portland, Oregon; and Northwest Design

ACTION PLAN AND IMPLEMENTATION

Products, Tacoma, Washington 98421.

At this time, Northwest Design Products (or Big Toys) appears to have a product most suited for a natural, recreational area such as the one planned for Tumwater. Their structures are made mainly of cedar logs and metal pipe components which can be made into a multitude of imaginative designs. Development can be geared to a specific budget. The finished product would be harmonious with the concepts of the projected park. Maintenance to these structures is considered minimal. The proximity of the home company also reduces demand problems. Phase approaches can be used in the engineering and construction of these structures. This can take place over a period of years as necessity and budget dictate.

The following are examples of three plans that can be implemented over a one to six year period to provide playground structures for 10 to 30 children of all age ranges.

<u>years</u>	<u>phase</u>	<u>cost</u>	<u>approx. # of pieces</u>	<u># of people accommodated</u>
1-3	a	<u>\$1,000</u>	3-5	10-20
1-2	a	500		
2-5	b	<u>800</u>		
		<u>\$1,300</u>	4-6	15-25
1-2	a	600		
2-4	b	400		
3-6	c	<u>500</u>		
		<u>\$1,500</u>	4-6	15-30

Activity - Picnic Tables and Shelters

Cost - \$450-900

Description - Picnic tables and shelters will provide an additional dimension of use to the park as a natural, recreational area. The placement of picnic areas at the edge of the open space (see Plate 4) shifts this one specific usage away from the trail system. This will result in the trails being open (not congested) for greater periods of time. This location for the picnic tables will also provide seating and a view of the playground equipment, should it go in, for those responsible for children using the park. The shelter over the tables will supply protection from the weather.

ACTION PLAN AND IMPLEMENTATION

The open wooden shelters (see diagram) would be in keeping with the theme of the park (see Plate #5). Hopefully some of the construction materials could be saved from the earlier developmental projects in the park.

Picnic tables of 3" cedar on a concrete base are recommended for durability and security. Three tables per shelter would be a maximum concentration.

Shelter Material = \$250.00

Tables and Base Material = \$200.00 (3 tables/shelter)

Materials Cost = \$450.00

Two shelters is the maximum number recommended for initial consideration in the open space section of the park at this time.

Activity - Parking and Arterial Street Improvement

Cost - \$250.00

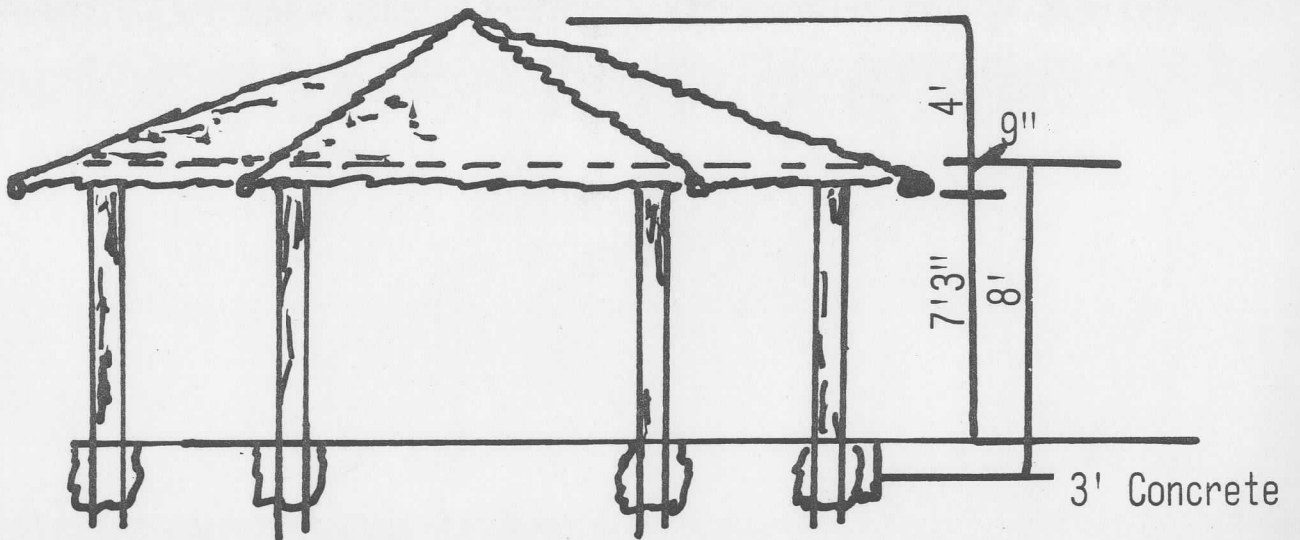
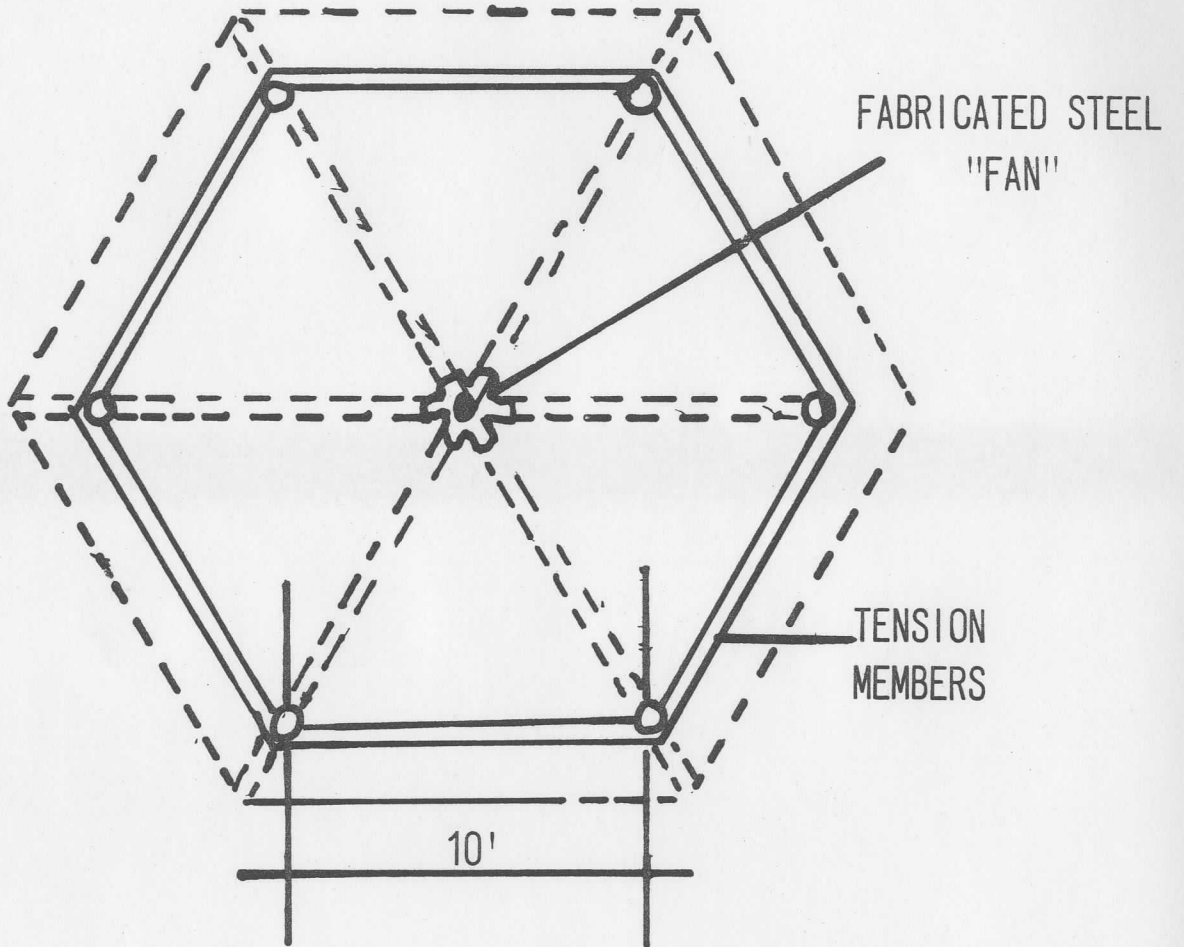
Description - Because the park is not located in the center of Tumwater, many people may be driving to the site. Because of this, parking space should be considered. Available land for parking spaces is limited. The first parking will be provided in an area just left of the entrance (see Plate #4). At the present there is room for approximately ten to fifteen cars (ten feet by twenty feet for each car).

As the park is expanded, the need for more parking space will probably arise. There are only two open spaces in the park that will be suitable for parking. One is to the right of the entrance which is a grassy field. This area will be better used as a place for playground equipment. The other area is to the left of the first parking site. It is a swampy area and will not use up valuable open space.

To make the primary site usable for parking, some piles of dirt will have to be removed and boundary logs set down. Crushed rock at about three and a half dollars a cubic yard could also be easily used to cover the parking lot. To cover the lot three inches deep, fifty cubic yards of rock would be needed (a total of \$250.00 for crushed rock).

None of the surrounding arterial streets will have to be modified or improved when the park is finished. The city engineer of Tumwater said that M Street and Palermo Avenue can both handle two thousand cars a day which is far above the number expected at the park.

PICNIC SHELTER



ACTION PLAN AND IMPLEMENTATION

Activity - Educational Display

Cost - \$70.00

Description - Displays are essential to every park. They supply valuable information about the park as well as being educational.

An outside bulletin board should be placed inside the entrance of the park or at a central point, such as where the trails begin, as described in Phase I. This all-weather bulletin board will have a map of the park on it; this will inform people as to the location of trails and points of interest.

A nature display can be made out of what is naturally in the park. For example, a tree stump can be used to show the growth of a tree.

A map will be placed at the beginning of each trail showing the route the trail takes and special items to be found along the trail. Signs will be placed along the trail pointing out various types of trees, vegetation and other points of interest.

Outdoor displays should be placed under the supervision and coordination of City Park personnel. The need for this useful feature of a natural, recreational area indicates the importance of some responsible authority in this area.

Activity - Landscaping and Beautification

Cost - \$250.00

Description - Landscaping should be done with the concept of a natural, recreational area in mind. Thus, any disturbance due to construction of the trail sites should be encouraged to return to a natural state. In the general entrance area, a perimeter of trees should be considered. Here native species and general ecological interest can be incorporated into the plans. Such living tree displays are of great educational value. Shrubbery around the various well houses and the shop may be useful for esthetic, educational, and protective reasons.

Activities such as these may well fall in line with capabilities of different service organizations in the Tumwater area. Plans to defray costs of purchase and maintenance should be explored to this end. Costs for this kind of activity are quite flexible and thus dependent on many variable parameters.

ACTION PLAN AND IMPLEMENTATION

Activity - Painting and Fencing Well Houses

Cost - \$100 (Painting) and \$1500-\$2000 (Fencing)

Description - Painting the four well houses and the shop building a more complimentary color will be more in keeping with the nature of the park. The buildings as they now appear (blue) tend to stand out and draw attention away from the natural attributes of the area. This activity can be included for consideration in the area of Local Participation. Cost estimates include paint and brushes or rollers based on the surface area of the present buildings.

Protection of the well houses on the park site should also be considered. This has been discussed briefly under the activity Landscaping. It is suggested that metal (chain link) fencing be used if living material is not used. The lack of maintenance and high initial cost of metal fencing must be balanced against the continual maintenance, reasonable cost and intrinsic beauty of the plant material. The decisions of fencing and the type of fencing should include reports as to the degree of vandalism to the well houses and shop. If the report indicates minor damage, no protection or planting should be done. High rates of vandalism may necessitate use of metal fencing. Cost estimates are based on perimeter measurements of the buildings presently standing.

ACTION PLAN AND IMPLEMENTATION

Phase III

Phase III would complete development of the natural, recreational park in the Tumwater Watershed. Planning and initiation of this phase depends upon much input in terms of region needs. The Watershed development can never completely fill the city's recreational needs. It will provide the initial step in this direction and it can, in conjunction with other small parks, serve the need of this community for recreational space. However, it is possible that this park could fill an educational void in the general region. Decisions at this level involve large sums of money and great time commitments on the part of many people. It is not inconceivable to suggest this be looked into. However, it is beyond the capability of this group to make more than this suggestion.

It would be possible to develop a compact, environmental park with a staff of resident ecologists. This plan would need broad support on a local and regional level. The original plans as outlined in the Preliminary Activities and Phases I and II would support either this grander educational effort or the limited sequential recreational development using series of smaller neighborhood parks.

ACTION PLAN AND IMPLEMENTATION

Budget

The budget for the development of the Tumwater Watershed into a natural, recreational park is based on cost approximations. In many cases prices may be reduced by seeking local participation or by using natural materials. The estimates cited here have been rounded to the higher price. Their inclusion is meant to be illustrative. At the present time more thorough investigation is taking place to update the figures. The prices are based on materials. Labor costs have been omitted. Some areas have not been budgeted. This was done when situations with grossly incomplete information existed. Also many areas will have little or no cost involved to make the required recommendations. We hope this budget will provide another means of evaluation of the potential of this project.

<u>Phase</u>	<u>Dates</u>	<u>Cost</u>
Preliminary Activity	February-June 1972	\$100.00*
Phase I	June-September 1972	\$900.00
Phase II	September 1972 -	\$3620 - \$5070
Phase III	-	-

*Not charged to the City of Tumwater.

APPENDIX A

THE EVERGREEN STATE COLLEGE

March 8, 1972

MEMORANDUM

To: Dick Nichols, city councilman of Tumwater
From: Tom Boley, Oscar Soule, for the Political Ecology program, TESC
Subj: Tumwater Park

C
O
P
Y

On February 5, we made a general survey of the city of Tumwater examining nine various areas where possibilities of Park construction existed. Our hosts, councilman Larry Nicholson and Jim Brown, Superintendent of Public Works, along with Dick Nichols, seemed anxious to see us do something with one of the areas.

On February 12, the following Thursday, we gathered interested students and toured the park sites, choosing the Tumwater Watershed Area most suitable for our interests and those of the City of Tumwater. At that time we surveyed the eastern half of the watershed. The concepts of the park were well accepted by the students.

February 24 we organized our special interest group to meet with John Robischon, city engineer, who has supplied us with two ft. contour maps of the area. Actual mapping of vegetation and noting of soil structure were started in an attempt to organize a system of priority selections for trails.

When all the information is gathered, we will have solid ideas of where trails may be constructed with least hazard and alteration of the natural beauty of this area.

We have generated the interest, and are now starting the general study of the area. We are excited, and we hope we can help create a new park for a better appreciation of nature and also provide a refreshing series of walks for the people of Tumwater.

C O P Y

RESOLUTION _____

WHEREAS, The City of Tumwater is interested in the development of outdoor recreation facilities for the benefit of the residents of the city; and

WHEREAS, The City of Tumwater holds ownership of a relatively undeveloped parcel of land generally referred to as the watershed or well field; and

WHEREAS, said watershed apparently is suitable for careful development as a natural environmental park; and

WHEREAS, students and faculty members from The Evergreen State College have graciously offered to help develop and execute a plan for a careful and tasteful use of the watershed area as a natural environmental park; and

WHEREAS, these special services would be mutually beneficial to the City of Tumwater and students of The Evergreen State College, who would receive academic credit for their work: now, THEREFORE BE IT RESOLVED:

That students and faculty in The Evergreen State College Political Ecology Coordinated Studies Program be authorized to undertake a special developmental study for the potential recreational usage of the Tumwater Watershed, said study to include but not be limited to the following:

1. A survey of the natural characteristics of the watershed area, including an inventory of its natural attributes and present uses.
2. Identification of natural flora and fauna in the watershed.
3. Based on studies of the area, submit a potential usage plan to the City Council of the City of Tumwater, said plan to emphasize the watershed's unique environmental characteristics through development of a natural trail system and through minimum disruption of the area's ecosystem. Said plan also should include:
 - A. Potential long-range recreational usages of the area, taking seasonal factors into consideration.
 - B. Short-range recreational usages of the area, taking seasonal factors into consideration.
 - C. Priority listings of staged short-range and long-range development.
 - D. A suggested timetable for development.
 - E. Potential costs for implementing both long and short-range plans, including suggestions for manpower to undertake various phases of the work.
4. Ways in which development of the watershed area as a natural environmental park might be accomplished with minimum problems in terms of security for the area and

in terms of the discarding of waste material by park visitors so as not to threaten the present natural attributes of the site.

BE IT FURTHER RESOLVED, that the students and faculty of The Evergreen State College who are involved in this special project will make periodic reports to the City Council of the City of Tumwater, with at least a preliminary set of recommendations made available by the end of the college's Spring Quarter, in June, 1972.

BE IT FURTHER RESOLVED, that the students and faculty of The Evergreen State College, who are undertaking this work at no cost to the City of Tumwater, be able to secure reasonable and needed assistance for the project from city staff members, particularly in terms of consultation and advice.

Approved this fourth day of April, 1972 by the City Council of the City of Tumwater.

Wesley L. Barclift, Mayor

THE EVERGREEN STATE COLLEGE

POLITICAL ECOLOGY PROGRAM

This study program deals with the nature, manipulation, and regulation of man's environment, as viewed from the perspectives of biological and physical sciences, anthropology, socioeconomics, political science, and law. In addition to helping students develop various communicative and investigative skills, the program aims to develop (1) a competency to examine, judge, and, in some instances, measure the accumulating mass of evidence pertaining to the environment; (2) an understanding of man's views and impact on the system around him; and (3) an understanding of man's ability to alter his ecosystem through physical and legal means.

Study techniques in the program include lectures and films, seminar discussions, individual activities (including special papers and project work), team activities (such as the Tumwater Park project or a special study for the U.S. Bureau of Fisheries and Wildlife of the Hood Canal area), and field trips. The program was designed for lower division students with interests in both scientific and social-economic aspects of man's environment. Those who complete the program will be prepared to take up further studies at Evergreen dealing with the environment and public affairs.

Tumwater Park Project Faculty Team Leader Oscar Soule came to Evergreen in September, 1971 from St. Louis, Missouri, where he was an instructor of Ecology at Washington University, and a research associate for the Missouri Botanical Garden. He received his bachelor's degree in biology from Colorado College; his master's of zoology from the University of Arizona, and his doctorate in ecology from the University of Arizona.

Other Political Ecology faculty members include Fred Tabbutt (physical sciences), Dave Milne (biology), Edward Kormondy (biology and ecology), and Richard Anderson (law).

Student members of the project team:

Tom Boley (Bellevue), John McCombs (Bremerton), Andy Bates (Snohomish), Karen Hansen (Longview), Terri Short (Olympis), Brian Bartholick (Seattle), Bob Thomson (Olympia), Scott Salzer (Seattle), and Jeff Anders (Longview).

