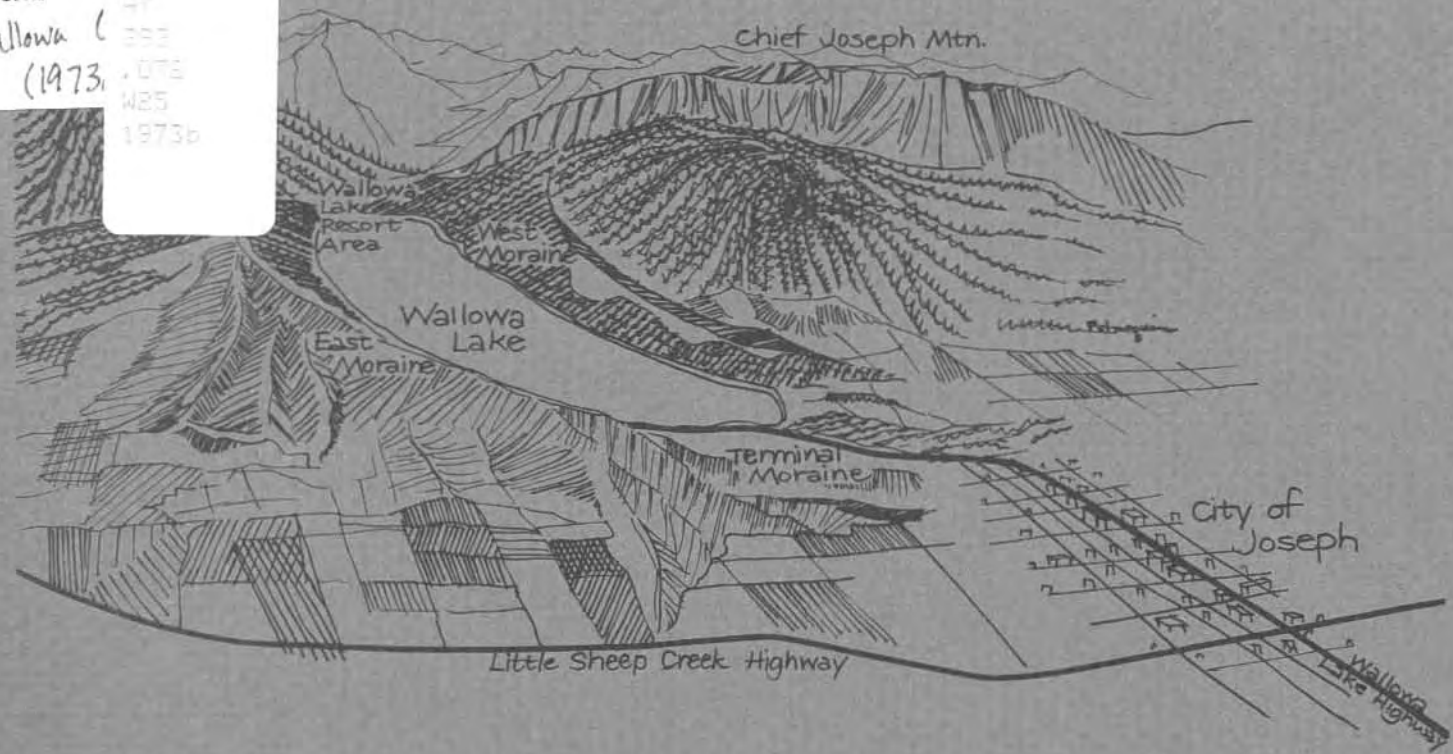


DOCUMENTS
LOCAL
Wallowa (1973)
1973b

Comprehensive Plan 701



Wallowa Lake Basin Comprehensive Plan

Technical Supplement

May 1973



prepared by
Stevens, Thompson & Runyan, Inc.

BIBLIOGRAPHIC DATA SHEET		1. Report No. LGR-72-13-02	2.	3. Recipient's Accession No.
4. Title and Subtitle Wallowa Lake Basin Comprehensive Plan Wallowa Lake Basin Comprehensive Plan/Technical Supplement				5. Report Date May 1973
7. Author(s) Stevens, Thompson & Runyan, Inc. Engineers/Planners				6.
9. Performing Organization Name and Address Stevens, Thompson & Runyan, Inc. 5505 S. E. Milwaukie Ave. Portland, Oregon 97202				8. Performing Organization Rept. No. P-863.001
12. Sponsoring Organization Name and Address Department of Housing & Urban Development 701 program administered by Executive Dept., State of Oregon, 240 Cottage St. S. E., Salem, Oregon 97310				10. Project/Task/Work Unit No.
				11. Contract/Grant No. CPA-OR-10-16-1006
15. Supplementary Notes Prepared in cooperation with the Wallowa County Court, Wallowa County Planning Commission, and Citizen Advisory Committees.				13. Type of Report & Period Covered Final 1973-
16. Abstracts (See back of page)				14.
17. Key Words and Document Analysis. 17a. Descriptors The Wallowa Lake Basin Comprehensive Plan consists of three basic work elements: (1) Land Use Plan Element, (2) Community Facilities, and (3) Zoning Ordinance Review.				
17b. Identifiers/Open-Ended Terms The word "plan" as used in the report should refer to the entire document. The Land Use Element is composed of the following considerations: historic, economic, population, existing land use, land use suitability such as geology, soils, slope, and natural amenities. The Community Facilities include preliminary designs for water and sewerage facilities. The Zoning Ordinance Review proposes changes in the ordinance in order to conform to the Land Use Plan.				
18. Availability Statement Write: Wallowa County Courthouse, Enterprise, Oregon 97828			19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 53
			20. Security Class (This Page) UNCLASSIFIED	22. Price Unknown

Abstract

The Wallowa Lake Basin Comprehensive Plan contains a Land Use Plan for long-range development and environmental protection of natural and scenic amenities in the basin area. The Land Use Plan also outlines service areas for provision of public water and sewerage facilities. These services are necessary to public health and safety as well as in preserving the high water quality of Wallowa Lake. The Public Facilities portion of the Plan includes preliminary designs for water and sewer showing general location and type of facilities necessary and cost estimates. Limited development will continue on the south, west, and north side of the lake. A sewer collection system will serve these areas and will connect to the City of Joseph's system. A separate water system will serve the south and west portion of the lake while an improved Joseph water system will serve the north shore area. In light of the Land Use Plan, recommendations for updating the County Zoning Ordinance have also been suggested.



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Portland
Seattle
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Spokane

P-863.001

May 30, 1973

Board of County Commissioners
Wallowa County Courthouse
Enterprise, Oregon 97828


Gentlemen:

Pursuant to our agreement of June 1972, we have completed the planning and engineering studies necessary for the development of the Wallowa Lake Basin Comprehensive Plan. The outcome of these studies, namely the Land Use Plan and Community Facilities Plan, is presented in two publications. The general discussion of the Comprehensive Plan was published in a form which would allow easy dissemination to the public. This technical supplement was compiled for use by County Officials and contains additional data and explanation, especially in the area of proposed water and sewerage facilities.

We appreciate having had the opportunity to be of service to the Board and to the citizens of Wallowa County.

Respectfully submitted,

STEVENS, THOMPSON & RUNYAN, INC.


Thomas R. Hawkins, AIP
Senior Planner

TRH:jb

WALLOWA LAKE BASIN
COMPREHENSIVE PLAN

TECHNICAL SUPPLEMENT

MAY, 1973

The preparation of this report was financed in part through a comprehensive planning grant from the Department of Housing and Urban Development.

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INTRODUCTION

STUDY BACKGROUND

The study to develop a Land Use Plan and a Water and Sewerage Plan for the Wallowa Lake Basin was authorized by the Board of County Commissioners of Wallowa County in June 1972. Initiation of the study came as a result of local concern over the potential pollution of Wallowa Lake from additional development and increased recreational use of the lake basin area.

Funding for the study was secured through the "701" Comprehensive Planning Program as administered through the State of Oregon. In addition, Wallowa County participated by providing a one-third matching share through related services performed by County personnel.

This technical supplement is intended to supply additional data which was not possible to present in the primary publication of the Comprehensive Plan, since that presentation was designed for the purpose of general public distribution. Specifically, this supplement provides a more detailed analysis of the proposed water and sewerage facilities which are of paramount concern to County Officials.

SCOPE OF THE STUDY

The basic overall goal of the study was to provide an environmental protection plan for the Wallowa Lake Basin. More specifically, this meant the formulation of a development plan for the lake basin while, at the same time, providing proper safeguards to protect the environment, namely the water quality of the lake and the natural, scenic amenities of the area. This was facilitated through three general tasks:

1. Development of a Land Use Plan;
2. Development of a Water and Sewerage Facilities Plan; and
3. Review of existing zoning policies as they would be affected by the Land Use Plan.

The specific objectives under each of these tasks could be summarized as follows:

Land Use Plan

1. Determine suitable development areas;
2. Specify desired land uses; and
3. Determine appropriate density levels.

Water and Sewerage Facilities Plan

1. Develop service areas based on the Land Use Plan;
2. Identify appropriate water sources;
3. Provide an overall plan showing storage facilities and major transmission lines;
4. Provide an overall plan for sewage collection illustrating major collection elements and appropriate treatment facilities; and
5. Prepare cost estimates for both water and sewerage facilities.

Zoning Ordinance Review

1. Review of the existing ordinance making general recommendations as to possible changes which would adequately relate the Ordinance to the Land Use Plan.

STUDY AREA

The study area can generally be defined as the Wallowa Lake Basin, the City of Joseph, and their environs within an approximate two-mile range. The boundary for this area, which is shown on the land use map in the main publication, was chosen somewhat arbitrarily; however, it was the intention to include enough area outside the immediate lake drainage basin in order to relate proposed land uses within the lake basin to those of the surrounding area.

PLANNING PROCESS

DATA COLLECTION AND ANALYSIS

Actual work on the study was initiated with a joint meeting of the Board of County Commissioners, County Planning Commission, and the Lake Public Works Committee. At this time, the basic objectives of the program were outlined and a time schedule was established.

Data collection first began on the local level in Wallowa County and concluded with a survey of state and federal agencies. The basic objectives of this investigation were to collect, for later analysis, all data and/or studies relating to the study area and to advise agencies and offices of the nature of the study so they might provide input into the planning process if they so desired. The following comprises a list of agencies and offices contacted:

- County Watermaster
- County Health Officer
- County Surveyor
- County Agent
- City of Joseph
- State Parks Department
- State Water Resources Board
- State Engineer's Office
- State Health Department
- Fish and Game Department
- Department of Environmental Quality
- Department of Geology and Mineral Resources
- U.S. Geological Survey
- Federal Forest Service
- USDA Soil Conservation Service

In addition to this investigation, a "windshield" land use survey of the study area was conducted with the aid of the County Surveyor. This task was performed in order to establish existing development types, densities, and trends.

Existing land use along with various data collected was analyzed in terms of development suitability. Where possible, this data was either quantified and/or mapped. The result of this analysis was the formulation of two alternative land use proposals. These proposals

were presented through a preliminary publication to citizens and County Officials in order to generate discussion, interest, and greater participation in the planning process.

ALTERNATIVE PROPOSALS

Although both proposals were viable alternatives in that each would accommodate future land use needs, they were significantly different in their direction. It was felt that the differences in the two plans would also help generate more public response; therefore, the citizens of the area were asked to respond with their ideas and preferences. Essentially, the public was being asked to decide how much development was appropriate for the area and where it should be allowed to occur.

Both alternatives, although different in terms of long-range development patterns, have basic similarities, since the development suitabilities within the lake basin were limited. These similarities were as follows:

1. The City of Joseph would expand primarily to the north and east.
2. More residential use would be encouraged in the north shore area. This area would also be provided with water and sewer service.
3. Wallowa Lake would be protected against pollution from subsurface sewage disposal.
4. Portions of the east moraine would be protected from development by the creation of a special "open space" zone.
5. The productive agricultural area within the study would be placed in an agriculture zone to protect farming interests from encroachment of incompatible land uses.
6. The south lake resort area would be encouraged to expand to accommodate a peak population of approximately 2,500 persons. This could be achieved by increasing the number of permanent residences and vacation units. This would produce a density of five persons per acre which is low enough to retain the natural character of

the area, yet it is an adequate density to economically support public water and sewer systems.

Alternative A

Essentially, this alternative recognized the emerging development trend on the west moraine. Presently, there are about 30 homes scattered along this moraine of which all but three or four are vacation cabins. This plan would have promoted additional development in this area creating an overall density of seven to eight persons per acre at peak usage.

Although the topography of the area is not particularly conducive to development, it was possible to continue building in a linear fashion following the existing road. This would provide a row of dwellings above and below the road where terrain allows. Development based on the existing subdivision pattern would accommodate over 200 homes or between 700-800 persons. The west moraine, unlike the east moraine, contains a great deal of natural foliage. Although development of this scale could not be totally concealed, the abundance of trees would certainly help to soften the visual effect.

This plan would certainly provide more access to the lake, but it would at the same time significantly increase the use of the lake for various boating activities. The public was asked to carefully evaluate this additional population and subsequent lake usage.

Alternative B

If Alternative A were to be called a development oriented plan for the lake area, then Alternative B could have been termed environmentally oriented, since this alternative precluded the allocation of additional lands for development within the immediate lake area. Instead, the plan favored creating a new recreation development at the base of Mt. Howard on the far eastern slope of the east moraine.

As in Alternative A, the south lake resort area and the north shore area would have been encouraged to develop. However, limitations would have been placed on further development on the west moraine. Like the east moraine,

it would have been placed in an open space classification, thus maintaining the natural character of the lake almost as it is today.

The new proposed recreation area would have been developed in an area which has suitable slope, soils, and natural vegetation. There is a sizable amount of land which could sustain a greater amount of development than proposed in Alternative A for the west moraine. This development could have occurred without infringing on productive agricultural land or on the scenic area of the east moraine.

In addition, this area could have been oriented toward the skiing potential on the east side of Mt. Howard. As such, it could have provided facilities, such as condominiums and convention accommodation, which the south lake area does not contain. In this manner, the two areas could have provided complementary facilities rather than competing facilities. This area would have been envisioned as a planned development utilizing the natural environment to create an aesthetic setting.

PROPOSED PLAN

Considerable response, both verbal and written, was received concerning these proposals. Most of the response came during various public meetings, although some replies were received on an individual basis. The end result was the development of a third alternative which seemed to best satisfy the desires of the public and of County Officials.

Essentially, Alternative A best met the desires of the community with some modification. The modification was the provision for two rural residential areas outside of the lake basin area. However, these areas were to have a ten-acre minimum lot size, so public water and sewerage facilities would not be necessary.

Rationale for this plan was primarily based on the local feeling that the west moraine, although not the most suitable development area, was for all practical purposes already committed to development. Besides the existing homes and cabins along the moraine, the area on both sides of the road has already been subdivided and much of it sold for recreational home sites. Furthermore, the proposed sewage collection system could provide eventual

service to this area. With these factors in mind, it was generally felt that development should be allowed to continue but only along the road where the terrain is somewhat favorable for construction.

The request to add the areas for rural residential use resulted from the development idea expressed in Alternative B. Rather than committing additional areas to development densities requiring public utilities, it was felt that the low density situation would be a preferable situation. This would facilitate several functions. First, there would be designated areas for persons wishing large acreage home sites or recreational sites. Second, the scenic portions of the moraines could be left in their natural condition. Third, it also protects the prime agricultural areas from encroaching and/or "leap frog" development. Lastly, and perhaps most important, this proposal facilitates a compromise between the speculative interests wishing to fully develop the moraines and the conservationist interests who seek permanent preservation of all the moraine areas. Therefore, the plan proposes rural residential use for the areas of gentle slope above the prime agricultural lands while well below the scenic areas of the mountains and moraines.

A further rationale for the ten-acre minimum lot size was to add future flexibility. The Land Use Plan must be continually updated to reflect current policies and conditions. If at some distant point in the future, it is desirable to increase the density of these rural residential areas, it will be much easier and less costly to subdivide ten-acre parcels of land than smaller lots. It would also be easier to then provide public utilities to the areas as well.

In any case, it is the purpose of the Land Use Plan to provide a rational and economical guide for future development and for the future allocation of land for various uses. In order to initiate a rational land use program, it is recommended that the County execute the following actions:

1. The County should adopt this plan as the official Land Use Plan for the Wallowa Lake Basin area.
2. The County should update its zoning ordinance to reflect the plan.

3. The County should establish a service district to facilitate construction, maintenance and management of public water and sewerage facilities in the lake basin area.
4. The County should seek federal assistance to offset costs for the construction of these facilities.
5. The County should retain a competent engineering firm to provide engineering services and construction drawings for these systems.

ZONING ORDINANCE REVIEW

PURPOSE

This is intended to be a brief review of the County Zoning Ordinance as it relates or would be affected by the proposed Land Use Plan. General suggestions will be put forth concerning recommended modifications of the Ordinance in order to relate it to the plan. This relation is very critical, since zoning is merely one means of implementing the Land Use Plan. Furthermore, the courts have held that zoning must be based on a comprehensive plan, otherwise zoning is invalid because it would be arbitrary and capricious.

MODIFICATIONS

Implementation of the Wallowa Lake Basin Comprehensive Plan would require changes in two basic areas. First, additional zones would be required; and, second, the zoning map would need alteration, so boundaries will conform to the Land Use Plan.

Obviously, the first need will be to add additional zones to cover the open space and rural residential classifications. In addition, modifications of other zones will be suggested.

The open space classification will need to be a highly restrictive zone concerning any type of development. No commercial, industrial, or residential uses would be allowed. Even road construction and access should be strictly regulated. In essence, the intent of the zone would be to protect and maintain the natural state of the land. However, some flexibility should be allowed for certain uses. For example, should the east moraine at some time in the future become a state park, provisions must be included to allow minimal construction, such as roads, display structures, rest rooms, picnic grounds, hiking trails, etc. In protecting the moraine areas, it would not be the intent to prohibit the public from enjoying their use, but rather, that control should be exercised so that any kind of construction or modification of the landscape would not detract from the natural qualities of these areas.

The rural residential areas of the Land Use Plan will also require the addition of another zone. This zone would be similar in nature to the existing agricultural zones except that a minimum ten-acre lot size would be specified. Again, the intent of this zone is to encourage either recreational or residential use on large parcels of land at a density which will not require public water and sewerage facilities. Agricultural operations would also be acceptable in this zone.

Other suggested alterations concern the existing agricultural zones and the C-2 zone. The C-2 zone constitutes the most important modification. Under the conditions of this zone, both commercial and residential activities are permitted. This zone currently comprises the entire south lake area. Therefore, commercial enterprises can be located anywhere in that area. In effect, there is presently no control over locations of commercial uses in the south lake area. However, the Land Use Plan calls for specific commercial lands in this area in order to better integrate residential uses with commercial uses.

The proposal is, therefore, to establish a resort residential zone while limiting the C-2 zone to specifying commercial uses. The resort residential areas designated on the Land Use Plan are also the areas which will have eventual water and sewerage facilities. As a result, it will be necessary to reduce the lot size requirements somewhat, so these systems can be economically supported. A minimum size requirement should probably be about one-half acre. In any case, the separation of residential and commercial uses in the resort areas will facilitate better implementation of the Land Use Plan as well as providing more rational control over commercial development in the south lake area.

Some modifications in the agricultural zones are also suggested; however, these are less critical, at least for the immediate future. The first suggestion would be to consider increasing the minimum lot size. If the County is serious about protecting good agricultural lands, the current two-acre minimum is wholly inadequate. Most agricultural zones have from twenty to fifty-acre minimums. The reason is to maintain large parcels of land which can be farmed economically and efficiently. Successful farmers understand this fact and know that the subdivision of lands into small parcels along with encroaching development is one of the most serious

threats to farm operations. Not only does this produce higher taxes, but it also begins to limit the efficiency of agriculture operations and, therefore, economic returns also decline.

A second reason for suggesting large lot sizes is in terms of services, primarily water and sewer services. Rural planning today is trying to cope with the problems created by the use of subsurface sewage disposal, namely the septic tank and drain field. One means of preventing health problems is to control densities. This was done in the lake basin area. Essentially, the goal is to provide public water and sewerage facilities in areas where it is desirable to have densities capable of supporting these systems. A general rule of thumb is that sewer systems are economically feasible up to one-half acre lots. When lot sizes get larger than this, the costs become prohibitive to the homeowner.

Where it is not desirable to have one-half acre lots or smaller, it is wise to require large lot sizes. In this manner, each homeowner would provide his own well and septic tank and drain field. The large lot size will then help to insure proper disposal without contaminating groundwater supplies. This was the rationale for the ten-acre minimum in the rural residential areas. By avoiding health hazard situations, the County will not need to build water and sewage systems in these areas. Unfortunately, the one and two-acre minimums in the agricultural zones are in between - too large to economically provide services and quite possibly too small for continued operation of wells and drain fields.

It was also noted that the A-1 zone covers the timber and recreation areas of the County. It is, therefore, suggested that consideration be given to creating a timber zone which could be tailored to forest management and recreation.

One further suggestion is in order, although not related to Land Use Plan. Article II of the Ordinance is entitled "Licensing of Entertainment Assemblies". This section deals with licensing of specific business operations and not with land use regulation. In short, it does not belong in the zoning ordinance and should be deleted and covered under a separate ordinance.

RECOMMENDATIONS

It is recommended that the County take the following actions:

1. The County should delete Article II, "Licensing of Entertainment Assemblies" from the zoning ordinance.
2. After adoption of the Wallowa Lake Basin Comprehensive Plan, the County should seek professional planning assistance in amending the zoning ordinance to reflect the following:
 - a. A rural residential zone;
 - b. An open space zone;
 - c. A resort residential zone;
 - d. A timber zone;
 - e. Modification of the C-2 zone; and
 - f. Modification of the agricultural zones.
3. The County should amend the zoning map for the Wallowa Lake Basin to conform with the Land Use Plan.

WATER AND SEWERAGE FACILITIES

INTRODUCTION

Society has come to depend more and more upon adequate water supply to meet the daily needs of man and serve his amenities and conveniences. The so-called need has more than doubled during the last several years to the point where, to serve all our modern conveniences, we each use at least 100 gallons of water per day. Development and distribution of this quantity of water is but one side of the picture, for once used the water must be treated before it can be placed back into the environment without undue affect. The study area surrounding Wallowa Lake is unique in that large quantities of water are available for development and use. This is all water of a high degree of purity. It is subject at present only to the natural contamination of turbidity and wild animals. However, the affect from man's penetration of these remote areas of source is becoming more evident. The very nature of the area, the water supply, and the recreational nature of the Wallowa's makes the use of the water supply and it ultimate treatment and return to the environment a paramount problem.

WALLOWA LAKE STUDY AREA

The study of the land use in the area of concern has shown that future development around Wallowa Lake should be directed to the area of present use and development. From the standpoint of providing utility services, such as community water supply and waste collection and disposal, this is a rational recommendation. To spread the service area would be costly. The most economical means of serving these utility needs is, of course, to concentrate all development into one area and avoid the strip development that often follows a highway. Due to the steepness of the terrain around Wallowa Lake, this would limit development to the City of Joseph, the north shore of the lake contiguous to the city, and the developed area at the south shore of the lake. The east moraine would remain undeveloped entirely, and the west moraine would maintain a status quo with limited use for vacation homes.

Area outside the Wallowa Lake Drainage Basin has limited potential for future development and would seem to stand as a separate entity in terms of providing the community utilities. Due to the physical separation of this developable area from the present concentration and the topography which tends to provide isolation, it would seem that these areas should be reserved for low density residential tracts where private utility services would be provided by each individual owner. Concentrations resulting from a commercial-recreational complex would require appropriate facilities to adequately handle the water supply needs and, specifically, the disposal of the generated water-carried waste products.

This study is concerned with providing services, both water and sewer, to the present areas of need which appear to be the location of the future development. This, of course, can be controlled and directed to an extent by the location of adequate community facilities and through planning and zoning. Basically, three areas of development have been considered, and plans for services have been centered around these.

Area No. 1 is the north shore of the lake. This lies on the terminal moraine between the lake and the City of Joseph where limited residential development presently exists. Developable area was assumed to be in the order of 40 acres, and total development would contain a population equivalent of 200 people. The area is contiguous to the City of Joseph and should, therefore, look to the city for community services. This might require annexation.

Area No. 2 is comprised of a narrow strip development along the west shore of the lake. At present, there are some 225 residential lots plotted with a potential for about 100 more. It was, therefore, calculated that, if this area were allowed to develop to its ultimate potential, approximately 800 people would require community services. Since this would constitute a strip development, it did not appear to be the most economic area to be served. However, as the design evolved, service could possibly be provided despite the restrictive economics of strip development. This will be discussed in more detail later.

Area No. 3 comprises all the developable land on the delta at the south end of the lake. This is a diverse community composed of some full-time residents, part-time residents, commercial development, and parks and campgrounds. It is thought that most of the future development of the study area would take place here. A total peak population of 2,500 people was calculated for this area.

PRELIMINARY DESIGN FACTORS

In developing criteria for the preliminary design of both utility services, it was decided that using an average use rate of 110 gallons per equivalent person per day would be reasonable for the water supply requirements, while 100 gallons per equivalent person per day should be used for the sewage flows. The area is oriented toward catering to people seeking the recreational opportunities afforded by the mountains and lakes; thus, the population is transient rather than permanent. Only a few residences are occupied on a year-round basis. Recreation is, at present, oriented to summer use but could be turned into a year-round facility with development of winter oriented sports. In either sense, it is thought that use rates will be nearly average, for irrigation of residential plots will not be one of the prime requirements.

WATER SUPPLY AND DISTRIBUTION

In a recent study, the Public Health Engineering Section of the State Division of Health investigated seven small water systems in the vicinity of Wallowa Lake. All but one of these is located in the south shore area. The Harris water system serves the west moraine area. Other information shows a single service in the north shore area, while the City of Joseph proper is served by a municipal water supply taken from Wallowa Lake. Nearly all of these supplies utilize surface water sources without benefit of treatment (chlorination) and have, therefore, been under scrutiny by the State Health Division for a number of years. The general water treatment guidelines of the Health Division are outlined in Exhibit No. 1 attached. In order to obtain sanction as a water supply, surface streams must be diverted at an advantageous location above the point of human influence and must receive appropriate treatment such that ultimate chlorination will be effective.

There has been continuous reference, in all reports, of the need for a consolidated supply system which can serve all the entities in the south shore area. This was the basic proposal of "A Comprehensive Water and Sewer Study for Wallowa County, Oregon", a report prepared by Ronald M. Blakely in March 1970. It was the proposal here to serve the city and the south shore area separately with individual systems. A later report prepared for the City of Joseph in August 1971, by Garth B. Harlan, proposed individual service for the city by the development of wells and by upgrading of distribution of storage. Treatment of the Wallowa Lake source was considered too costly.

The basis of planning here has also been centered on maintaining two separate systems due, principally, to the fact that several miles separate the two points of concentrated use, the City of Joseph and the south shore area. Cost estimates will illustrate these aspects.

Although water is abundant when the resource of the lake proper is considered, the usable sources become limited when the Division of Health guidelines and the simplicity of system operation and cost are considered. With this consideration of simplicity and least cost of operation in mind, the order of significance of source development would be as follows:

1. Development of springs.
2. Development of wells, assuming that groundwater is available.
3. Developing an infiltration gallery along a major stream bed.
4. Treatment of water from a stream or from the lake.
5. A combination of these sources.

Development of one or more springs would constitute the simplest form of water supply. Proper regulation and control of the area in the vicinity of the springs would insure good quality water. It would probably not require chlorination treatment. A well, too, would fit into this category but would probably require more operation and cost for pumping. Infiltration galleries are a simple form of source development when they can

be properly located and controlled and where adequate natural gravels exist. In this instance, chlorination would be an absolute requirement.

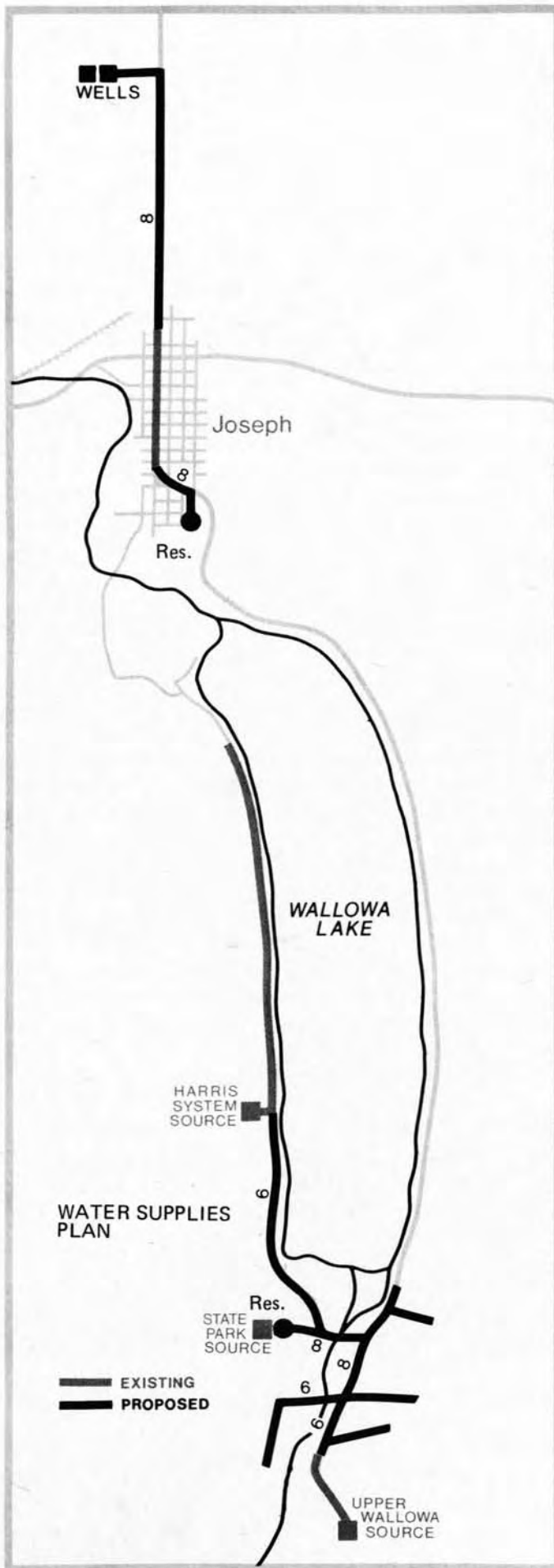
A treatment plant utilizing a stream or the lake as a water source would be the most expensive facility from both the first cost standpoint and from the operational point of view. Filtration, chlorination, and probably pumping would be a necessity.

In any instance, it will be necessary to provide adequate storage and distribution facilities. This is a different problem from the source development and is an equal quantity in all cases. The available information seems to indicate that, for the most part, the existing water systems are in a state of deterioration or inadequate to serve future requirements. Therefore, the plans proposed will incorporate facilities for a maximum of three days of storage in a covered reservoir along with adequate distribution mains. The localized systems should be used where possible for distribution to the users.

Very limited information was found concerning the quantities of water available from the presently developed spring water sources. Local individuals expressed opinions that adequate source is available. This is accepted at face value, but alternate sources of supply, such as wells, have been considered to supplement the springs until these prove adequate for peak demands.

The basis of this plan consists of a cost estimate for developing springs for water supply, constructing storage and distribution systems to serve the south shore area (Area No. 3), and the west moraine (Area No. 2). This cost and the cost of separately serving the City of Joseph with a scheme slightly revised from the Harlan report proposal is compared with an estimate of serving a regional area with a consolidated system. The consolidated system would depend upon the springs in the south shore area along with supplemental sources for supply.

Area No. 1, contiguous to the city, will be served in this comparison. However, without constructing a regional system, service to the area from the City of Joseph will be a greater cost.



The Health Division report indicated that the Harris system, serving the west moraine, was reasonably new and extended to nearly all the area of present need. It was, therefore, concluded that use of this existing system was plausible for a number of years and did not justify a transmission system to the City of Joseph which could simultaneously serve this area. The existing line extends for some two miles along the road, and consists of 6", 4", and 2" steel and PVC pipe. An adequate source of supply is the only requirement necessary to insure adequate service to this area (Area No. 2) for some time. This area could be tied in with the south shore system.

Proposed Water System Cost Estimates

Cost estimates of the various systems have been made for comparative purposes. The south shore area and the west moraine service areas are computed separately from the individual service for the City of Joseph. It must be remembered that there is a degree of uncertainty in that spring flows are unknown. If adequate supply can be developed from these springs, the well will be unnecessary.

The discussion of the well to serve the south shore area also has some uncertainty associated with it, since no wells presently exist in the area. To get an idea of the success which might be attained in drilling for groundwater, contact was made with a staff member of the State Engineer's Office who indicated that proper conditions prevail for such development. Further study is required to verify these aspects before final design could proceed.

The system proposed which would serve Areas No. 2 and 3 was estimated as follows:

1. Spring Development	\$ 12,000
2. Well and Pump	21,000
3. Storage (800,000 gallons)	65,000
4. Transmission and Distribution	
Mains (16,000 feet)	201,000
TOTAL CONSTRUCTION COST	<u>\$299,000</u>
Administration and Contingencies	
at 25%	75,000
TOTAL COST	<u>\$374,000</u>

Local interest was expressed in determining the cost of total consolidation of the study area of this report with the City of Joseph. Initially, it was assumed that the recommendation of the Harlan report for the City of Joseph was basically sound. The cost estimates were updated to reflect 1973 prices. The locations of the wells were changed to an area north of town away from the terminal moraine. Again, contact with a staff member of the State Engineer's Office indicated that this area had great potential and existing well logs provided evidence of this potential. The estimate of cost of this aspect alone was as follows:

1. Wells and Pumps (2)	\$ 42,000
2. Storage (700,000 gallons)	58,000
3. Transmission Line (7,500 feet)	105,000
4. Upgrade System (per Harlan report)	<u>70,000</u>
TOTAL CONSTRUCTION COST	\$275,000
Administration and Contingencies at 25%	<u>69,000</u>
TOTAL COST	\$344,000

In addition to serving the city proper, consideration should be given to serving the contiguous area, Area No. 1. It has been estimated that it will require about 9,500 feet of 4" and 6" pipe to distribute water here. Additionally, it would appear that a booster pump would be required at the proposed reservoir to maintain distribution pressures. If this area were served by the regional system, the cost would be somewhat less, because part of the distribution system would be served by the regional transmission line. The cost estimate for these two options is as follows:

Option No. 1 - Service by the City of Joseph

1. Distribution System (9,500 feet)	\$114,000
2. Booster Pump Station	<u>8,000</u>
TOTAL CONSTRUCTION COST	\$122,000
Administration and Contingencies at 25%	<u>30,500</u>
TOTAL COST	\$152,500

Option No. 2 - Service by the Regional System

1. Distribution System (4,000 feet)	\$ 48,000
2. Booster Pump Station	<u>8,000</u>
TOTAL CONSTRUCTION COST	\$ 56,000
Administration and Contingencies at 25%	<u>14,000</u>
TOTAL COST	\$ 70,000

The comparison of these two separate programs was made with a consolidated system which would depend upon development of the springs in the south shore area and a reported large spring on the west moraine. Contact with local individuals indicated that the latter spring was large, and the flow was apparently not seasonally affected. It was, therefore, assumed without benefit of flow measurement that an adequate quantity of water could be developed from these multiple sources. On this basis, a consolidated system was estimated. The system was composed of re-estimating the upgrading of the Joseph system, constructing reservoirs in Joseph and at the south shore area, connecting the two areas with a transmission line, constructing distribution mains in the south shore and north shore areas and developing the water source. These costs were as follows:

1. Joseph System Upgrade (per Harlan report)	\$ 67,000
2. Joseph Reservoir (700,000 gallons)	58,000
3. Transmission Line (23,000 feet)	324,000
4. South Shore Reservoir (800,000 gallons)	65,000
5. South Shore Distribution System (16,000 feet)	201,000
6. Water Source Development	31,000
7. Area No. 1 Distribution System (4,000 feet)	70,000
TOTAL CONSTRUCTION COST	<u>\$ 816,000</u>
Administration and Contingencies at 25%	204,000
TOTAL COST	<u>\$1,020,000</u>

This cost must then be compared with the total cost of separate service to the two areas of concentration which is as follows:

1. Separate Water Supply for Joseph	\$344,000
2. Service to Area No. 1 by Joseph	152,500
3. Separate Water Supply to the South Shore Area	374,000
TOTAL CONSTRUCTION COST	<u>\$870,500</u>

From this comparison, it can be seen that separate individual sources and services will be the least costly of the alternatives proposed. A saving of approximately \$149,500 will be realized by this program, yet all the areas concerned will be adequately served.

SEWAGE COLLECTION AND TREATMENT

The choice of solutions for providing sewage utilities to the planning area is limited. At present, the universal method in use is to carry the waste from its origin to a central collecting point with once used water. After the sewage is centrally collected, the solids are removed from the flows for separate treatment, and the water, containing dissolved and colloidal waste, is treated generally by biologic means before discharge back into the environment. These flows are usually in the order of 100 gallons per equivalent person per day. Depending upon the integrity of the collection system, this quantity may be increased during periods of wet weather when extraneous flows enter through defects in the collection system. As mentioned, the general method of treatment takes the form of some type of biologic system. Specialized situations often find other methods employed. Physical-chemical processes are becoming more important in certain uses. Such a system was brought to the attention of one of the members of the community. The physical-chemical treatment method could be used to recirculate effluents back for specific reuse in a closed system. Another method sometimes used for ultimate disposal is effluent irrigation. All such methods have specific use and may not be totally satisfactory in all situations.

Specific conditions found in the study area are rather unique and so limit the range of solution to be investigated. Terrain around the basin is very steep and, therefore, rules out the irrigation of effluents. Runoff would result without desired percolation. This method of disposal relies upon the great treatment capacity of the soil; and, therefore, percolation is a must. It is somewhat akin to the present subsurface disposal methods in use.

The elevations of the surrounding mountains virtually prohibit pumping the effluent to an adjacent area for treatment and disposal, except for along the lake in the direction of natural drainage. The treatment and recirculation method mentioned above would have its greatest potential in serving an area of concentrated use such as the State Park. It would have less appeal for adaptation to a community such as the south shore area. This stems from the fact that a dual system would be required, one to achieve the conventional

collection and the other to return the treated effluents for reuse. In addition, there is need to constantly bleed concentrated wastes from the system for ultimate disposal.

Finally, the obvious conclusion of treatment and discharge into the lake proper must be considered. Wallowa Lake is considered to be water of very high purity. Tests run by the State Division of Health and the Department of Environmental Quality show little affect on the lake resulting from man's recreational uses. Chemical tests show that the lake is not receiving appreciable amounts of sewage effluent through groundwater return from the shore based activities or the septic tank drain fields. At least for the most part, these are below detectable levels. The monitoring of the bacterial levels again showed little influence from the shore based activities. It is thought that these do show an affect from water based activities; however, no trend could be detected from the five sampling runs made on the lake over a period of five years. Analysis of the biota from the lake again substantiates these findings. A game commission report written in 1967 shows that fish production in the lake is finite, due to the limiting factor of the food chain. This would normally be enhanced if the nutrients associated with sewage contamination were present. The conclusion reached to explain this aspect is that the soils provide adequate treatment for the present quantities of waste discharged. It may also be enhanced by the fact that seasonal discharges allow the soil to rest and recuperate. However, the balance is delicate and may be near the point of saturation where additional development will have a direct affect on the lake.

All of these factors support the conclusion that the lake is of very high quality and it is, therefore, difficult with good conscience to consider a treatment system which would discharge to this body of water. It is generally impractical to achieve 100% efficiency in the treatment of sewage wastes. Since there is always some residual in treated waste effluent, treatment with discharge to the lake was not considered. There is no justification in degrading the geologic phenomenon that gives the area the significance which it enjoys. In addition, the City of Joseph has a sewage collection and treatment system which is so situated that it could be used and expanded to accommodate the additional loading

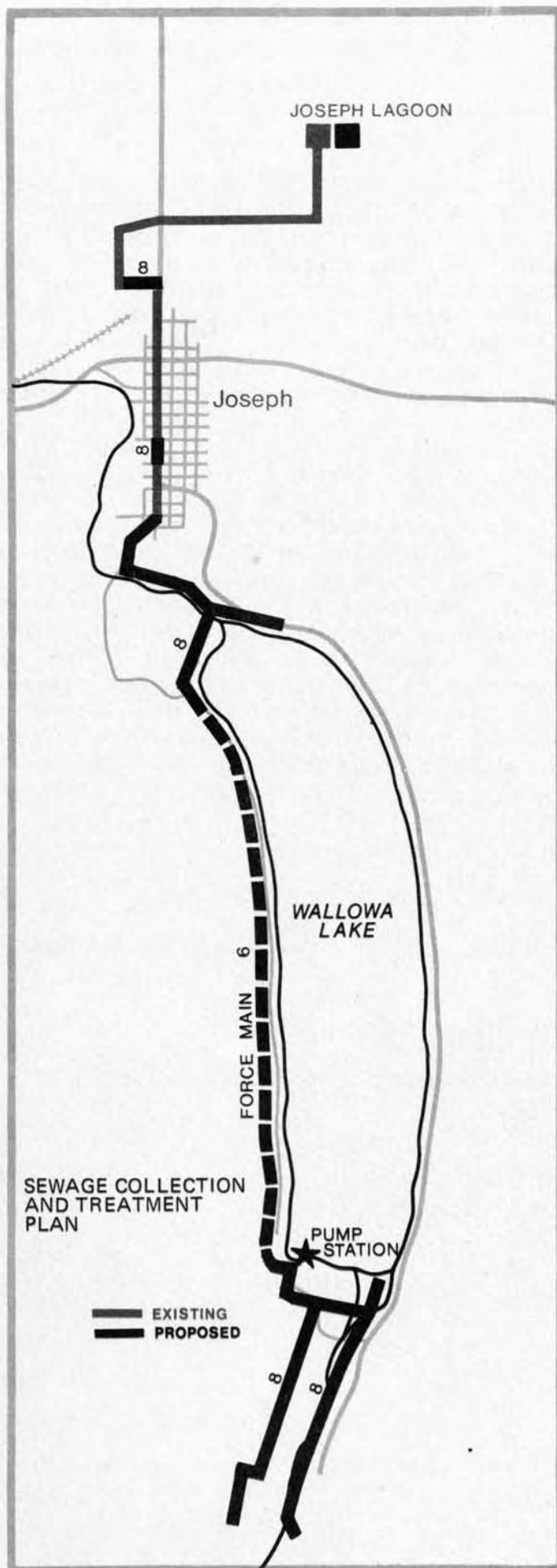
which would result from providing these services to the planning area. This system is a form of biologic treatment with ultimate disposal achieved by seepage into the ground.

Proposed System

Considering all aspects; such as the physical location, separation of the areas to be used, the need to keep all effluents from the lake, and the seasonal nature of use; the following system is proposed for solution to the sewage disposal problems of the Wallowa Lake study area. A conventional collection system would be constructed on the south shore area. It will be of the highest quality construction so a "bottle tight" system results. It is most important that no more flow than is absolutely necessary be collected; therefore, all sources of groundwater infiltration must be excluded. In addition, all footing and roof drains from individual homes must be excluded. It must not only be a fact of ordinance but must also be policed by adequate inspection at the time of construction.

The collection is to be centralized at one point, such that all the south shore would be served by a gravity system. At this location a flow equalization basin and pump station will be constructed. The objective of the flow equalization basin would be to allow a continuous pumping rate, so the facilities downstream would not need to be sized to accommodate peak flow periods. The pump station would contain two pumps which would meet the high head requirements of the long force main and yet be capable of handling the solids associated with the raw sewage. Grinders would also be required ahead of the pumps.

The force main would be constructed along the west side of the lake, probably on the existing road where construction and later maintenance would be facilitated. This line would traverse all of Area No. 2; however, it would not directly be of service to this area. In order to use this pressure main, it would be necessary that small localized improvement areas be formed. Collection systems and small pumping stations could be constructed should the need arise for service to local areas long the route of this force main. The smaller pumping stations could, in turn, pump into the force



main. These stations would cost about \$15,000 each, plus the cost of the collection system as required. Extensive service on this basis has not been considered a high priority item. The density will not be as great in this strip development as it is anticipated to be in the south shore area, even though it is estimated that 800 people could inhabit the west moraine. The method of use and occupancy will probably forestall a need for alteration of the present pattern of service.

The force main would terminate in a gravity system which serves Area No. 1, the north shore area. This gravity system would, in turn, be tied into the existing gravity system in the City of Joseph. By equalizing the pumping rate on a daily basis, the existing gravity system in the City of Joseph could be used with only minor replacement of 750 feet of sewer line in existing main "A". In order to accommodate this new loading, the Joseph treatment lagoons would need to be expanded. The present method of treatment and ultimate disposal would appear to be adequate, so expansion would consist of the same type of treatment. This lagoon is a very advantageous system and is very flexible in being able to adjust to the weekly and seasonal fluctuations of loading which would result.

Proposed Sewerage System Cost Estimate

The cost estimate of the previously described system is as follows:

1. South Shore Collection System (11,500 feet)	\$161,000
2. Pumping Station and Equalization Basin	82,000
3. Force Main (22,500 feet)	270,000
4. North Shore Collection System (9,200 feet)	129,000
5. Lagoon Expansion	137,000
6. City System Replacement (750 feet)	10,500
TOTAL CONSTRUCTION COST	<u>\$789,500</u>
Administration and Contingencies at 25%	197,500
TOTAL COST	<u>\$987,000</u>

The obvious defect in this plan is that the indicated cost does not include service for any of the west moraine. The transmission line will be in place and ready for use if and when local clusters of housing become concentrated enough to afford a small pumping station and collection system. This would appear to be the proper alternative at this stage, for the expense of the collection system can be deferred until needed in the future at which time additional capacity will be required in the treatment facility as well.

In order to compare this proposed system with a program which would incorporate similar features but would offer immediate service to the west moraine area, the following program was estimated. A similar system of collection is to serve both the north shore and the south shore areas. The primary difference would be in the means of transporting the sewage along the west side of the lake. Instead of a single pump station and force main, the proposal would be to use a series of three pump stations which would relay the sewage to the gravity system at the north shore. Gravity systems could extend both directions from the intermediate pump stations to serve the west moraine area. In order to serve the additional population, it will also be necessary to increase the capacity of the lagoon. This is also reflected in the cost estimate. The cost of this proposed alternative is as follows:

1. South Shore Collection System (11,500 feet)	\$ 161,000
2. South Shore Pumping Station Equalization Basin	82,000
3. West Moraine Service Area	
a. Pump Station (2)	50,000
b. Force Main (11,000 feet)	132,000
c. Gravity Sewer (13,000 feet)	182,000
4. North Shore Gravity System (9,200 feet)	129,000
5. Joseph System Replacement	10,500
6. Lagoon Expansion	168,000
TOTAL CONSTRUCTION COST	\$ 914,500
Administration and Contingencies at 25%	228,000
TOTAL COST	\$1,142,500

It appears that the gravity system through the city will handle the additional flow from the west moraine with the minimal line replacement. However, it is still important to recognize the absolute necessity for building a system which will exclude all sources of extraneous flow. If this is not accomplished, it will be necessary to recognize that the force mains, pump stations, and the existing gravity system through the City of Joseph will need to be increased in carrying capacity for either system.

ADMINISTRATIVE AUTHORITY

One of the first major steps which will need to be taken is the formation of an administrative body having the authority to represent those areas requiring public services. This body will have authority to perform various duties such as purchase and condemnation of land, enter into contracts, adopt ordinances, carry legal action such as suing and being sued in court, establish use rates, determine tax levies and assessments, issue bonds, employ personnel, apply for grants and construct, and maintain sewerage and water supply facilities.

By state statute, two alternative means are available for providing administrative authority. First, the individual concerns may be governed by districts formed under ORS 264 for Water Districts and ORS 450 for Sanitary Districts. In both instances, a separate board is elected by the people. In practicality, this could be a matter of both districts having identical boundaries with possibly a single set of directors serving on both boards. The second means of providing this administrative authority would be through the formation of a County Service District under ORS 451. In this instance, the County Commissioners act as the board of directors but are aided by local representatives in the decision making process.

Districts formed under ORS 264 and 450 have restrictive, specific authority dealing with either matters of water supply and distribution or sanitation. In the latter case, authority exists for maintenance and operation of solid waste disposal facilities also.

Formation in accordance to County Service Districts law ORS 451 gives sweeping authority to include maintenance and operation of sewage collection and treatment

facilities, maintenance and operation of wholesale water supply facility, drainage works, street lighting, and solid waste facilities. It is to be noted that the drawback here is that the operation of water distribution facilities would still be a function of localized bodies for the County is not authorized to enter this aspect.

Although at this stage it is not considered practical, it should be mentioned that the formation of a city would also cover all of these administrative concerns.

In all cases, one of these forms of governing authority best fits the needs of the local community. In many respects, the County Service District can give the best chance for administrative continuity with the drawback that additional legal bodies will have to be formed to distribute the water supply. This is a matter that must be resolved locally. In any case, this decision must be made early in the chain of events for it must be submitted to the people affected for voter approval.

RECOMMENDATIONS

From the foregoing preliminary discussion, the point has been made that the study area in the vicinity of Wallowa Lake, Oregon, has need for community water and sewerage utility services. At the present time, adequate water supply to serve all the area is a high priority item. The State Health Division has, in effect, issued an ultimatum to this effect. Of a lesser immediate concern is the need for sewerage collection and treatment. This lesser concern stems from the nature of use, the soil type in the area, and the concentration of the uses. There is at present little affect on the lake resulting from the shore based facilities. However, the point has been made that this balance is critical and could possibly be tipped with additional development. There is need for community sewage facilities if development is to proceed. Preliminary plans have been discussed and cost estimates made. From these preliminary plans, the following recommendations are offered.

1. There is need for the formation of an administrative body to coordinate and oversee the construction and later operation of water and sewerage utilities. It is recommended that the advantages of the formation of specific service

districts be compared with those of the County Service District. Once the type of governing body is decided upon and boundaries established, this must be submitted to a vote of the people.

2. The costs of these utility services are disproportionately high, therefore, immediately upon forming the administrative body a plan of attack must be established. Financing methods must be adopted, application must be made for maximum state and federal aid to assist in offsetting construction costs. Also, a priority schedule must be adopted for it would appear from the total cost that staggering construction will be required.
3. It is recommended that the water supply in the lake planning area be held separately from the program for the City of Joseph. The lake area should develop the spring sources to the maximum extent and then supplement by developing other sources. A well has been suggested, but feasibility can only be determined with future investigation. Other supplemental sources are available if the well is not feasible. This will necessitate that the City of Joseph proceed on the program such as proposed in the Harlan report and that the north shore area be annexed by the city and served in this manner.
4. Due to space limitation and the necessity to keep all effluent out of the lake, it is recommended that all sewage be pumped out of the lake basin proper. The existing Joseph system can be used and expanded to provide an adequate treatment facility. Due to the estimated cost and the apparent lack of immediate need for the sewerage utility in the west moraine area, it is recommended that the single pump station and force main be constructed with future construction of individual collection systems and pump stations along the west moraine where need arises. This will also necessitate future addition to the Joseph treatment system.

5. In the construction of both water and sewer systems, it will be necessary to provide the best construction possible. It is recommended that the adoption of ordinances restricting construction and use of the system be one of the first acts of the administrative body. During the construction phase, adequate inspection must be provided.

COMMUNITY WATER SUPPLY
WATER TREATMENT GUIDELINES

State Health Division
January 1972
Revised April 1972

OBJECT: The following is intended to give a general outline of water treatment requirements for different types of raw water quality. Water quality at all times must meet the biological, chemical and physical (including radiological) standards of the Division of Public Health. In order to meet these requirements at all times, the following water treatment must be provided.

CHLORINATION: Chlorination treatment means a 0.2 ppm free chlorine residual in the distribution system after 30 minutes contact time or 2.0 ppm combined chlorine residual in the distribution system after 30 minutes contact time. (Chlorination must be proportional to flow where service is direct to the distribution system and flow will fluctuate.)

Type I: Relatively clear and clean upland, flowing streams.

Treatment required is either an infiltration gallery plus chlorination, as defined above, or filtration plus chlorination. Where the infiltration gallery cannot be built "in the dry" or where the applied water will plug the infiltration gallery frequently, then filtration must be provided.

Type II: Flowing streams which are periodically turbid or deep impoundments with good depth-of-withdrawal selection, exposed to contact by humans and pollution is limited to ground seepage but the water does not receive any direct treated sewage effluent.

Treatment required is either coagulation, flocculation and sedimentation plus chlorination as defined above, or filtration plus chlorination.

Type III: Water over which there is little quality control such as: Impoundments with a fixed level of withdrawal; shallow ponds subject to access by small animals and which support aquatic growth; or waters which have received treated sewage effluent.

Treatment required is coagulation, flocculation, sedimentation and filtration plus chlorination as defined above.

Type IV: Waters which are either clean and clear or which are produced from treatment recommended above (or well waters) which require additional chemical treatment such as:

- a. iron removal
- b. taste and odor removal
- c. H₂S removal
- d. pH adjustment
- e. fluoridation adjustment
- f. nitrate removal
- g. other objectionable chemical compounds

Treatment required must be in accordance with the latest recommended AWWA treatment process and must at all times, meet the biological, chemical and physical (including radiological) standards of the Division of Public Health.

CITIZEN RESPONSES

In addition to discussion at public meetings and numerous verbal responses to the preliminary land use proposals, several citizens took time to set down their ideas and reactions in writing. These are included as a reminder of the variety of opinions expressed as well as maintaining a record of the ideas put forth.

WATSON'S
FLYING ARROW
CORRAL

JOSEPH (WALLOWA LAKE), OREGON 97846
TELEPHONE 432-4061



Complete Vacation Homes — KITCHENS, FIREPLACES, SUNDECKS ON THE WALLOWA RIVER

December 19, 1972

Mr. Joe Mc Laren
Wallowa County Planning Commission

I strongly recommend planned development at the lake.

I believe the time has come to think about a mobile home court. This should not be at the south end of the lake, as I don't see the room for it.

In order to develop the south end of the lake to any great extent, a combined water system is a must - even more so than sewage.

I am also very much in favor of developing any portion of the Lake, whether it be North, South, East or West, as long as that property lends itself to any type of building recommended by the Planning Commission.

In order to install a sewage disposal and an approved water system, there must be development on property to increase the assessment value to make it possible to finance any type of system.

I believe the present members of the Planning Commission have a better insight on the needs of the County, and their decisions setting up districting should be accepted.

Paul D. Watson
Design Committee Chairman

In response to the public hearing conducted in the Court House December 13, 1972. Statements for or against the proposals submitted by Engineering Firms in Portland.

This opinion is from an individual rather than from the Court appointed Lake Committee of which I'am a member.

I feel it is imperative that forward movement be made on the construction of a sewer and water line. Until more ideas or suggestions facts and figures are submitted I cannot commit my approval to either plan suggested. My reasons for favoring a sewer and strict zoning controls are as follows:

1. "Things" will not stay as is.
2. The county needs employment in the tourist industry and Wallowa Lake can provide this, if development continues under close zoning regulations and if a sewer system is installed.
3. Without a sewer and perhaps water mains no legitimate developer or persons can do anything of consequence. The risk is too great that the State Health Board would cut you off at the pockets before you got started or worse the middle of an expensive building program. Modern, year around facilities in the number to make it a paying proposition would pollute the Lake in a short time. A
4. Most of the existing water systems have already been told to chlorinate by the Board of Health. Fix up now or shut down and they are looking at long range plans now being studied for the long range answer for water and fire protection. At present there is no actual fire protection because of the old inadequate water sources and distribution systems. It makes sense to put in both water and swage at the same time and save some costs.
5. Some kind of density of population or control is needed. The county must keep the lake as a desirable attraction rather than an uncontrolled glob of people living near the mountains with a body of polluted water in the middle. Too many cattle in a pasture is no different than too many people in a given area. We dont need another Lake Oswego only 320 miles from Portland city limits.
6. Without zoning control on type of buildings, location of road nets, sewage, water, etc. we will only have a county problem rather than an asset. There is no other way to control future expansion other than strict and enforced zoning and building codes.
7. Developers that propose magic on the East and West side of the moraine offer nothing (so far) but problems. Their only concern is to sell lots for as much as they can get and put in as little as possible to make the lots legal and for sale. Example: Harris logged hell out out of the lot sites then put in the minium for wator (which does not now pass state requirements) and a couple ugly looking logging roads for access. The first road went thru the middle of the lake side lots therefore the reason why of more spur roads.

job done in a correct manner. There is a strong desire to sell lots and as many as the local citizens will stand still for and probably do the absolute minimum to get by in the way of water , sewage, roads and in corporation zoning thru their own sales contracts. To develop on a large scale would require amounts of capital that probably could not be afforded at this time because lots would not bring enough on the market. The developer has got to make money or leave it in cow pasture. There are hundreds of so called developments in the Pacific Northwest that should have been left in cow pasture. A point many county officals and developers would both agree after things turned sour in the courts, county, and with State Officals.

Had many plans of development been laid out with honest intentions in mind and had the ideas been gone over with local officials there wouldn't be so many strict development laws put into law as in the past year.

One professional developer (all are so called professional) told me last summer there is no way the moraine can be roaded for development in most places without making the whole hillside look like an open pit copper mine. Costs on this half for sewer and water and fire protection and roads that would stay on the mountain- you wouldn't believe. On the other hand- no planning, zoning, or rules and our troubles now will look like child's play ten years from now. Never to my knowledge have developers offered anything in the way of improving the landscape for their benefit and the county. Example: Offer to bury utility lines, provide hidden well constructed roads, offer to build their own sewer system, clean up logging slash, zone their own land and offer their own building code, offer to build some facilities for their own buyers like marine docking, swimming floats, etc.

8. There has to be a happy medium for development for the lake basin. There should be a limit for growth (do we want 30,000 people or would we like to see perhaps twice what there is now). There is room for development for private homes generally where they are now- with some strict environmental controls set up through codes and zoning. I hope we have enough sense to cater to people that want zoning rather than do everything possible to get around it. Lots around the area are not unlimited, so let us appeal to the buyer that is concerned of having his property values kept up. Personally I wouldn't buy a lot where anything goes. Spend \$5,000 for a lot and \$20,000 for a building and I sure as hell wouldn't want a mink farm ten feet from my property line and a non-working septic tank besides. The world is full of these kind people (look in any city) but there is only one Wallowa Lake area in existence.

9. The area needs a commercial section generally where it is now. There are too many jobs to be afforded to have the whole area go to private cabins and a state park. Again there should be zoning that covers signs, height of buildings, bury of utilities, etc. There are hundreds of similar areas that have been faced with the same problems and the ones that did a good job can be named on one hand. Most end up looking like strip city America and all in poor taste. Most people in business accept zoning as a fact of business and comply if that is the law.

10. Most accommodations at the lake are outmoded and worn out. Very little in rental cabins or accommodations have been built in twenty years. I feel that any ski development is years in the future, and most professionals that have no local axe to grind feel the same way. This does not mean *we don't need to move with zoning, sewer, water plans.*
If we do not do this - the area in question is destined to add

a few cabins a year- not knowing from one year to the next- when the state will blow the whistle or when some attorney will file suite against the county because he couldn't get a building permit. Nothing of any consequence will be done on the commercial line because there isn't a sewer line, and the water systems will be under constant barrage to get fixed up, and Joseph citizens will be angry most of the time because their water source gets worse and worse, and on and on and on. Instead lets examine the costs of a sewer and water line, lets put in some zoning and enforce it, lets let it be known to developers where the county stands and expect they do a good job or end up doing nothing, and lets us try to encourage a boost in the local tourist base and employment by looking forward. I hope in ten years to be able to say it was in 1973 that the county started to move in the right direction at Wallowa Lake. It is a beautiful area that has made a comprise with man and is a credit to Wallowa County. The only other course is long silence- and a shake of the head.

Duane Wiggins

Wallowa Lake

Dec. 19, 1972

Wallowa County Planning Commission
Wallowa County Court House
Enterprise, Oregon

Subject: Sewer system for Wallowa Lake and Area

Dear Sirs:

In planning the sewer system for the Wallowa Lake area, it seems that the only logical way to go is to install the system down the west side at this time, keeping in mind that the face of Mt. Joseph will most likely be developed one way or the other sometime in the future, also consideration should be given to any development up Hurricane Creek.

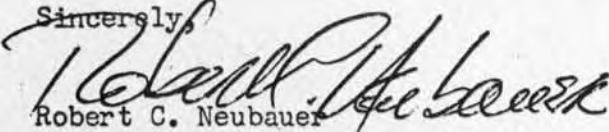
The development that will most likely take place on the east side of the lake should be included in any future planning as far as the sewage plant itself is concerned, but as far as getting the sewage to the plant should be at the developers expense, therefore not burdening the tax payers.

In this day and age, with the present population growth this country is experiencing, planning twenty five years ahead is not to be considered lightly.

With reference to the first paragraph, considering there are already seventy odd homes on the west morrain, and the Mt. Joseph area partly developed, there is no other choice, but to install the sewer system on the west side.

As a citizen of Wallowa County, I am very interested in the future of our county, and I am fully convinced that with proper planning, the county will be as desirable to everyone in the future, as it is today.

Sincerely,


Robert C. Neubauer
Enterprise, Oregon

Willow County Planning Commission
Court House

Enterprise, Ore 97828

Route 1 - Joseph, Ore
12-22-72

Your letter to Congressman Al Milman regarding condemnation of land on the Snake River printed in the Dec 2nd Chieflain is wonderful. You presented the pertinent points well I hope the land will be effective.

Regarding the Willawa Lake Basin land the alternative plans if the State Park is required to pay one hook up charge to the sewer line for each camping unit space and each utility-toilet building, they would then be carrying their fair share of the cost. This could well lower the cost of each hook up for summer cabins and homes. They have presented but two alternatives which in essence gives a good outline from which to proceed, but I feel it is much too restrictive. When there is proper sewage, I feel that the West Moraine should be allowed to develop at the Planning Commission's discretion. Except perhaps for the westerly slope of the East Moraine, the top and the east side of it should be developed for people's use. I enjoy the view from the top of this Moraine perhaps more than from any other spot in the county. The top should be open to the public, setting aside a park for picnicking, or at least for viewing. Road access should be encouraged so that ordinary people could get to the good vistas the county has to offer in all of it. Wilderness restrictions need be modified, another thing we need to press our federal legislators about. Wilderness has too much land for the enjoyment of too few people.

Sincerely,

Paul Beske

"Mountain House"

DESIGNERS & BUILDERS OF FINE RECREATIONAL HOMES

Ted Winchel
P. O. Box 426
Joseph, Oregon 97846
503-432-5501

Wallowa County Planning Commission
Wallowa County Court House
Enterprise, Oregon

Re: Wallowa Lake Basin Land Study

Dear Sirs:

I would like to express my appreciation for the opportunity to express my ideas and views.

Plan A and Plan B, as I understand, are alternative solutions to the problem of the lake and adjacent environment preservation and utilization. I am happy that there is progress being made and sincerely wish to support these activities in any way I can.

I do not believe that Plans A and B are alternatives. I feel that they represent requirements or needs that each in itself must be dealt with in the near future.

Advocating the development of the back side of Mt. Howard would not, I believe, relieve the development pressure on the west or the east side of the lake. I think that the potential development of the Mt. Howard area has a great deal of merit. The Lake basin and Mt. Howard are two distinctly different recreational potentials, one possibly complimenting the other but certainly not replacing the other. A winter sports area would be a significant addition to the area economy and stature.

Continued West Moraine development as it was currently being carried out will certainly achieve the most undesired results.

One of the greatest environmental felonies in an area such as the lake shore, is an unplanned high structure density. Continued construction of sub-standard disposal systems will in time also foul the environment. However important the proposed sewer system for the west moraine might seem, I believe that zoning and building codes are the first concern. There are very few lake shore building sites adequate for disposal systems or sewer line access. The probable high cost of the west side sewer is due to the close proximity of these sites to the lake. Also this private property along the lake is violating a right that an environmental organization could make an issue of. Also, why should all other would be users of a sewer system be made to share the higher cost necessary to service those relative few that crowd the lake shore. There remains considerable land along the road suitable for building that can accomodate code disposal systems or easy sewer access (down the present road bed). Some of this land requires extensive excavation and foundation. However I don't think this is a significant draw back.

"Mountain House"

DESIGNERS & BUILDERS OF FINE RECREATIONAL HOMES

Ted Winchel
P. O. Box 426
Joseph, Oregon 97846
503-432-5501

I believe that a sewer system should eventually come down the West Moraine, but I don't believe the lake is in any danger from the present west side seasonal occupancy. I think the immediate danger to the west side is the absence of building codes and arbitrary lot sizing. Quite a bit more development could take place and not endanger the lake at all. Adequate building sites away from the shore and strict codes can insure symbiotic development of housing within the natural environment. Adequate in this reference means larger lot sizes than is presently plotted. Another seemingly significant point is the potential development of multi-dwelling structures (condominium). These structures are advantageous economically, physically and politically. They tend to decrease over all structure density on a per capita basis, and they are a good investment in this area of inadequate housing, and they ostensibly provide greater public access to the lake. Again with proper zoning and codes these structures could utilize disposal systems without harmful side effects. I believe that the West Moraine, under good management could develop into a good recreational and residential area and be in a better position to support a full sewer system in the near future.

I suggest that you consider relieving a great deal of the pollution problem by adopting that portion of Plan A that implements a sewer system down the East Moraine. I also suggest that in that plan you provide for a future sister or joint system for the West Moraine and enact the above mentioned zoning and building codes to provide for continued development. Then at a time when the development can support the extended sewer system, it can more readily be implemented.

Respectfully Yours,


B. T. Winchel

December 13, 1972

Wallowa County Planning Commission
Enterprise, Oregon 97828

Gentlemen:

The following comments are submitted for your information on the Wallowa Lake Basin Study as prepared by Stevens, Thompson and Runyan, Inc., as requested.

Wallowa County has been studied and re-studied many times in the past few years with the end result being the same in nearly every instance. It is evident that the agricultural resources and forest products industry are limited and that recreation and tourism will be the influential factor for the economy and development in the near future. It was with this thought in mind that the recommendation was made to the Wallowa County Court in 1963 for the formation of a County Planning Commission.

Since the formation of the Planning Commission and the preparation of zoning ordinances and land use data, development has been permitted to proceed on a very informal basis throughout the county without proper regard to long range planning, thus discouraging the more discriminate type of recreational development. The Wallowa Lake area is one of the most heavily used recreation centers in the state and pressure for this type of activity is expected to increase.

As a property owner for some of the most choice recreational acreage in Oregon if not the United States, I am particularly concerned as to future plans and development in the area. We have prepared a "Plan of Development" for the east moraine utilizing the most modern concepts for highest and best usage for this acreage. No development has been accomplished to this time and it is the consensus of opinion that assurance on the part of the buyer would be necessary to conform with our master plan prior to release of any parcel. Had we desired to disregard the future of the area, many opportunities were available to dispose of parcels ranging from a few acres to several hundred acres in size.

In the review of the Wallowa Lake Basin Study, I support the recommendation of regulated development, however I disagree with the suggested land use proposals. The open space proposal for a portion of the east moraine is ridiculous. I have discussed regulated type development for the barren slope with many local residents and many non-residents, and all agree that the environmental qualities would only be enhanced with special planning for this particular acreage and not to leave it in its natural state.

Also, the reference to the moraines as being composed of highly unstable material is questionable and very probably unfounded. My experience with soils and foundation investigations have proven unstable materials to be associated with soils subject to vertical and horizontal movement as the water content increases, soils susceptible of low shear and/or materials that will not support loads of computed design weights.

Further, I do not agree with the suggestion for development on the west moraine to continue in a linear fashion. This type of development, grid method, adds nothing to the aesthetics and particular care should be exercised in planning utilizing the most professional planners.

Conclusions and Recommendations:

A county planning engineer should be acquired to coordinate the planning and development throughout the county, while at the same time disseminating projected plans with commissioners and land owners and encouraging selected outside interests.

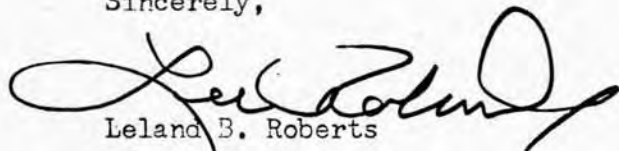
Proposed and existing developments should be reviewed and serious attempt be made to negotiate satisfactory relationships thus encouraging future investments.

It is obvious that development around the Lake must be curtailed until such time as water and sewage facilities are provided or provision made at the time of development.

Prior to any land use designations, public hearings held to avoid violation of civil rights.

This area can be developed into a nationally and inter-nationally known tourist attraction with foresight and imaginative planning, without altering the characteristic legend of Chief Joseph or the "Little Switzerland of America" atmosphere, and at the same time vitalizing the local economy so essential for survival.

Sincerely,



Leland B. Roberts

Wallowa Basin Committee

Comments concerning the Wallow Lake Basin Study.

1. The 701 funding for this study was Granted for the purpose of preserving open space for clean air while developing clean water and sewage systems.

Stevens Thompson and Runyan Inc have met the terms of this Grant.

2. However the county Court and Lake Basin Committee excepted this Grant for the purpose of determining the cost and feasibility of a clean water and sewer system for maximum development of the Lake Basin.

3. The Land use Proposal resulting from this study are in conflict with maximum development of the Basin.

Recommendations to W.L.B. Committee

1. That the Land use Proposal be rejected.

2. That S.T. and R inc. submit to us a plan for a sewer system capable of handling full development of lake basin.

Recommendations to the planning commission.

1. That a qualified planner be hired for the county for the purpose of developing the Lake Basin to its Highest Potential (quality) as tourist attraction, for the overall economy of the county.

Edythe Crane

ACKNOWLEDGMENTS

WALLOWA COUNTY

County Commissioners

Claude Hall
Bill DeGrofft
Clifford Johnson

Wallowa County Planning Commission

Joe McClaram, Chairman

Lake Public Works Committee

Duane Wiggins, Chairman

Public Affairs Committee

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Economic Development Coordinator

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ACKNOWLEDGMENTS

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