Comprehensive Plan

Tulalip Reservation

Reservation Profile

Wayne,

this plan is as
much yours as mine.

Best of Everything

John L.

COMPREHENSIVE PLAN: TULALIP RESERVATION

prepared for

The Tulalip Tribes of Washington

by

The Latourell Associates
3321 N.E. 185th Seattle, Washington

June 1972

The preparation of this document was aided by the Washington State Planning and Community Affairs Agency through a Federal Grant from the U.S. Department of Housing and Urban Development under the Urban Planning Assistance Grant Program authorized by Section 701 of the Housing Act of 1954, as amended. Contract number Washington P-166-4.

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PREFACE

It has indeed been a most exciting and gratifying experience to have worked with the Tulalip Tribes in this planning effort. While there are problems that at times seem unsurmountable and progress treads with leaden feet, the opportunity to create the quality environment they seek is at hand. The lands of the Reservation have the potential to become one of the finest residential and recreational areas of the state. At the same time, through development of these resources, the Tribes has the opportunity to provide meaningful and stable employment in tribal enterprises. It is going to take time and effort but it will happen.

Indian reservations are unique and complicated places. Indian Country has problems most white people have not thought about, much less understood. Fortunately, America is beginning to recognize the rights and privileges of Indians as Indians. Hopefully this awakening will lead to honoring our long standing, long ignored comitments to the Indian nations.

Because of the uniqueness of Indian reservations, the planning problems are multiplied, not in the least of which is figuring out what the problems are. Three of these problems merit special notice as they so obviously affect the program.

The question of tribal sovereignty and the extent of tribal jurisdiction over Indian Country has a pervasive influence on the plan and program. The demarcation between the rights and duties of the federal, state, county, local and tribal governments is very hazy and will ultimately be resolved in the court house. A large part of the problem stems from Public Law 280, a curiously worded act which grants jurisdiction over Indian reservations to state government. The conditions of assumption and extent of that jurisdiction have never been defined and the result has been a virtual vacuum of effective development planning and regulation. To help clarify the issues and set forth the position of the Tribes, we have included in the program a study of state jurisdiction over land use controls on fee patent lands within Indian Country. This study conducted by Lewis A. Bell, legal counsel for the Tulalip Tribes; the Treaty of Point Elliot, 1855, which established the Reservation; Article VI of the Constitution of the Tulalip Tribes of Washington, which enumerates the powers of the Board of Directors; and a statement on Indian water rights are included in Appendix A.

There are some instances in the plans and programs of this study that may appear to conflict with the concept of full tribal jurisdiction over the Reservation. Where that occurs, the recommendations should be considered as interim until tribal sovereignty is completely established -- a concept which we strongly believe in.

Another problem with which we had to contend is the complete lack of accurate statistical information on the Reservation. There are large differences between Census, B.I.A., U.S.P.H.S. and O.E.O. data on both housing and population. As a consequence, rigid accuracy and close comparability were often impossible to achieve. For the most part, we found that the numbers from the Community Action Agency were the most reliable and current.

In this program, as in most others, there are some goals and objectives which are in fundamen-

tal conflict. The urgent need for development of tribal lands for employment and income stands opposite to the very real necessity of preserving the natural environment which is ultimately the primary asset of the Tribes. The plans and programs recommended here are designed to have the least possible adverse impact on the quality of the environment and when this conflict surfaced in a specific proposal it was resolved in favor of the land.

With few exceptions, those who have been involved in this planning program have given far more time, advice and encouragement than could be asked of them without embarrassment. It has been particularly rewarding to have worked so closely with the Tulalip Board of Directors and staff whose diligence and patience over the past two years has been remarkable.

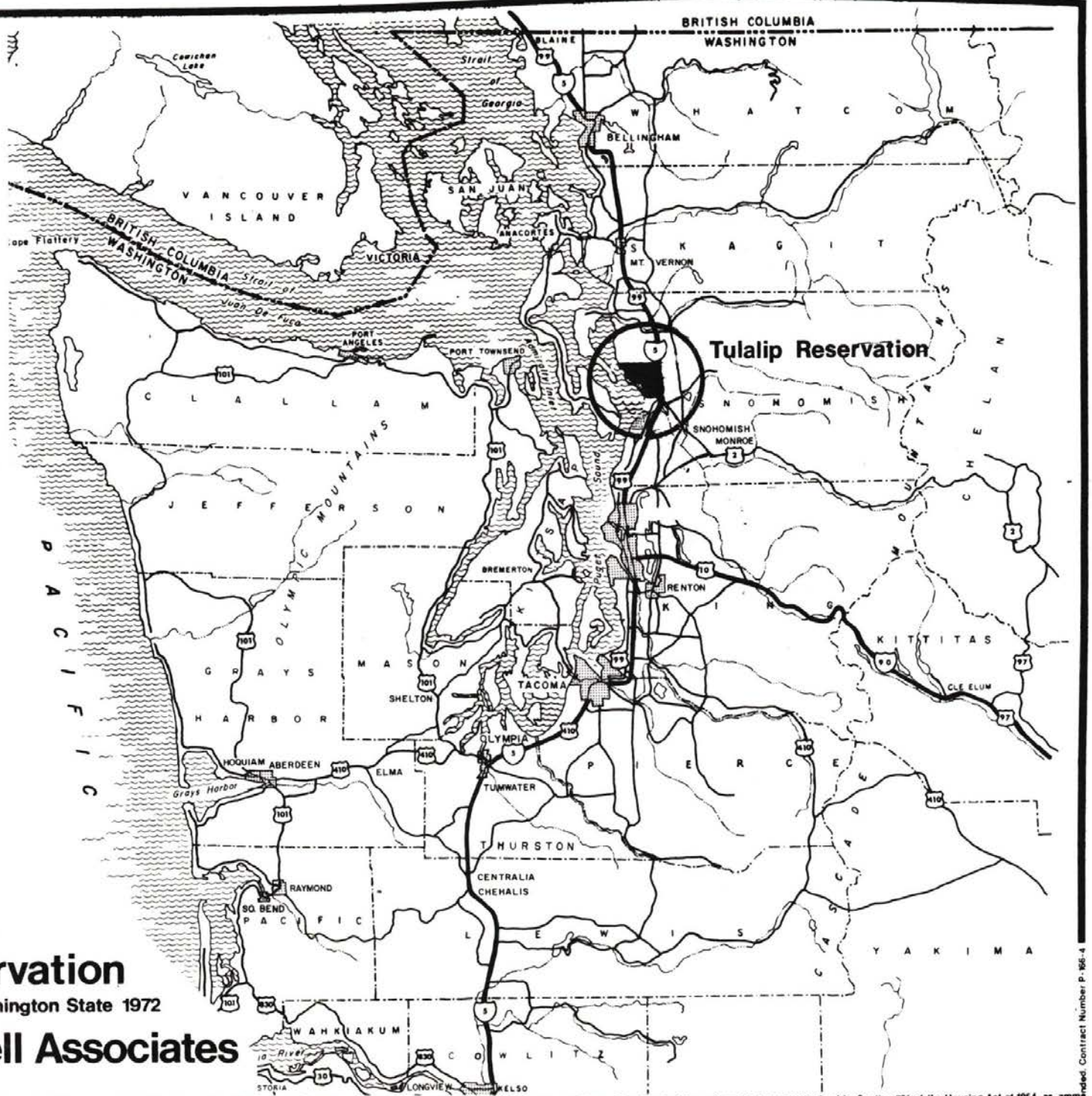
We would like to express our sincere appreciation for the support given us by the Snohomish County Planning Department and the Washington State Department of Planning and Community Affairs. Without the active participation of these two agencies this plan could not have been accomplished.

A special note of thanks is in order for Professor Robert Small and the students of the Department of Architecture and Urban Planning of the University of Washington who worked so hard and contributed so much. Their fresh concepts and enthusiasm were a real stimulant and many of their ideas have been incorporated in this plan.

We would also like to express out thanks to the following persons and organizations and assure those who are not listed that we have not forgotten their help either.

Ruskin, Fisher and Associates, Inc.
The Murray-McCormick Environmental Group
Lee Johnson and Associates, Inc.
Social Development Corporation
Macaulay and Associates, Ltd.
Lewis A. Bell; Bell, Ingram, Johnson and Level, Attorneys
Robert C. Jacobson, Community Development Services
Peter J. Ales, General Services Administration
Richard J. Navarre, Bureau of Sports Fisheries and Wildlife
Washington State Department of Fisheries
Bureau of Indian Affairs
U.S. Army Corps. of Engineers
Economic Development Administration
U.S. Public Health Service, Division of Indian Health
Puget Sound Governmental Conference
Phillip Lacourse, Tribal Services Association
Robin Butler
Anthony J. Shultz
Michael Kelly Smith

John A. Latourell
Elaine Day Latourell



Vicinity Map

The Tulalip Indian Reservation

Snohomish County, Washington State 1972

The Latourell Associates

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MILES

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Physical Features

CHAPTER 1

PHYSICAL FEATURES

The physical features of any area in large measure controls what can and what cannot be developed on the land. Conditions of topography, soil types, degree of slope, surface and ground water either singly or acting in concert may preclude development or make it prohibitively expensive to overcome in order to facilitate the desired development.

These land features together with the cultural development on the Reservation set the base line for physical planning. This section of the report summarizes these elements and describes the situation on the Reservation as it is today. This is the raw material with which we must work.

The Tulalip Indian Reservation is near the geographic center of the eastern shore of Puget Sound and has access to all the populous urban centers from the Canadian border south to Tacoma, west beyond Bremerton and east to the Cascades within a fifty mile radius. Within a ten mile radius of the center of the Tulalip Reservation is the City of Everett, fifth largest in the State of Washington, with a population of 53,622 in 1970. The rest of Snohomish County, with 265,236 people, lies within a 20 mile radius of the Reservation. Most of the Seattle metropolitan area with a population of over 1,200,000 is within 40 miles.

Snohomish County is the fourth largest county in the State of Washington. It is centrally located on the eastern shore of Puget Sound, between Skagit County on the north and King County on the south, the Cascade Mountains on the east and tidewaters of Puget Sound on the west.

Located five miles north of the City of Everett on the north side of Everett Harbor (Port Gardner), at the mouth of the Snohomish River and across Interstate Highway Number 5 from the Town of Marysville, the Tulalip Reservation measures about 6 1/2 miles along its east boundary and 8 miles along its north line. The south and west boundaries front for about 12 miles on the salt water of Puget Sound and for about 2 miles on Eby Slough, a slow moving channel of the Snohomish River along the south line. (See map 1.)

The Tulalip Reservation lies within the Snohomish Drainage Basin. Three sub-basins run in a north-south direction through the study area. The interior and principal sub-basin is the Tulalip, with the Warm Beach basin along the coast to the west, and the Quilceda Creek basin to the east.

The source of stream waters within the Reservation can be traced primarily to the hills of the three ridge-like land forms, with surface run-off being the major supplier. Tulalip Creek is fed in part by Lake Goodwin and Lake Shoecraft north of the Reservation.

TOPOGRAPHY

The major portion of the Reservation includes the southern toe of the Tulalip Plateau which extends northerly for several miles. This land is characterized by gently rolling to hilly terrain which rises from sea level to elevations of between 400 and 580 feet along three dominant ridges reaching southerly into the Reservation. (See map 2.)

Between the ridges, small valley floors, composed of poorly drained and organic soils, follow the drainage systems of Tulalip and Mission creeks south to Tulalip Bay. The western coast is predominantly rough broken land with excessively steep slopes sometimes dropping as much as 300 feet to the water.

The lowlands of Tulalip and Mission creeks form the immediate background for Tulalip Bay, an oval body of water partially closed by a hook of land called Mission Beach. The bay is shallow throughout the southeastern half, with mud exposed at low tides.

Along the eastern boundary of the Reservation, a continous strip of land one and one-quarter mile wide, lies within the Marysville Trough. This lowland, never exceeding an eight percent slope or rising above 100 feet in elevation, is the valley floor for Sturgeon and Quilceda creeks. Steep slopes rise to the west. The soil is primarily poorly drained and organic with the exception of some well-drained material along Quilceda Creek. To the south is the narrow strip of shoreland along Eby and Union sloughs. These waters form part of the tidal estuary of the Snohomish River, emptying into Port Gardner Bay.

SLOPE

The degree of the slope is of particular importance when locating areas suitable for future construction. Complementary to the topography map the slope map (map 3) illustrates the degree of slope independent of the elevation. Below eight percent grade no particular difficulties are encountered for most types of development although commercial and industrial complexes generally desire a slope of less than three percent. Buildings in residential developments must be carefully sited and in some instances designed specifically for hillside construction where the grades of the slope exceed eight percent. Extra grading and site preparation are usually required. Construction of residences on grades in excess of 15% requires extensive and expensive measures both to the building itself and to the site.

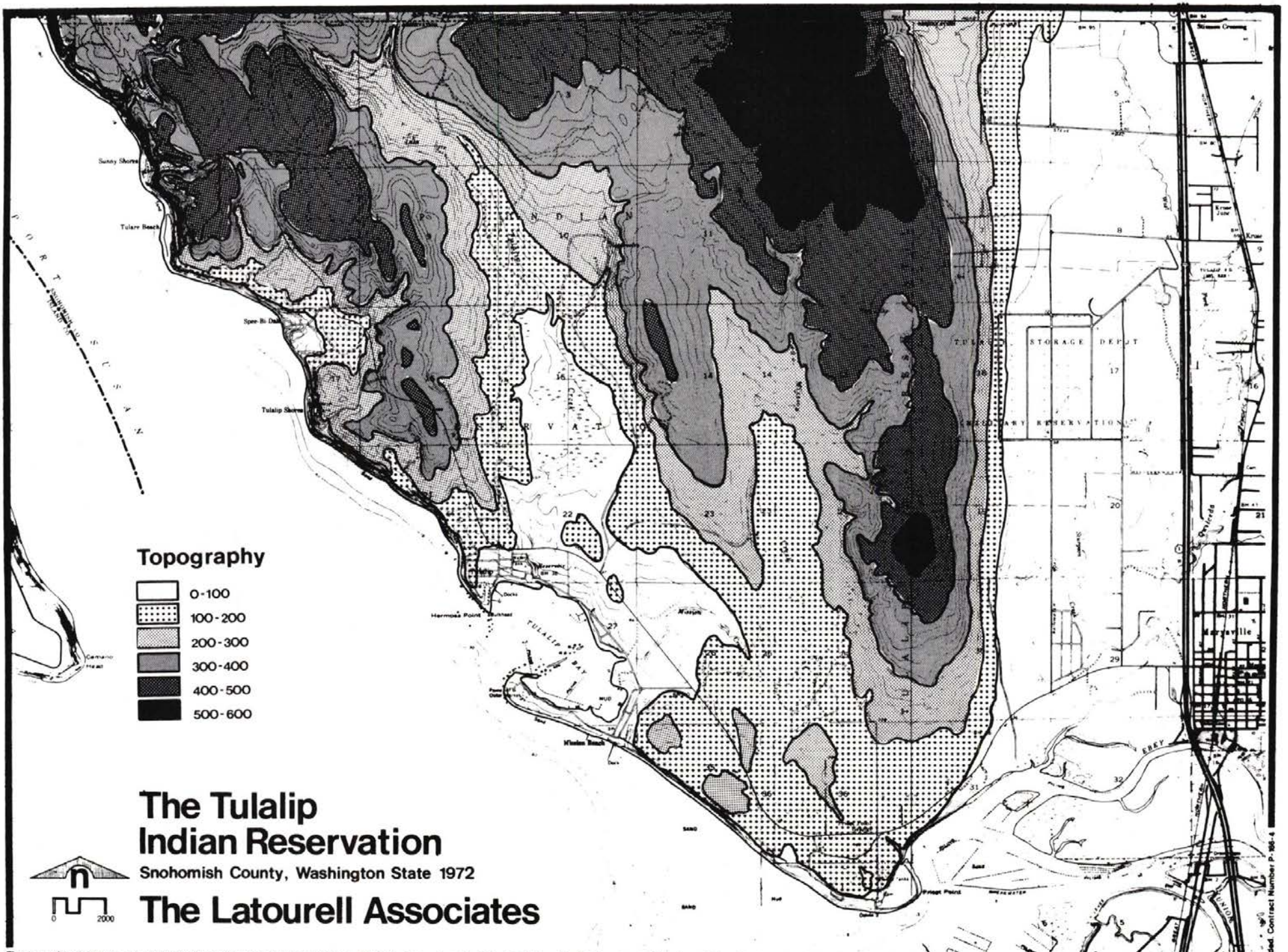
The degree of slope also influences land use for several other reasons. The combination of slope, soil types and structure characteristics determine the susceptibility to both landsliding and erosion. Silty clays as in the Bellingham series can become quite fluid when saturated with rainfall. Sandy loam is highly susceptible to erosion when water-retaining ground cover is removed as in the cutting of roadbeds or construction sites on side hills.

The same combination of soil types and slope also conditions the suitability of land for septic tank systems. Generally speaking, the steeper the slope the larger the drain field required to avoid effluent breakouts.

As amply illustrated by the accompanying maps and data, significant amounts of land on the Reservation are unsuitable or difficult to develop because of the steepness of the slope. Of the 22,000 acres, over ten percent is land with a gradient in excess of 15%. Twenty-eight percent (6,200 acres) is land with slope between 8 and 15% in grade. Although 8,700 acres or almost 30% of the entire Reservation has some restrictions to building by reason of steep slope and corollary factors.

SOILS

The characteristics and distribution of soil types in any planning area have come to be recognized



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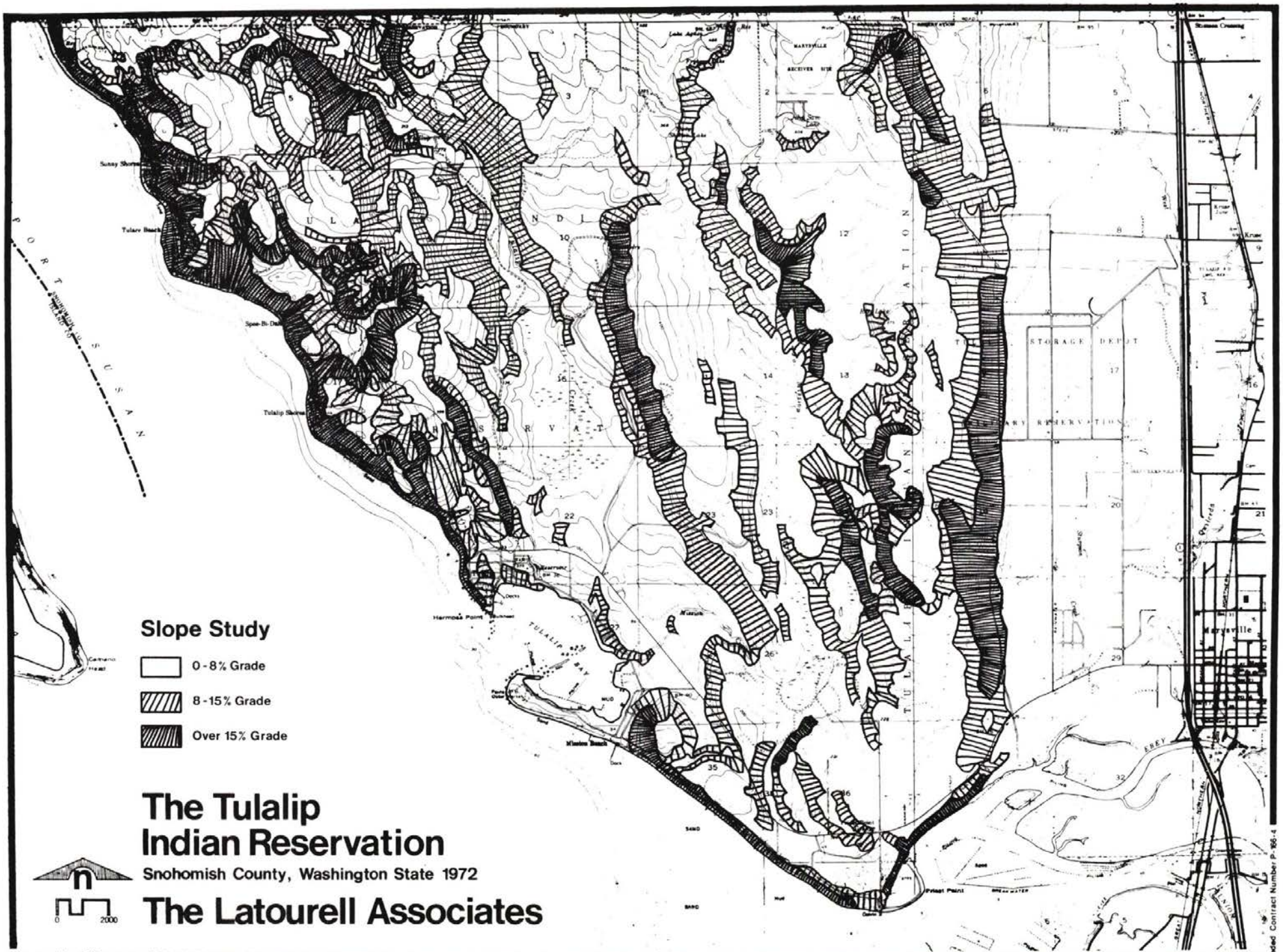

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as a powerful determinant of the developing urban forms. In the past the major consideration of soil types has been its agricultural productivity and virtually all soils analysis and classifications were made with agricultural uses in mind. Only recently has the importance of soil types to urban development been recognized in land use planning. The traditional approach to the question of soil types and their effect on urbanization has been to evaluate the additional expense incurred because of adverse conditions and devise ways of either altering the soil or the structure built on it to overcome the problem. However, the presence of certain types of soils often are indications that these areas may be best left undeveloped for reasons unrelated to economics. Although almost any physical impairment to development can be overcome at a cost, there are many areas that in their natural state fulfill important roles in the ecological balance of nature, a service to man that cannot be measured in dollars.

Fundamentally there are two characteristics of soils, often interrelated, which significantly influence development: permeability and structural characteristics. Permeability determines the ability of the soil to provide drainage of surface and subsurface water, to provide domestic and industrial water supplies, to grow desired plant types and to accommodate septic tanks. The soil structure determines the ability to bear heavy loads of buildings and roads, to remain stable on hillsides and to maintain dimensional stability under changing climatic conditions.

Soil Types and Distribution

The soils of the Reservation have been consolidated into five general groups. Within each group are a number of different soil types, each having specific characteristics which are indicated in Soil Tables I and II.* Map number 4 indicates the distribution of these general groups.

Type I: Well-Drained Soils. The largest and most widely distributed category is well-drained soils, sandy or gravelly loam underlaid with a variety of glacial materials.

Type II: Imperfectly Drained Soils. Derived from recent alluvial stream bottom deposits, these soils are the most fertile.

Type III: Poorly Drained Mineral Soils. These soils have been developed under conditions of poorly established drainage in glacial lakes and other depressions. Subsoil waters move slowly and must be drained for uses other than pasture.

Type IV: Organic Soils. Mulch and peat occur in spots along all the drainageways and are characterized by layers of organic materials in varying states of decay. These soils are generally very wet and soft.

Type V: Miscellaneous Lands. This category includes tidal flats, rock and broken glacial till, and beach material. These are generally found only in tidal areas and steep slopes.

Limited amounts of commercial grade sand and gravel occur in scattered places on the Reservation. No significant deposits of valuable minerals are known.

WATER RESOURCES

Surface Water

In addition to the resource of Puget Sound and Tulalip Bay, the Reservation has a number of lakes

* See Appendix D.

and streams. With the exception of Ross Lake, which is wholly owned by the Tribes, there is road access to all named lakes. These are: Mary Shelton, Agnes, Fryberg, John Sam, and Weallup. Development when it has occurred on these lakes has been spotty and of low intensity with small summer cabins and mobile homes. There are many small unnamed lakes scattered throughout the Reservation. There is a possibility of developing some of them into larger, productive lakes.

The three major streams on the Reservation, Quilceda, Mission and Tulalip creeks, all flow generally from the north to the south. Quilceda Creek meanders along the easterly edge of the Reservation emptying into Eby Slough through a long, wide tidal marshland. The lower reaches of Quilceda Creek, below the Tulalip Road Bridge, are navigable to small craft.

Mission and Tulalip creeks flow from the northern ridges to the lowland marshes between and both empty into Tulalip Bay. Mission Creek flows directly into Tulalip Bay in a deep ravine and is little influenced by tidal actions. Tulalip Creek is impounded in a large reservoir built for power generation at the old mill at Tulalip. The outfall is regulated by gates at the dam. Because of the very sparse development on the Reservation, the creeks are relatively free from pollution and provide excellent fish and wildlife habitat.

Ground Water

The City of Marysville drilled deep wells in sections 19 and 25, which produced no water even below sea level. However, the city engineer is confident of producing wells in sections 12 and 1. Just north of the Lake Ki area there are several good wells.

VEGETATION AND NATURAL LIFE

Forestation

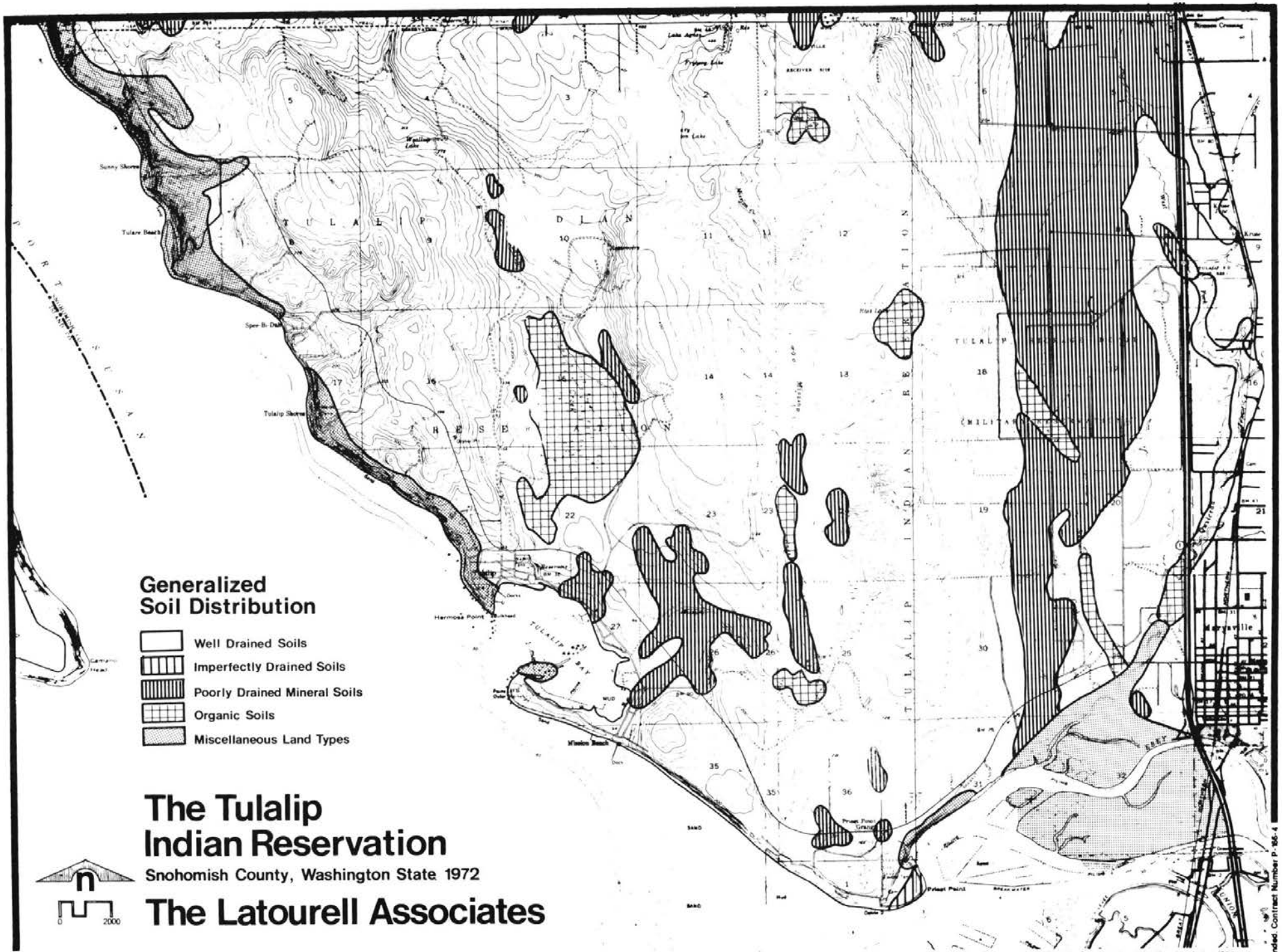
Almost all the Reservation is covered with dense, second- and third-growth timber of little commercial value. There are some small stands of large cedar, hemlock and fir, primarily at the northwestern corner of the Reservation. However, most of the forest cover is limited to logged-over lands sprinkled with alder and maple, characteristic of unmanaged second growth with evergreens generally less than 18" in diameter. Large areas in the drainage basins of the three major creeks are swampy, with alder, vine maple and cottonwoods predominating. Dense ground cover in all forested areas provides excellent wildlife habitat but severely restricts access to man.

Few large areas of the Reservation have been cleared and retained in meadow. Exceptions include land for the dairy farms and land cleared for the raising of personal livestock or horses. Some meadowlands now support residential development.

The Snohomish River flood plain in the Eby Slough area is a typical estuarine salt marsh, with poorly defined demarcation between tidelands and uplands. Salt grass and cattails predominate and provide an excellent wildlife and waterfowl refuge.

Fish and Wildlife

The streams, lakes and forest of the Reservation provide excellent habitat for fish and wildlife. Salmon spawn in Quilceda and Mission creeks and are planted in the reservoir on Tulalip Creek for rearing and release in the late spring. Later



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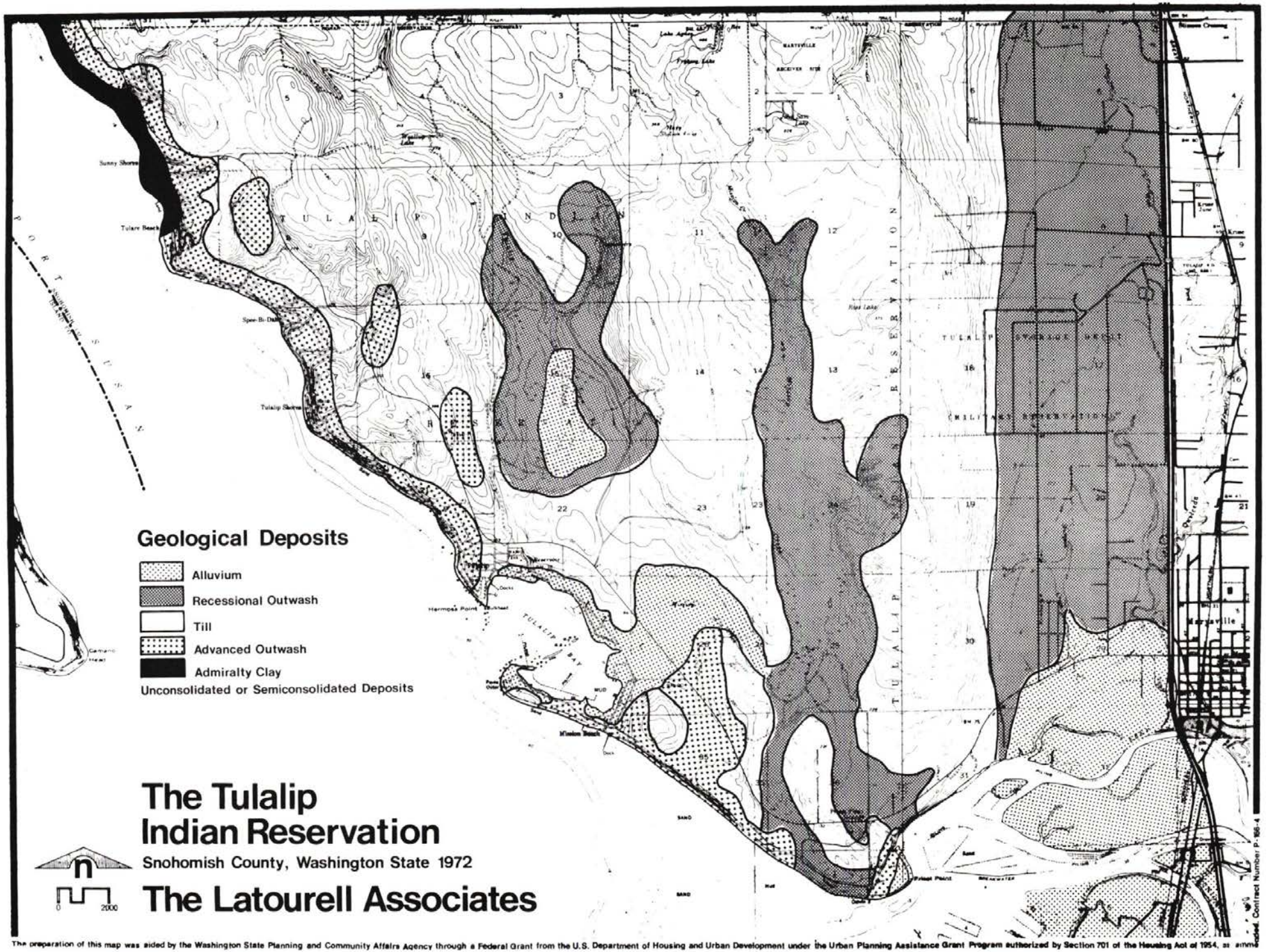

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Tulalip Creek is planted with resident trout.

Some shellfish, including crab, are present on the sandy and gravelly stretches of saltwater beaches. Pollution from Port Gardner Bay and septic tank effluent poses a serious threat to the existance of shellfish in some areas.

Most types of western Washington wildlife are found on the Reservation from beaver and raccoon to some deer and bear. Most significant, however, are the waterfowl in both the Snohomish Delta areas and the numerous swamps and wetlands throughout the uninhabited areas of the Reservation.

LAND USE

With few exceptions the land within the Reservation boundaries is either vacant or used for permanent or seasonal residences. Residential development is highly oriented to salt water access, wherever there are low banks along the Sound (See map 6.)

Commercial development is limited to: a general store and gas station on Tulalip Road near the Priest Point Road; a second-hand store on the Tulalip Point Road at Quilceda Creek; two gas stations at the intersection of 4th Street and Interstate 5; a drive-in theater at the same location; and a second-hand store on the Interstate 5 frontage road just to the north.

The only institutional uses are the Sno-Isle Regional Library on the I-5 frontage road, the Tulalip school, the tribal buildings and the small fire house at Tulalip.

All industrial activity is carried on at two locations: a boat builder on Quilceda Creek near Eby Slouth, and the 2,000 acre Tulalip Test Site where the Boeing Company tests and stores explosive ordinance. Most of the land is unoccupied. A large tract of tribal tidelands in Eby Slough is being filled with industrial wastes barged from Seattle.

North of the Tulalip Test Site there is some dairy farming on the flat land but most of the Reservation is unsuitable for farming because of soil conditions and topography.

The remainder of the Reservation is unoccupied and largely inaccessable as indicated on the land use map. This pattern has existed for many years with little new subdivision activity even at the height of the Boeing expansion period in 1968-1969. Some new residential construction has occurred on the east side of Quilceda Creek on Tulalip Road and on the fire trail near Lake Weallup. The mobile home development at Lake John Sam is the only other significant area of recent residential development.

Individual residential construction has occurred scattered throughout the previously settled areas such as Tulare Beach, Tulalip and Priest Point. Sewage disposal problems have inhibited growth of the Reservation.

LAND OWNERSHIP PATTERNS

There are basically three types of land ownership on the Reservation: allotted lands, owned by individual Indians; alienated lands, owned by non-Indians; and tribal lands, owned by the Indian Tribes (See map 8).

Alloted Lands

Shortly after the Reservation was established in 1855, the federal government assigned individual parcels of land to the Indian families on the tribal roles and in some cases forceably relocated the families from the small settlements on the shores of Puget Sound to their designated parcels. These lands are held in trust and managed by the Bureau of Indian Affairs on behalf of each Indian owner.

Alienated Lands

From time to time in the past, the Bureau of Indian Affairs has approved of sales of allotted lands to non-Indian purchasers. Alienated lands are no longer in trust and are not subject to BIA management.

Tribal Lands

Until the formation of The Tulalip Tribes of Washington, and the granting of a federal charter in 1935, there was no tribal organization capable of holding and managing lands for the Tribes as a whole. At that time, the only unallotted lands, other than alienated lands, within the Reservation were the tidelands and approximately 350 acres at Tulalip Bay which were reserved for the Indian agency offices and the Western Washington Indian Boarding School. Over the years, since 1935, these unallotted lands have reverted to tribal ownership.

In 1939, the Tribes made its first purchase of allotted lands when it acquired 100 acres near Jimicum Springs to form the headworks of the tribal water system. Throughout the years, the Tribes has acquired holdings in all areas of the Reservation and is today by far the largest owner.

Tribal lands, delineated on map 8, are generally held in trust status with joint management responsibility between The Tulalip Tribes and the Bureau of Indian Affairs.

Tidelands owned by the Tribes are not shown on the ownership map because of the unresolved extent of these holdings. Litigation in pending on this issue.

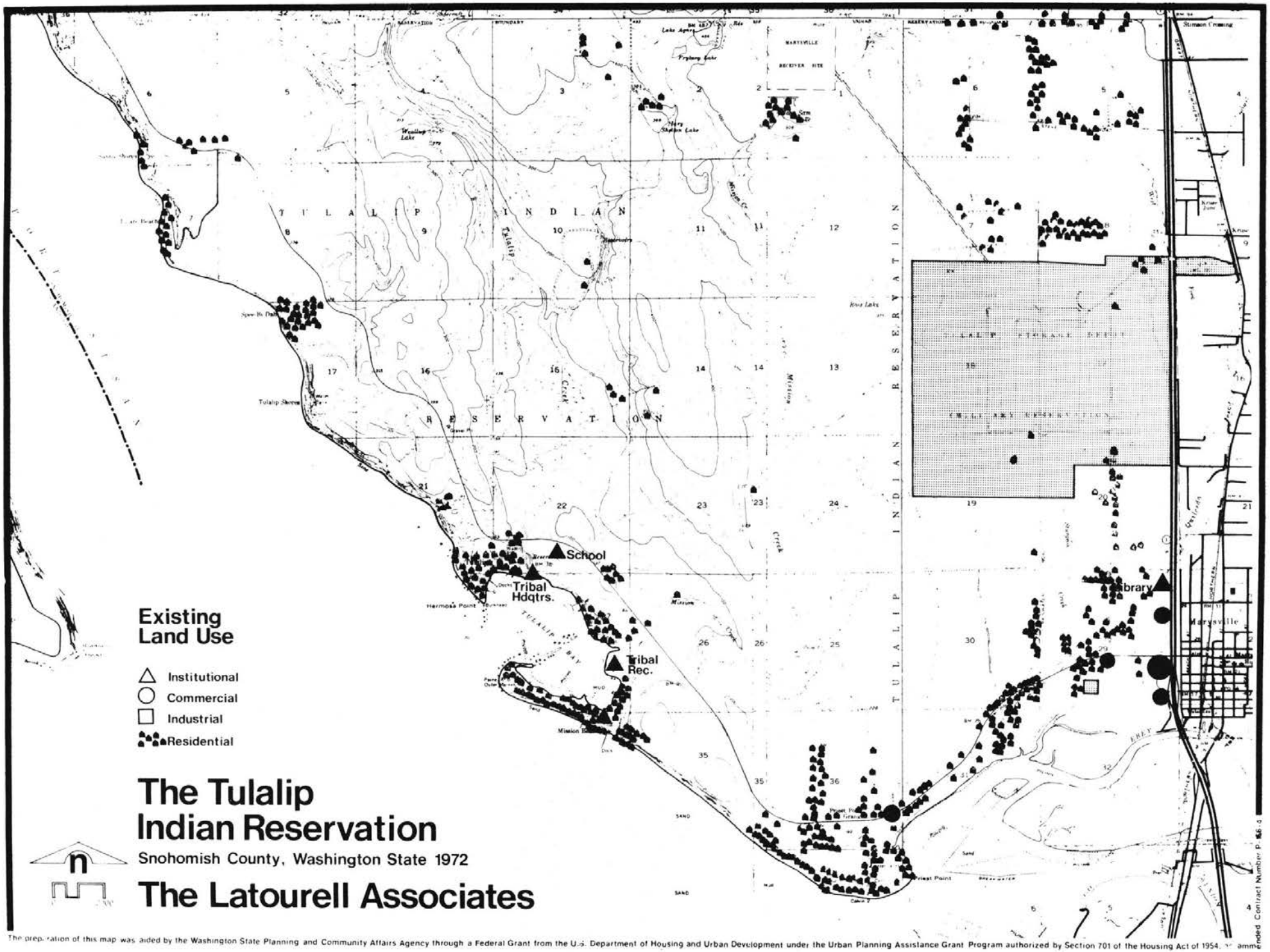
At present, the approximate acreage in each category is as follows:

Tribal	5,780	acres
Allotted	3,347	acres
Alienated	12,873	acres
TOTAL	22,000	acres

SPECIAL FEATURES

Water Frontage

The Tulalip Reservation is endowed with several outstanding features which will significantly influence future development. Foremost is the 16 miles of salt water shoreline. Starting in the Snohomish Delta marshlands and extending into Port Susan Bay on the northwest, the shoreline has several distinctly different characteristics. (Indicated on map 9.) Most of the shoreline, 7.2 miles, is high-bank waterfront falling precipitously to a narrow beach at the bottom. Up to 300 feet high in places, these cliffs preclude access to the water, but do provide excellent views of sea and mountains. In some high-bank areas, steep ravines cut access points to the water. At the base of some of the larger ravines, beachfront communities have developed on the nar-



The Tulalip Indian Reservation

Snohomish County, Washington State 1972

The Latourell Associates

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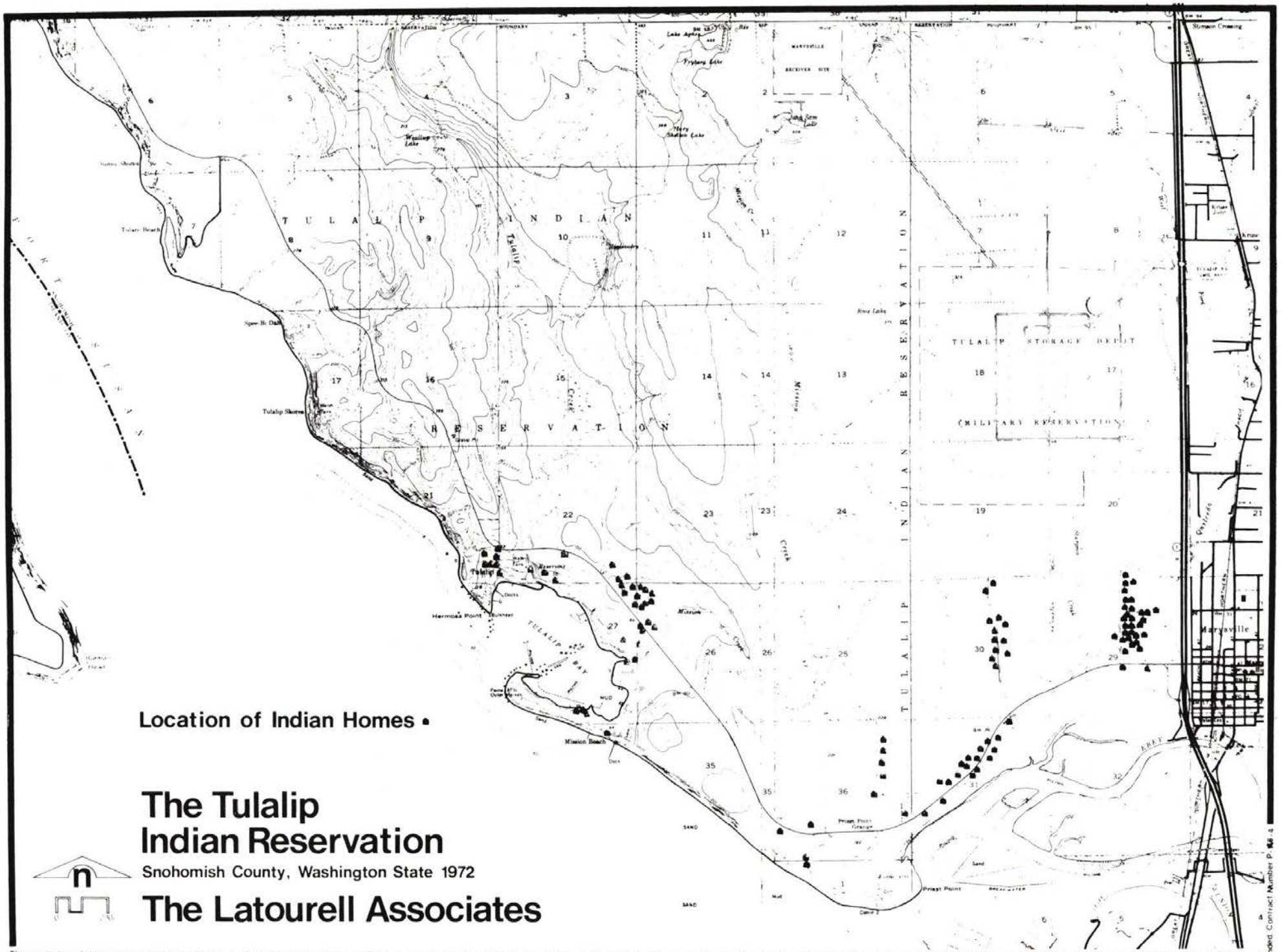

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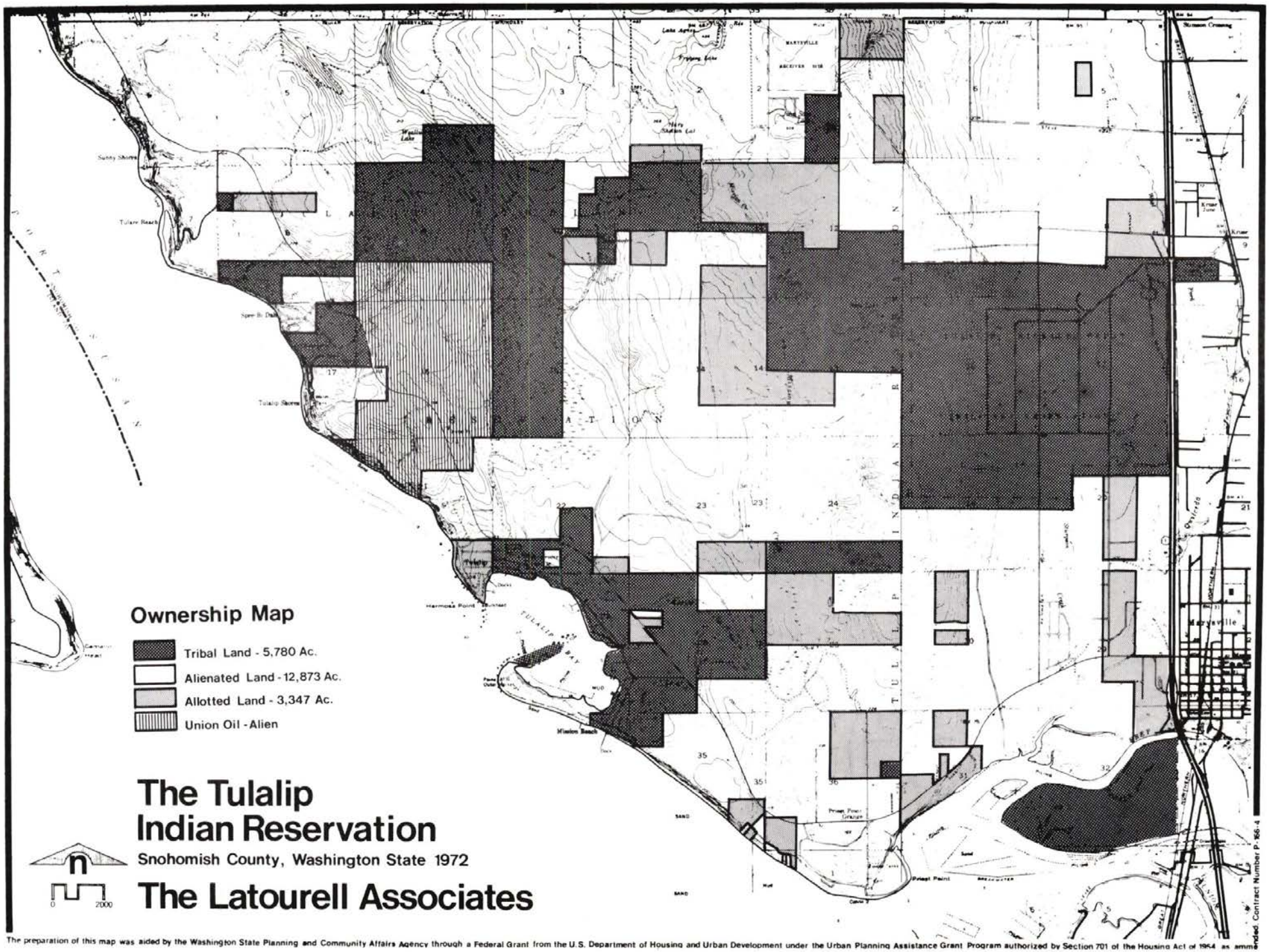

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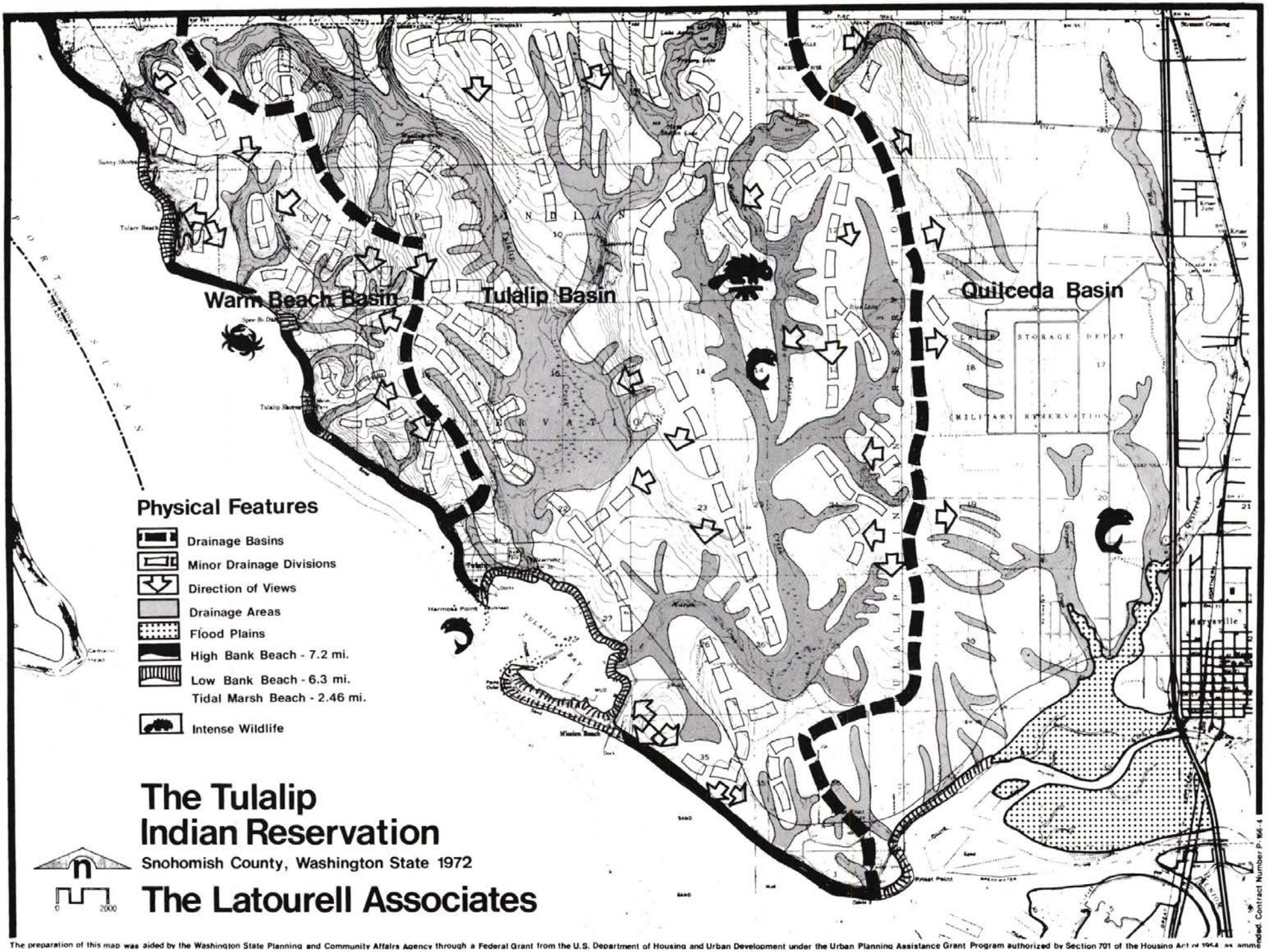

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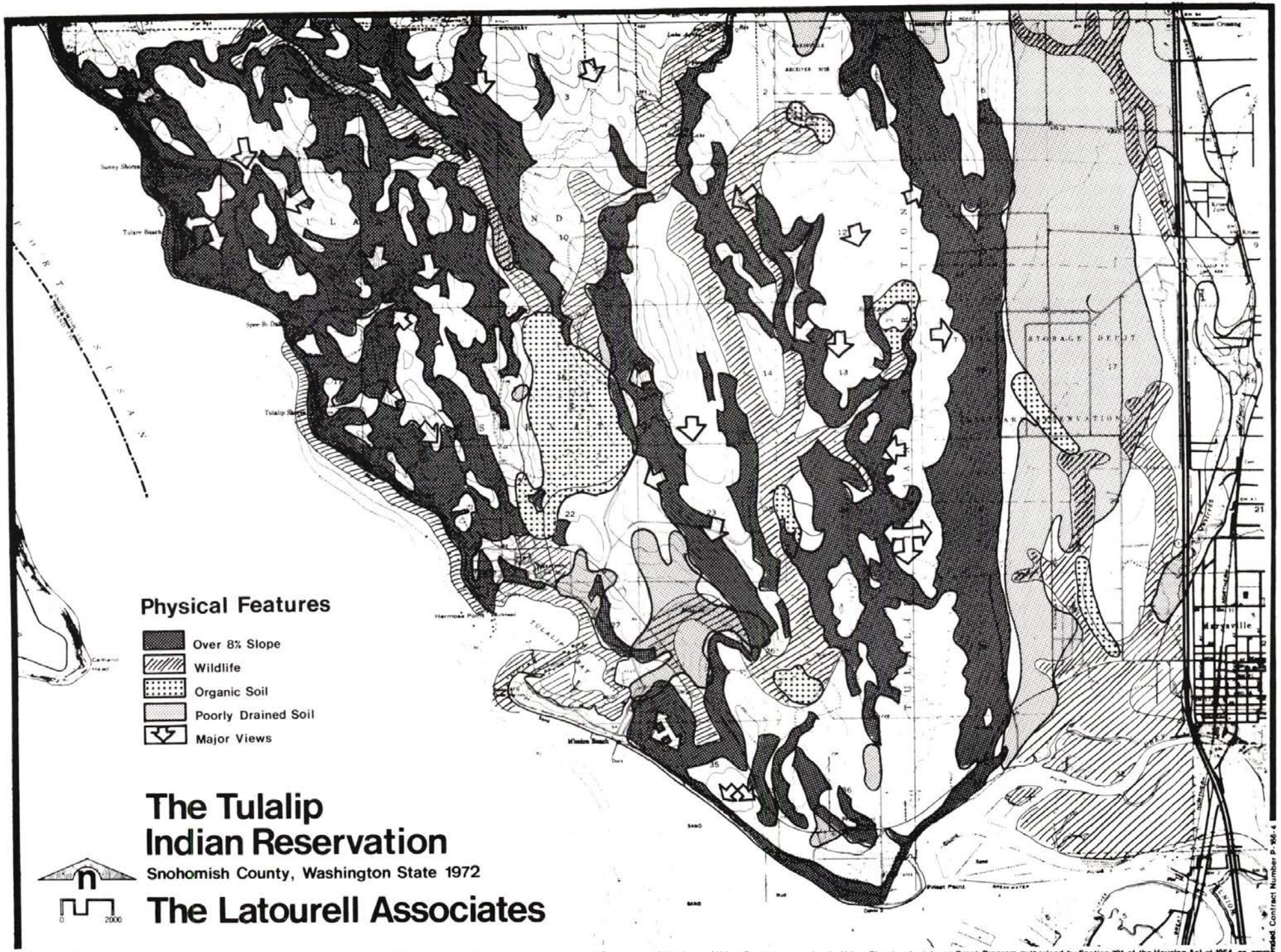

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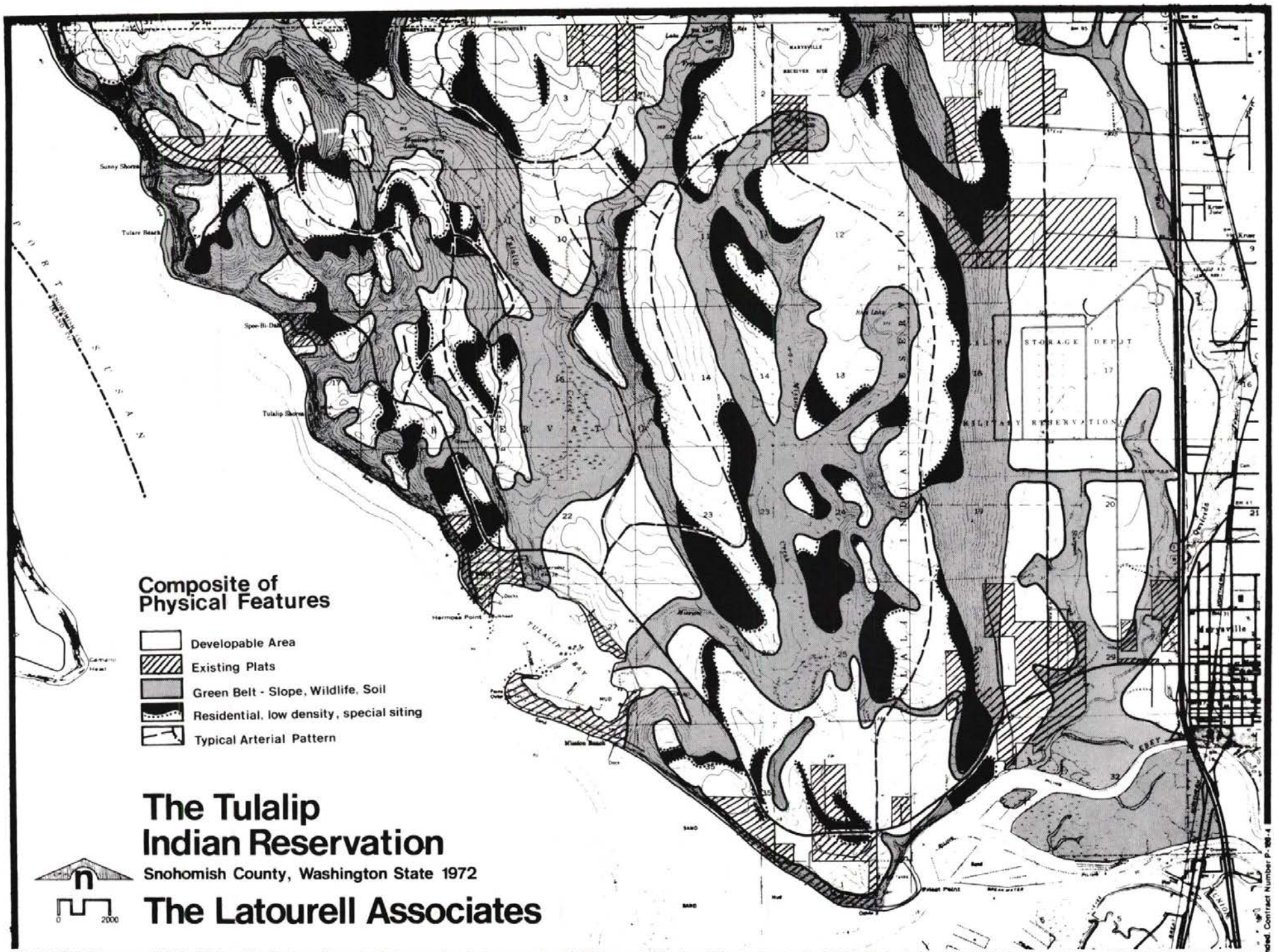

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row bench at the shoreline.

In other areas, notably Tulalip Bay and Priest Point, the waterfront banks are more moderate and offer good access to the water. These areas have developed fully with both seasonal and year-round residences. In the mouth of the Snohomish where the flat, low-lying uplands meet the water, the demarcation of tidelands is often difficult. These wetlands are often subject to flooding from both extreme high tides, on-shore winds and flood flows of the Snohomish River. There are about 2.5 miles of marshland shoreline, including the perimeter of islands in Eby Slough. Low-bank waterfront totals approximately 6.3 miles.

View Potential

In addition to the view property on the high bluffs overlooking Port Susan Bay and Port Gardner Bay, several other major areas of the Reservation have excellent view potential. Both of the high ridges, coming down from the north, offer truly spectacular prospects to the east overlooking the Marysville plain to the Cascade Mountains, to the south over Port Gardner Bay and the City of Everett, and to the west over Puget Sound, Camano Island and the Olympic Range.

Industrial Potential

The suitability of land for industrial use is dependent upon a host of factors in addition to physical features: locational and cultural features, transportation, power availability, proximity to labor and to markets. Moreover, the specific requirements of different types of industry, including type and location of raw materials needed, primary markets to be served and structures required, are equally varied. Depending upon the strength or desirability of available features, some undesirable aspects of a site may be either tolerated or overcome by improvements to the site. This balance is wholly dependent upon the needs of the eventual user and can only be evaluated in that light. Nevertheless, it is possible to identify those sites most likely to meet industrial requirements.

The land lying immediately west of Interstate 5, including the Tulalip Test Site, has long been recognized as potential industrial area. (See map 6). For more than a mile, the flat Marysville Valley extends into the Reservation terminating at the foot of the steep ridge at the west. Although poorly drained at present, the soils are generally fine sandy loam, highly permeable which can be drained with adequate systems for that purpose.

This entire area, including the similar land north of the Reservation, can be easily served by power, both electricity and natural gas, and sanitary sewer service by the City of Marysville. The Marysville Water System presently serves the area and Marysville is now in the process of forming a Local Improvement District to extend sewer service into the area.

There is excellent highway and rail access. Interchanges at Marshall Road and Stimpson Crossing have been completed this summer. The Tulalip Test Site already has direct access to the Burlington Northern main line and a complete internal rail trackage system which remains from the earlier use as an ammunition storage depot. North of the Reservation, Burlington Northern has been assembling acreage bordering the trackage in the Lakewood area. The Tulalip Test Site is approximately ten miles from the deep water harbor facilities at Everett. There are few sites of the size and quality under single ownership in the Seattle-

Community Facilities

CHAPTER 2

COMMUNITY FACILITIES

SCHOOLS

The Tulalip Elementary School (K-6) is the only school on the Reservation (See map 12.) This school was built in 1959 by the Marysville School District on a beautiful ten-acre site donated by the Tulalip Tribes. There are 12 teaching stations within the school with a total of 22,134 square feet. All but one of the teaching stations are rated "good" by state standards. Modernization of the one station rated "fair" is scheduled for the 1971-72 school year.

October, 1971, full-time enrollment at the Tulalip school reached 249 pupils. The designed capacity of the school plant is 316 students. In addition to the traditional elementary school program, Head Start and other community activities are conducted at the school.

Marysville Junior High School, built in 1960-65, and Marysville Senior High, built in 1954-58-62-66, are both given good ratings by the state standards. While the junior high school has sufficient capacity to absorb more students without crowding, the senior high school is now over capacity and must make use of portables built in 1963 and 1969. This is partially offset by considerable excess capacity of the newly built Pilchuck High School.

Future construction of school facilities on the Reservation is contemplated, but planning has been deferred pending completion of the land use plan and population distribution.

FIRE PROTECTION

Responsibility for fire protection on the Reservation is split between the City of Marysville and Fire Protection District No. 15. The Marysville jurisdiction encompasses the entire eastern third of the Reservation and extends out the Tulalip Road to the Priest Point or Church Road. FPD No. 15 is an all-volunteer system with its station located at Mission Beach. Because of the sparse population and lack of high value structures, fire protection services on the Reservation are generally adequate for its rural character. Special problems are presented, however, in the beachfront communities west of Tulalip because of inadequate water supply and difficult access.

SEWERAGE AND SOLID WASTE DISPOSAL

Virtually all sewage disposal on the Reservation is handled by individual septic tank systems. Most of the land is unsuitable for septic tank development and high density clusters of housing at Priest Point, Mission Beach and Tulalip have caused saturation of the soils resulting in numerous breakouts of effluent. The Snohomish County Department of Health has ceased issuing septic tank permits in several areas and has designated other areas of concern. (See map 13 & 14.)

The City of Marysville Sewer System extends into the Reservation along Tulalip Road as far as Rainwater Road. Future plans include extending a trunk northward parallel to Interstate 5, two miles past the Reservation boundary, to serve the potential industrial sites in that area. The

Tulalip Road trunk can be extended out to a point just east of Priest Point Road and serve the entire area eastward by a gravity system. A future lagoon site is contemplated near Eby Slough on the west side of Interstate 5. (See Appendix C.)

Solid waste disposal on the Reservation is available to those wishing to contract with a private collector. Since this is only an approved means and not mandatory, illegal dumping is a problem evident everywhere on the Reservation.

WATER SUPPLY

The City of Marysville presently serves the southeastern corner of the Reservation with a twelve-inch main along the Tulalip Road, to the subdivision of Marysville West. About one half of the capacity of this line is being used. The Tulalip Test Site is also served by the City of Marysville.

Tulalip Bay is served by a tribally owned and operated system, composed of a reservoir behind two concrete dams on a tributary of Tulalip Creek. A ten-inch main extends to the bay area distribution system. Storage is contained in a 65,000-gallon steel tank near the tribal office with an auxiliary 100,000-gallon wood stove tank at the east end of the bay. This spring, both dams at the headworks washed out in a heavy rainfall. Temporary repairs have been made and the system is once again in operation. (See map 15.)

The remaining small communities such as Tulare Beach and Sunny Shores are served by small community systems. Wells, with very restricted quantities, are the source of supply for these systems. (See Appendix B.)

POWER SUPPLY

Electrical

The Snohomish County Public Utility District supplies the electrical power throughout the County, including the Tulalip Reservation. The Snohomish County PUD is a major purchaser of power from the Bonneville Power Administration which has a major substation and distribution system at Snohomish. Power rates for both residential and industrial use are typical of the Pacific Northwest -- very low.

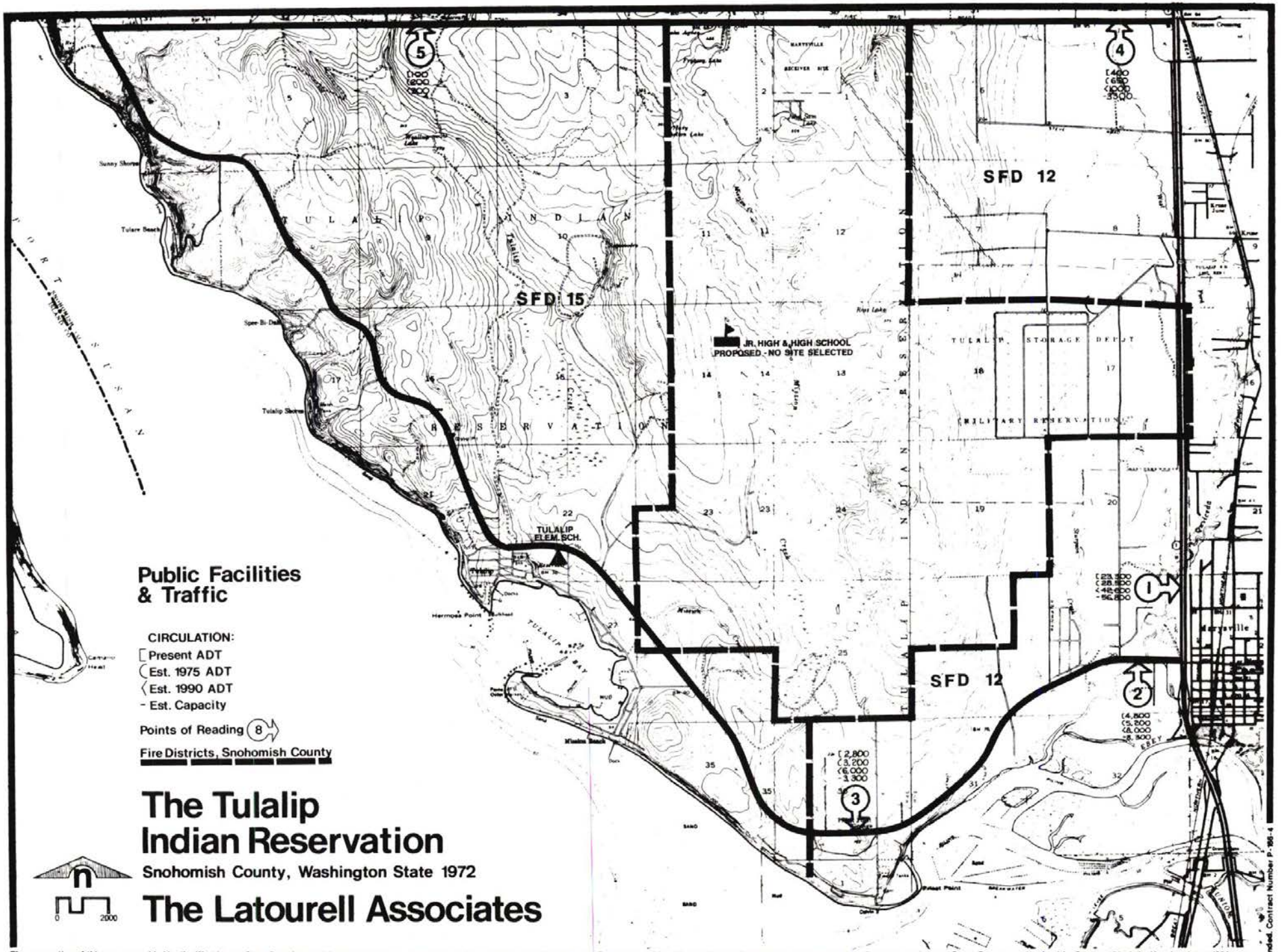
All developed areas of the Reservation are served by the PUD which has pursued an aggressive policy of promoting the use of electrial power. Future expansion of power service on the Reservation for either industrial or residential needs can be accomplished easily.

Natural Gas

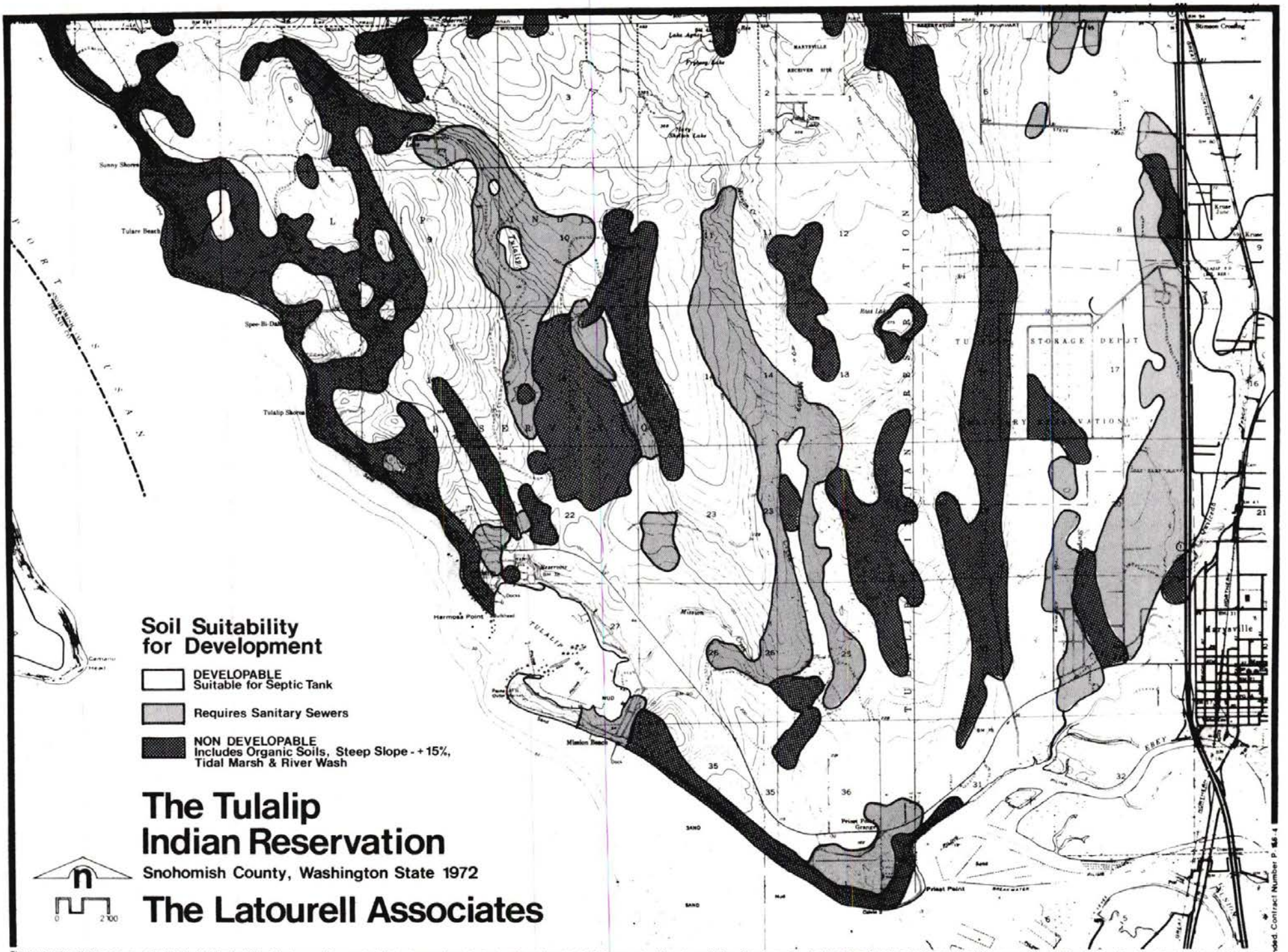
A 26-inch natural gas transmission line roughly paralleling Interstate 5 in the Marysville area is capable of delivering 700 million cubic feet per day. Use of natural gas in the Puget Sound area is rising steadily, but considerable unused capacity remains.

ROADS AND HIGHWAYS

The existing circulation system in the Reservation area includes two highways--Interstate 5 and the Tulalip-Warm Beach Road. Interstate 5 is the primary freeway connection between the major west coast cities from Canada to Mexico. It forms the easterly border of the Reservation for approximately six miles. Five miles to the south of the



The preparation of this map was aided by the Washington State Planning and Community Affairs Agency through a Federal Grant from the U.S. Department of Housing and Urban Development under the Urban Planning Assistance Grant Program authorized by Section 701 of the Housing Act of 1954, as amended. Contract Number P-165-4



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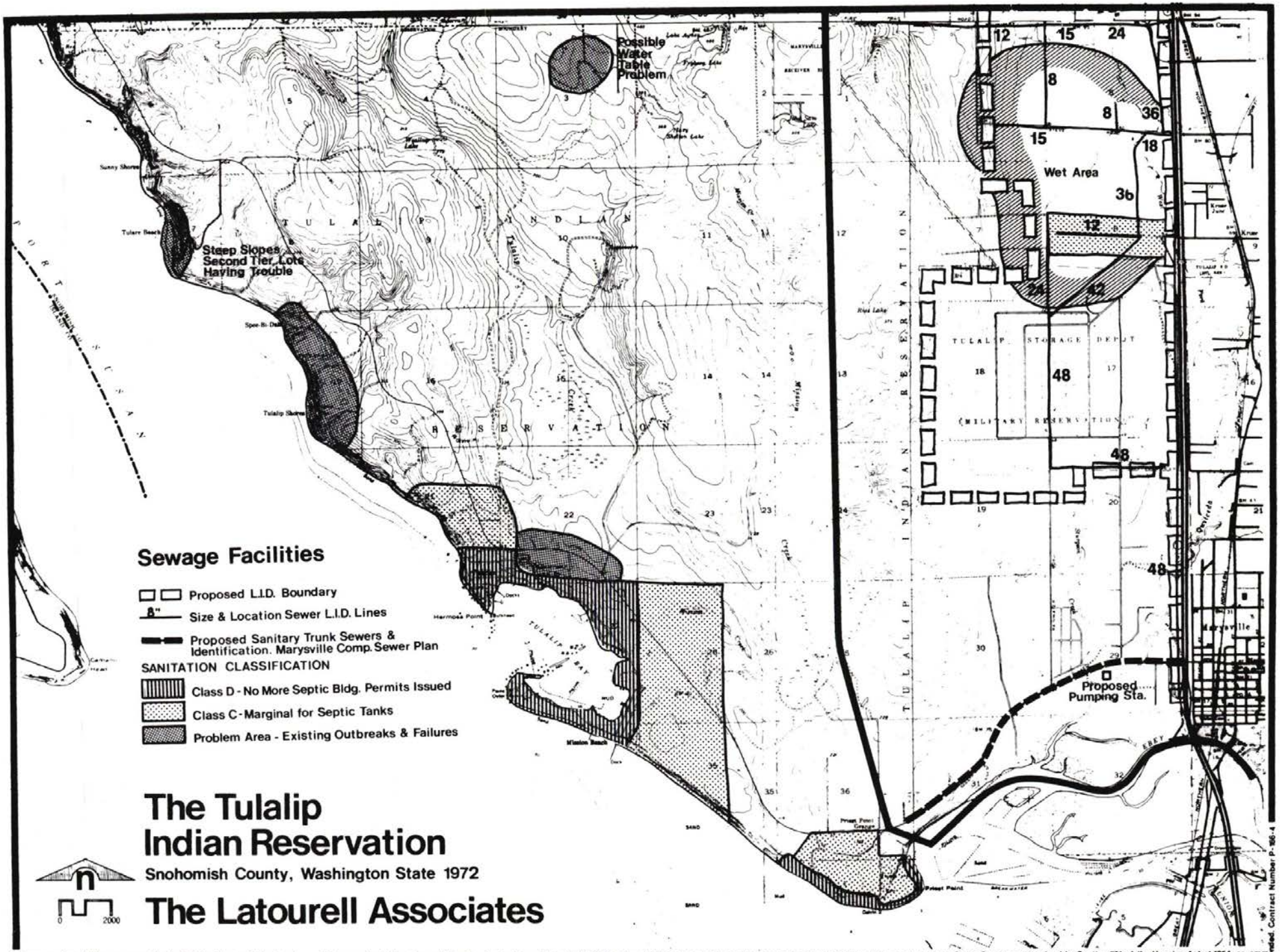

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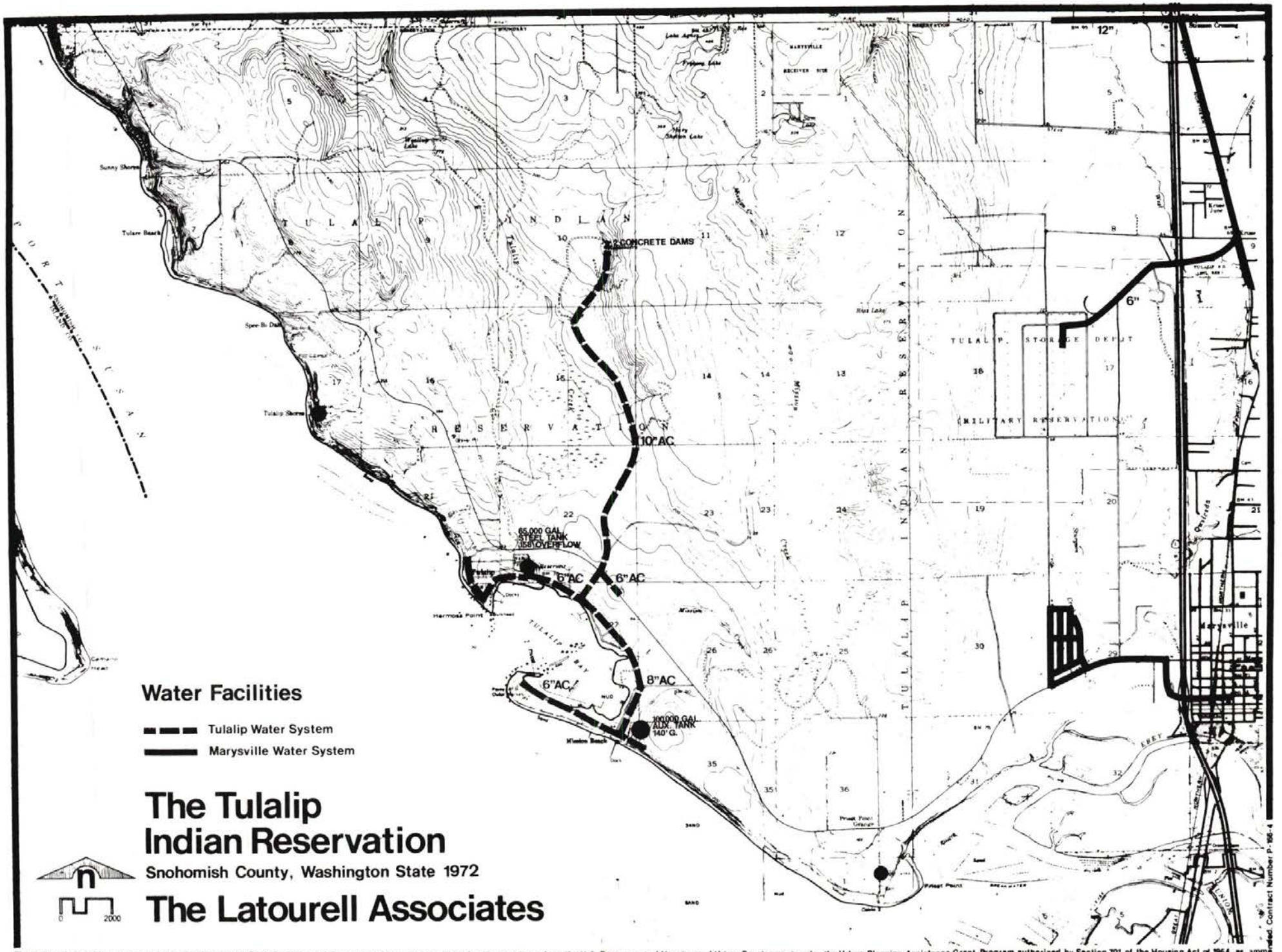

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Reservation I-5 links to primary State Highway 2 which leads to Stevens Pass, over the Cascades, and into Eastern Washington. Interchanges serving the Reservation are located at 4th Street in Marysville, connecting with the Tulalip-Warm Beach Road; Marshall Road at the north end of the Tulalip Test Site; and Stimpson Crossing just north of Fire Trail Road, the northern boundary of the Reservation.

The designed capacity of I-5 is estimated at 56,800 average daily traffic (ADT). As of April, 1970, the ADT was 23,300. Preliminary estimates of future traffic, by the State Department of Highways, indicates ADT's at Marysville in 1975 and 1990 of 28,500 and 42,600 respectively.

The Tulalip-Warm Beach Road serves virtually all of the developed areas of the Reservation and extends north along Port Susan Bay to the community of Warm Beach and on to the town of Stanwood. Although it is designated a primary arterial, it is in need of considerable improvement. Indeed, some portions of the road are over capacity now. With the estimated capacity of 3,300 ADT, the 1970 count near the 4th Street Interchange indicated 4,800 ADT. These figures are projected to increase to 5,200 in 1975 and 8,000 by 1990. West of Priest Point Road, the 1970 ADT was 2,800 and is forecast for 3,200 in 1975 and 6,000 in 1990.

Improvements on the Tulalip Road are included in the County's six-year program but are not firmly scheduled. The County is presently attempting to acquire right-of-way for a new alignment between the 4th Street Interchange and the west side of Quilceda Creek to by-pass the hazardous right angle corner of the present alignment. This improvement would include a new bridge over Quilceda Creek and removal of the deteriorating structure there now.

On the northern boundary, Fire Trail Road, primarily serving the Seven Lakes area to the north of the Reservation, carries very little traffic. The 1970 counts indicate only 400 ADT rising slowly to 650 in 1975 and 1000 by 1990. The rated capacity of this arterial is 3,300 ADT. West of the Lake Shoecraft turn-off, there is very little traffic connecting to the Tulalip Road, 100-ADT in 1970, estimated at 200 in 1975 and only 300 in 1990. These forecasts are preliminary only and are based upon the assumption of continual low density residential development. (See map 12.)

Population

CHAPTER 3

POPULATION

Population analysis is basic to land use planning and the starting point for all community development planning. Such analysis provides: (1) an understanding of the composition of the population in the study and (2) a look into the future to see what it holds in terms of changes in the size and characteristics of the population. A description of the existing population characteristics, past trends, and probable future changes is basic to the formulation of development plans for the Tulalip Indian Reservation.

The April, 1970, census of population recorded 3,028 persons residing on the Reservation of whom 465 were classified as "Indians." As noted in Table 1, the population increase from 1960 to 1970 compared to that of the previous decade was similar to that for Snohomish County as a whole. Although the employment in aerospace industry, which paced the sprint in population growth, has been sharply reduced, the net result has been to bring the Reservation into the ambit of regional urbanization.

While the overall population density is still less than two persons per square mile, more concentrated settlements are emerging. (See map 6.) These include numerous small areas on the shorelands of freshwater lakes and on the Puget Sound waterfront and Marysville West, where urban expansion onto Reservation land from a long-established community has occurred.

POPULATION TRENDS

State of Washington

After the population explosion touched off by the discovery of gold in Alaska at the turn of the century, Washington State displayed a strong, steady population-growth pattern with an annual increase of approximately 2%. From 1900 to 1910, the State population jumped 121% from 518,000 to 1,100,000. It took the next 40 years to match the increase of that first decade of the century. Each decade since 1940 has seen about 600,000 new citizens in the State, the same number who came during the gold rush and remained to make Washington their home.

For the first 40 years of this century, the Indian population of the State remained stable, growing but little--only 14% from 1900 to 1940. Between 1940 and 1950 the Indian population of the State grew rapidly, over 20%, to a total of 18,000 in 1959. However, the State's population as a whole grew much more rapidly as thousands migrated to employment in Puget Sound industry during the second World War. (See Chart 1.) Because of the sustained overall growth during that period, the Indian population represented less than 0.6% of the total of the State by 1960.

During the past twenty years, Washington State has grown rapidly, almost 2% per year or about 20% each decade, reaching 3.4 million in 1970. Indian population between 1950 and 1960 increased by 52% and between 1960 and 1970 well over twice as fast as the State as a whole. During this twenty-year period, the Indian population as a percentage of the State population reached nearly one percent.

TABLE 1

TOTAL POPULATION AND INDIAN POPULATION

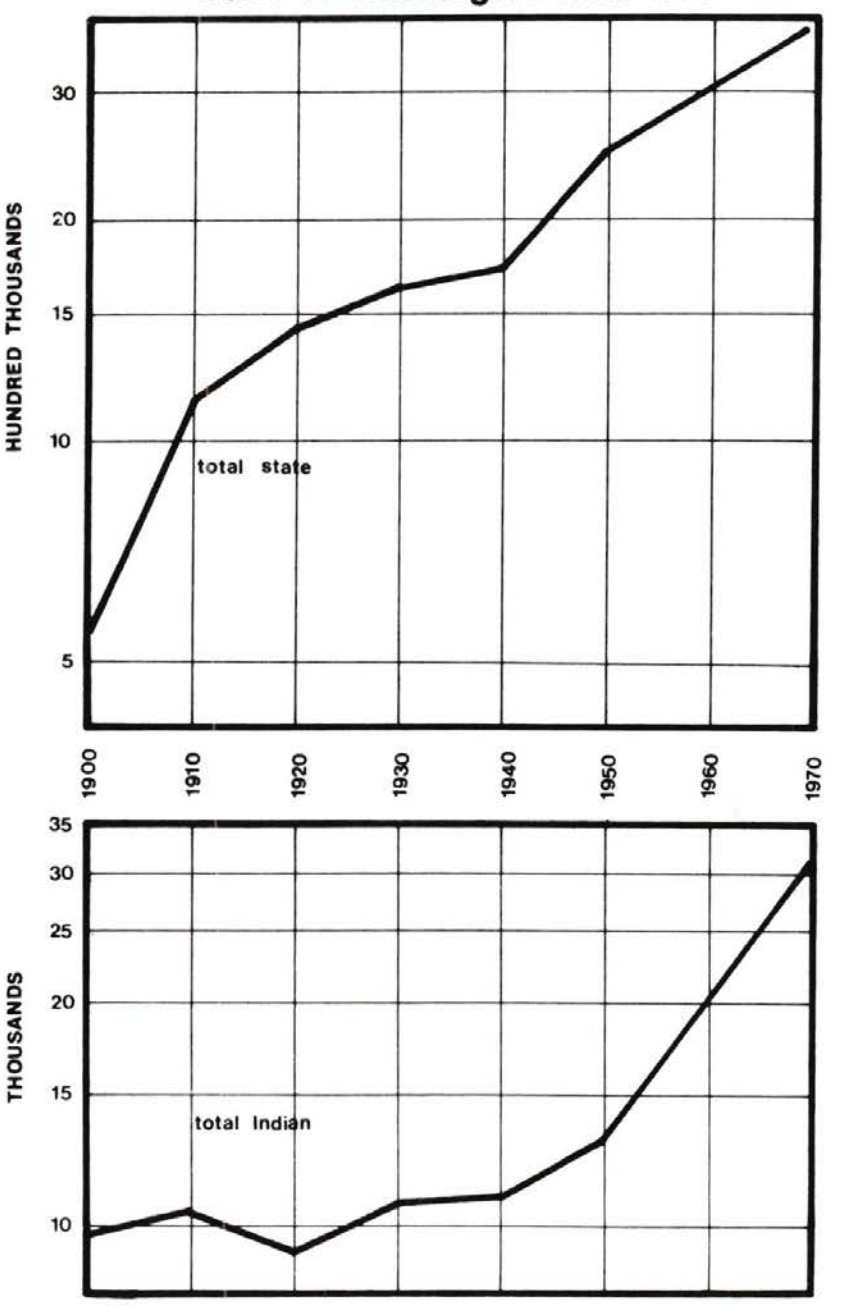
The Tulalip Indian Reservation,
Snohomish County, Puget Sound Region
and State of Washington
1950 to 1970

	1950	1960	1970
Washington State Total	2,378,000	2,853,000	3,409,000
Puget Sound Region*	1,196,000	1,512,000	1,934,000
Snohomish County	111,580	172,199	265,199
Tulalip Reservation Total	1,249	1,687	3,028
Washington State Indians	13,816	21,076	33,386
Snohomish County Indians	516	888	2,105
Tulalip Reservation Indians	N/A	397	465

Source: U.S. Bureau of Census

* King, Snohomish, Pierce and Kitsap Counties (Indian population not available).

TOTAL POPULATION & INDIAN POPULATION
State of Washington 1900-1970



Sources: U.S. Bureau of Census;
C.F. Shmid, C.E. Nobbe, A.E. Mitchell, Non-White Races of Washington, Planning and Community Affairs Agency

If the State's Indian population continues to grow at the same rate, 4.5% annually, the total Indian population would exceed 50,000 in 1980 and 80,000 by 1990.

This rate of growth is due primarily to the very high Indian rate of natural increase (births in excess of deaths) as compared to the population as a whole. In the total population throughout the State in 1969, there were nearly twice as many births as deaths, i.e., a net addition of almost one person for each death. Among the Indian population of the State on the other hand, there were more than three births for every death, an addition of over two Indians for every one that dies.

Because of the high ratio of births to deaths, the Indian population of the State is very young, much younger than any other racial group. The median age has been slowly dropping and stood at 19.4 in 1960 as compared to 29.6 for white persons. As Indian health care improves, particularly prenatal and infant services, this trend toward a lower median age will continue. Ultimately, of course, improved health care will result in a longer life expectancy and an increase in median age.

Snohomish County and the Puget Sound Region

The population of the four central Puget Sound counties has increased about 27% each decade since 1950, an annual rate just under 2.5%. Today, the regional population is just under 2 million. Snohomish County with a 1970 population of 265,199 has grown by over 50% each decade from 1950 at annual growth rates of about 4.5%. As a result, Snohomish County rose from 9.3% of the regional population in 1950 to 13.7% in 1970. Although this rate of growth has dramatically fallen since 1968 due to the economic decline, Snohomish County is expected to increase its relative importance in the region.

As in the rest of the State, the Indians have increased at a rapid pace in Snohomish County from 516 in 1950 to 2105 in 1970. Because the absolute numbers are small, the rates of increase in the county's Indian population are exceedingly high, a 72% increase between 1950 and 1960 and 138% in the next ten years. This latter figure represents a 9% annual rate of growth by which the population doubles every eight years. Although the Indian population is a small fraction of the County total, there are four times as many Indians in the County now as there were twenty years ago.

While the total number of Indians in Snohomish County grew rapidly, those living on the Tulalip Reservation did not, increasing by only 68 persons in the last ten years from 397 to 465. At the same time, the total population of the Reservation grew substantially faster than the county, increasing by 70% from 1687 to 3028. As a result, the Indian population on the Reservation fell from 23% of the total in 1960 to 15% in 1970. (See Chart 2.)

POPULATION CHARACTERISTICS

In Snohomish County in 1970, 48.4% of the population was under the age of 25 and 7.4% over 65. Because of the large number of retired persons on the Reservation, the total Reservation population shows a somewhat older structure: 45.0% under 25 years of age and 8.7% over 65. The white or non-Indian population is undoubtedly even older in as much as the percentages are calculated from aggregated data which includes Indians. In striking contrast, fully 67% of the tribal membership,

including those off the Reservation, is under 25 and only 4% is over 65. Conversely, while 44% of the County is between the ages of 25 and 64, only 29% of the tribal membership is in that group. In 1960, just under 60% of the State-wide Indian population was under 25 and about 35% between 25 and 65 years of age. This has important consequences and implications for both the total Indian population and the Indians on the Reservation.

Data on the age and sex distribution of the population for the Reservation, Snohomish County and the State are presented in Chart 3. This serves to illustrate the similarities and differentiating characteristics between these areas.

Summary

1. The Indian population in the State and in particular Snohomish County has grown much faster than the rest of the population.
2. The Indian population has a very high proportion of young persons.
3. The rate of natural increase, the number of births per year minus the number of deaths, of the Tulalip population is very high as it is for Indians throughout the State.
4. The total population on the Reservation has grown more rapidly than the rest of the County in the past ten years.
5. The Indian population living on the Reservation has grown very little and has not kept pace with either total Reservation growth or Snohomish County growth rates.

IMPLICATIONS FOR PLANNING

Taken as a whole, the population information leads inevitably to some important conclusions about the Indian people on the Reservation and throughout the State.

1. Indian population is beginning to recover after a long period of very little growth and is presently growing very rapidly due to the high rate of natural increase.
2. While Snohomish County Indian population mushroomed, the Reservation grew but little indicating a very high rate of migration off the Reservation. However, migration from other areas of the State also contributed to the growth of the Indian population of Snohomish County.
3. Migration from the Tulalip Reservation has been primarily adult male persons in the wage-earning years.
4. Of those remaining on the Reservation, there is a very high proportion in the ages of dependency (0-14; 65 and over.)

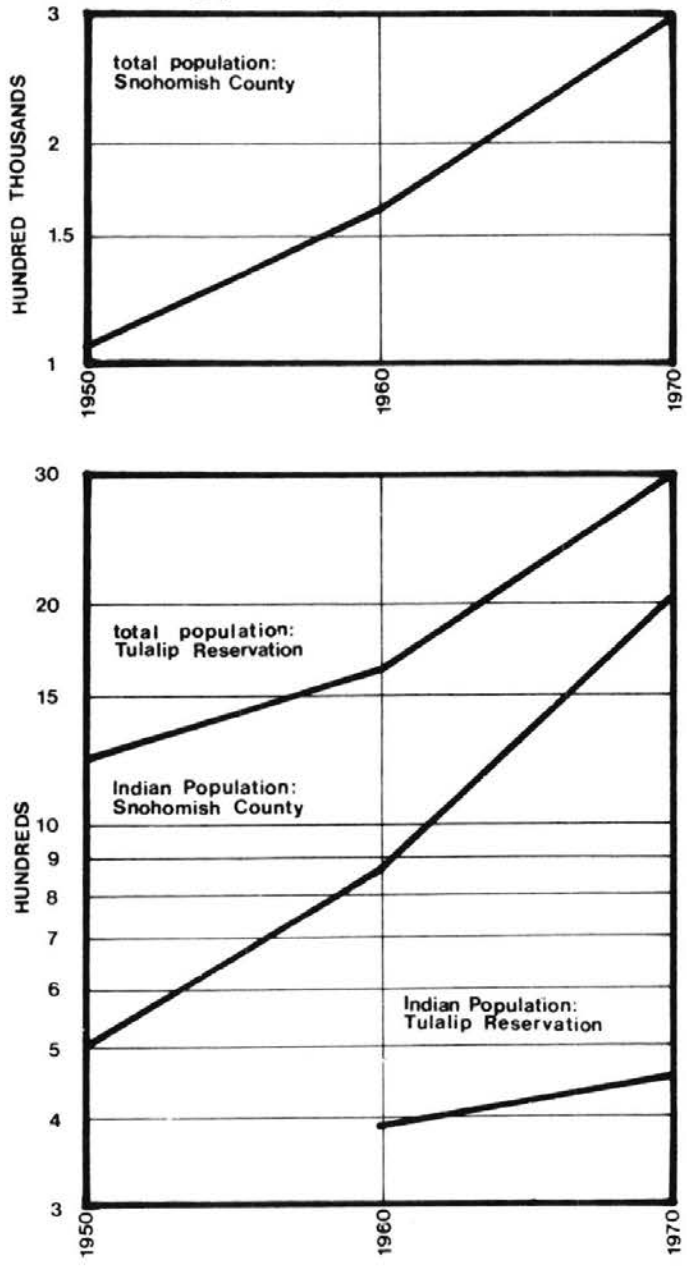
POPULATION FORECASTS

Two population forecasts of Snohomish County have been made in recent years.[1] Between the two there are substantial differences in forecasted population. These differences illustrate the difficulty in forecasting population growth for a small portion of a large metropolitan area. Not only is the sub-area subject to the influence of the regional growth cycle, but it is also affected by employee commutation across county lines.

Based on the rapidly expanding aerospace industry in the late 1960's (103,700 employees in 1968), regional population was forecast to reach 2,273,000 by 1975 and 3,102,000 in 1990. Snohomish County's share in this growth was forecast at 350,000 in 1975 and 475,000 in 1990.

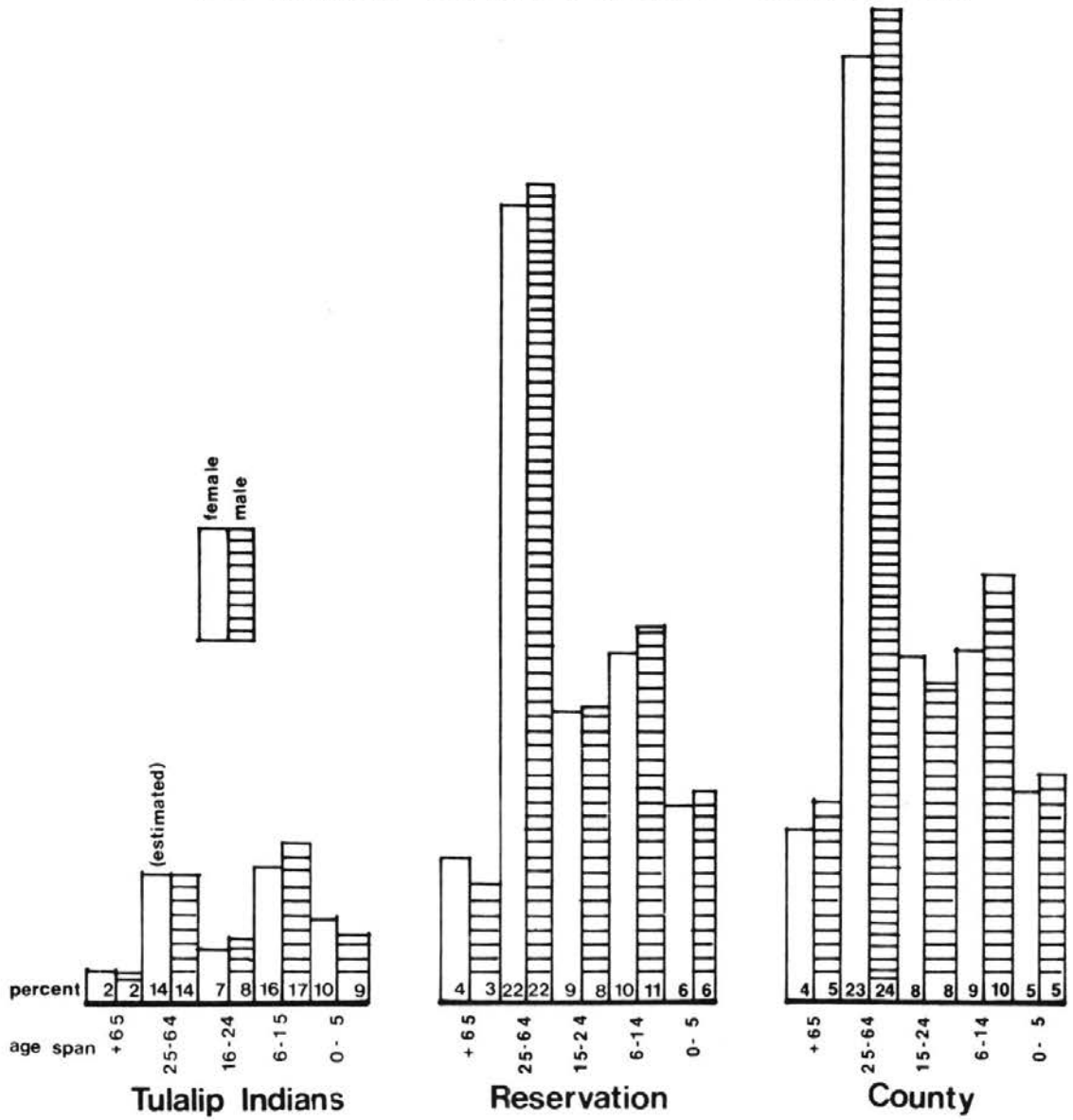
Few, if any, could foresee that only one year after printing these forecasts, aerospace employment in

TOTAL & INDIAN POPULATION
Snohomish County; Tulalip Reservation 1950-1970



Source: U.S. Bureau of Census.
1950 Reservation Indian population not available.

POPULATION CHARACTERISTICS; AGE by SEX



Sources: U.S. Bureau of Census;
Tulalip Tribes Community Survey

the region would be reduced by over 60,000. Total unemployment in the region in mid-1971 hovered at about 15% of the work force. The collapse of the labor market precipitated an immediate exodus from the State as a whole and the Puget Sound region in particular. A re-evaluation of the population forecasts was called for.

The assumptions made in 1971 forecasts are illustrative of the reversal of the perviously forecast rates of growth.

"...3) the current economic recession produces an anomalous time period between 1970 and 1975 where a large net out-migration is projected. However, recovery from this recession is assumed to be achieved during this five-year period....
6) no major or rapid employment build-up by the Boeing Company (such as experienced in the late 1960's) through 1980...."[2]

In short, the regional economy is now expected to stabilize at a lower level in 1975 and resume a "normal" rate of growth thereafter. (See Chart 4 and Table 2.)

Reservation Forecasts

As a means of allocating forecast population to smaller areas, the Puget Sound Governmental Conference divided the region into analysis zones. The Tulalip Reservation is wholly contained in four analysis zones which were included in both the 1968 and 1971 population forecasts. The disparity between the two forecasts for the Reservation is large indeed. In the 1968 forecast, the Reservation population was expected to reach 10,375 by 1975 and 19,750 by 1990. The revised figures are 3,572 and 7,840 respectively. With the 1970 census population of 3,028 even the revised 1975 forecast may be a little high.

In both forecasts, the Reservation was expected to grow at a rate faster than the rest of the County. This can be because of the Reservation's proximity to the urbanizing metropolitan area and the relatively small number living there at present. From the period 1975 to 1990, the revised forecast calls for a 43% increase in the County population or an annual rate of 2.5%. The Reservation population is forecast to grow by 4,268 people (119%) over the same period yielding an annual rate of increase of 5.5%.

This forecast rate of growth is consistent with the observed rate of the last ten years and is entirely consistent with the assumptions of the revised forecast of 1971. The resulting population totals, even though they may not be reached, should serve well as a base line of normal growth for the planning area. If on the other hand, during the forecast period, a major employment center were to be located on the Reservation or even in the Everett area, the Reservation population would undoubtedly increase at a much faster pace This contingence must be considered in the planning process. (See Chart 5.)

Indian Population Forecasts

Because of the continuing unemployment problem of the region, the rate of urban migration of Indians both interstate and intrastate can be expected to slow considerably. Therefore, it is unlikely that the extremely high rate of increase in the Snohomish County Indian population of the last ten years can be sustained. However, the high rate of natural increase along with some immigration will result in an increase of Indian population higher than can be expected for the County as a whole. During the more stable period from

TABLE 2

POPULATION FORECASTS

Washington State, Puget Sound Region,
Snohomish County and Tulalip Reservation
1975 - 1990

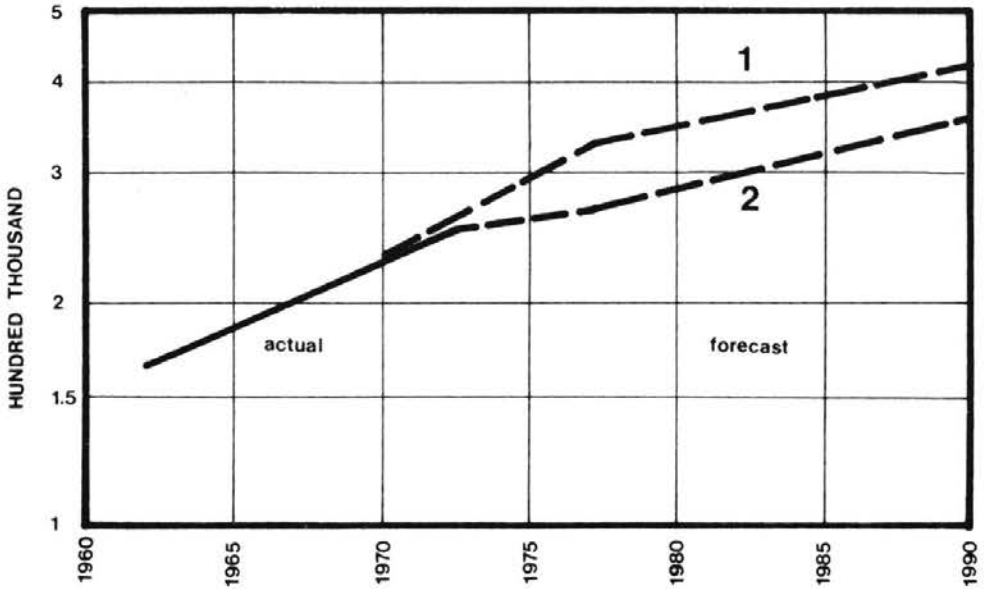
	1975	1990
Washington State	3,513,000	4,333,000
Puget Sound Region		
1968 Forecast	2,273,000	3,102,000
1971 Forecast	1,967,000	2,558,000
Snohomish County		
1968 Forecast	350,000	475,000
1971 Forecast	285,000	409,000
Tulalip Reservation		
1968 Forecast	10,345	19,750
1971 Forecast	3,572	7,840
Reservation Indians*		
High	1,323	2,054
Median	585	1,209
Low	483	632
Reservation Indians**		
High	1,347	2,091
Median	622	1,246
Low	520	669

Sources:

Snohomish County Planning Department
Puget Sound Governmental Conference
The Latourell Associates

* Using U.S. census data as base.
** Using OEO-CAP Staff census as base.

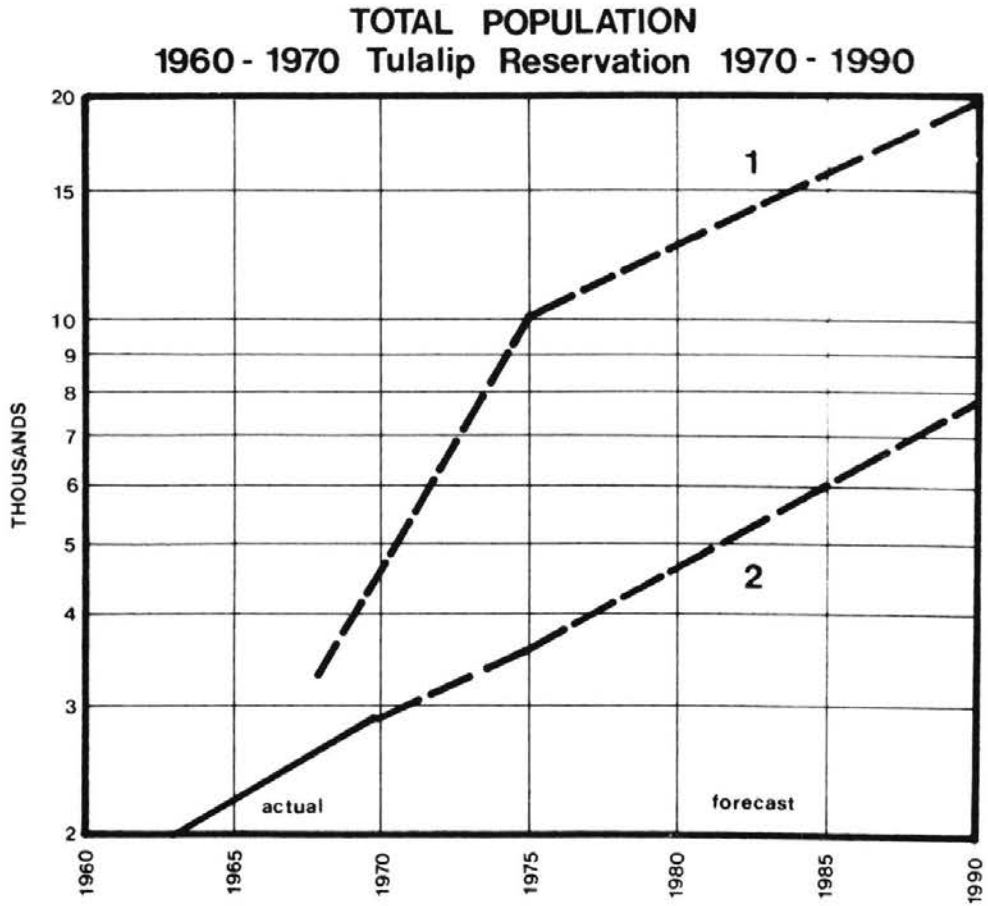
POPULATION
1960 - 1970 Snohomish County 1970 - 1990



Sources: Snohomish County Planning Department;
Puget Sound Governmental Conference;
State Department of Commerce and Economic Development

1. 1968 forecast

2. 1971 revised forecast



Sources: Snohomish County Planning Department;
Puget Sound Governmental Conference

1. 1968 forecast

2. 1971 revised forecast

1950 to 1960 the Indian population grew at an annual rate of about 5.5% as contrasted to the County growth rate of 4.4%. This more "normal" rate of growth would yield an Indian population in the County of 2,760 in 1975 and 6,245 in 1990.

The forecast of Indian population residing on the Reservation presents a very different picture. As we have seen, the tribal population on the Reservation has been virtually static. While the rate of growth over the period of 1950 to 1960 attributable to natural increase was 75% or 5.7% annually, the Indian population on the Reservation increased only 17% from 1960 to 1970 or an annual rate of 1.5%, here indicating a rather substantial out-migration of persons in the family formation and childbearing years. In the absence of improved housing and employment opportunities it is likely that there will be a continuation of the out-migration of tribal members and a static Reservation population. On the other hand, provision of new, low-cost housing and increased employment opportunities would very likely stem the flow of tribal members from the Reservation. Presently the tribal community as defined in the Community Action Program includes 629 members of which 127 live nearby, but off the Reservation.[3]

It can be seen that growth of the Reservation Indian population predicated on improving the housing stock available to low-income Indians with large families, which characterizes the present population, needs further examination. Most of the existing homes on the Reservation are either too expensive or too small to constitute a stock of housing available to the Tulalips. Only subsidized new or rehabilitated existing houses could appreciably change this picture.

If the Tribes or some other organization undertook a vigorous program of development of housing suitable for Indian families, it is likely that a significant number of tribal members now living off the Reservation but in the service area would move onto the Reservation proper.

As now constituted the approved tribal roles include approximately 600 additional members living off the Reservation and outside of the service area. (This is in addition to the 629 residing within or nearby the Reservation.) This group represents a potential source of new Indian Reservation inhabitants.

As stated above, improved housing and employment opportunities are necessary incentives to locate on the Reservation.

Over 2,000 of the Indians in Snohomish County are not Tulalips. For a variety of social and economic reasons it is not likely that these Indians would choose to live on the Tulalip Reservation unless through intermarriage or other family relationships with tribal members.

Based on the observed increases on the Reservation, the statewide rate of natural increases of the Indian population, and some assumptions about migration of tribal members on the Reservation with the provision of housing and employment, several sets of forecasts can be made for the Indian population of the Tulalip Reservation:

1. If the Reservation Indian population continues to grow at its present rate observed over the past ten years, the 1975 and 1990 populations will be 483 and 632 respectively. (Numerical increases of 18 by 1975 and 167 by 1990.)
2. If the out-migration from the Reservation is stopped and the observed rates of natural increase of Indian population in the State as a whole are applied, the figures for the same years would be 585 and 1,209. (Numerical in-

creases of 120 and 744 for 1975 and 1990.)

3. If it is arbitrarily assumed that one-half of all the off-Reservation Tulalip members returned to the Reservation by 1990, this would add approximately 845 more to the figure. Assuming further that this would occur only under the most favorable conditions (Number 2 above) this would bring the total number of Indians on the Reservation to 2,054--an increase of 1,589 over the present. (See Chart 6.)

Regarding the position of the Indian population on the Reservation relative to the growth of the entire Reservation population in the latest forecasts, it can be readily seen that if present trends continue (Condition 1 above) the Tribes will rapidly lose ground, falling to but 9% of the total Reservation population. On the other hand, if the outward migration can be halted and the present statewide rate of natural increase for Indians is attained, the tribal population should maintain a level of about 15% of the total Reservation population, just what it is today. If at the outside, the natural rate of increase of the Indians of the state is attained and the assumed in-migration of tribal members indicated in Condition 3 (above) occurs, the Indian population relative to the forecasted total population of the Reservation would increase substantially to over 20% of the total.

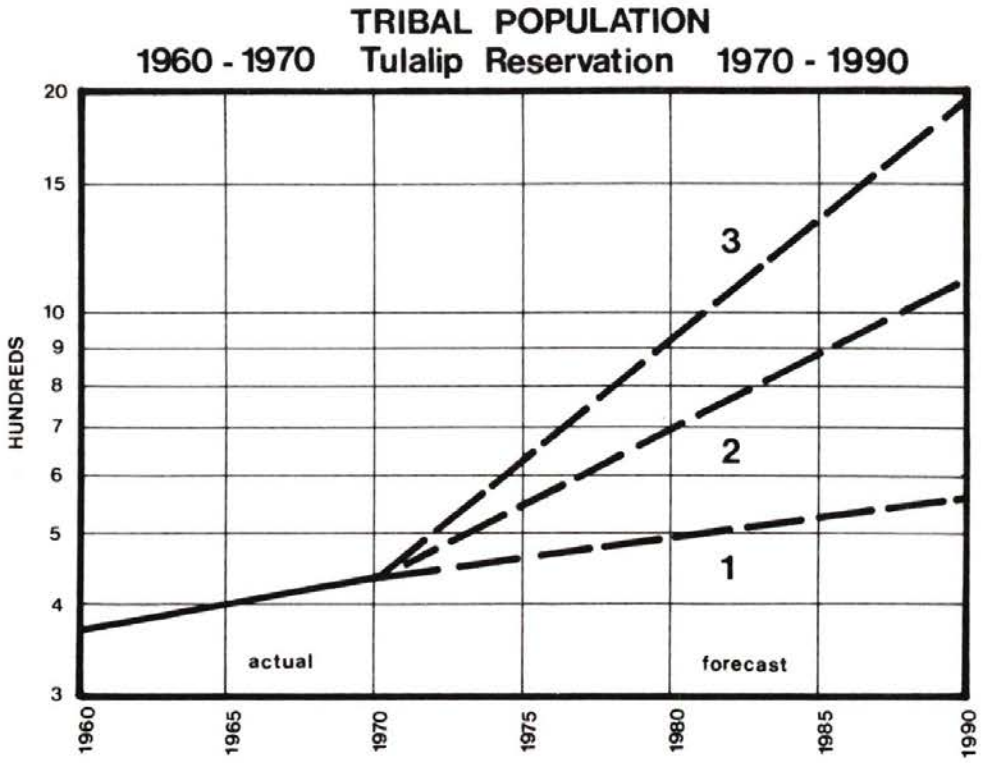
SUMMARY

The analysis indicates that any substantial increase in the tribal population over the next twenty years will be dependent upon an overall reduction in net out-migration. Vastly improving the social conditions, i.e., housing and employment opportunities on the Reservation, appears to be the only way this can be accomplished.

[1] "Population and Employment Forecasts and Distribution for the Central Puget Sound Region 1975 - 1990," Special Report Series No. 1 (Seattle, Wn.: Puget Sound Governmental Conference, May, 1969), p. 4. and "Interim Population Forecasts for Snohomish County, Washington - 1970/1990," Tech Report-10 (Everett, Wn.: Snohomish County Planning Department, February, 1971).

[2] "Interim Population Forecasts for Snohomish County, Washington - 1970/1990," Tech Report-10 Everett, Wn.: Snohomish County Planning Department, February, 1971), p. 8.

[3] Annual Report, 1971, Tulalip Community Action Agency.



Sources: U.S. Bureau of Census
The Latourell Associates

1. Continuation of present needs

2. Net migration = 0

3. Net migration assumed

Employment & Income

CHAPTER 4

EMPLOYMENT AND INCOME

Analysis of the micro-economy of the Tulalip Indian Reservation has been undertaken within the context of the larger region. The economic health of the Puget Sound region during the past two years has not been good. Although the nature of the Pacific Northwest economy has always been volatile, due to its dependence on natural resources and the aerospace industry, the recent depression has been extraordinarily severe. In the decade of the sixties, the highest annual average rate of unemployment was 6.6 percent reached at the end of the 1963-64 recession. In June of 1971, unemployment in King and Snohomish counties increased to 15.1 percent - 98,200 persons without jobs. Less than three years earlier, in September, 1968, at the peak of the boom, the unemployment rate was 2.5 percent with only 16,300 unemployed. At that time the aircraft industry employed 105,700 compared to the current number of 38,200 employees. These fluctuations in employment are presented in Table 3 and 4 and graphically illustrated in Charts 7 and 8.

In Snohomish County, aircraft manufacturing employment dropped from 24,800 at its highest to just over 6,000. Total employment in Snohomish County fell by almost exactly the same amount. To compound the unemployment problems, other major employers anticipate cut-backs. In mid January of 1971, Weyerhauser Company announced that by mid 1973, it will have closed its pulp mill at Everett which employs 330. One week later, it was announced that the 750 employee Simpson Lee Mill would close by the end of the year with some employees already given termination notice as a phase out of operation was initiated.

TRIBAL EMPLOYMENT AND INCOME

In comparison with the Puget Sound region, the Tulalip Reservation is substantially worse off. The unemployment rate of The Tulalip Tribes was four times the rate for Seattle-Everett SMSA, five times higher than in Washington State and seven times higher than for the nation in 1970. Of those employed only 40% had full time, full year jobs. The predictable result of this situation is low incomes; 72% of the families under $3,000 per year and 49% of the population receiving welfare related services.

Population and Labor Force

The population characteristics for the Tulalip Tribes are shown in the table below. The relative youth of the population, 42% under 16, is characteristic of rural Indian populations and is probably related to the lack of local job opportunities.

Population Characteristics
The Tulalip Tribes
1970

Age Group	Male	Female	Total	Percent of Total
Under 6 years	62	56	118	18.8
6 to 15 years	108	100	208	33.1
16 to 24 years	49	46	95	15.1
25 to 59 years	76	75	151	24.0
60 & over	24	33	57	9.0
TOTAL	318	311	629	100.0

Source: Tulalip Tribes Community Action Program Survey.

TABLE 3

ANNUAL AVERAGE LABOR FORCE
UNEMPLOYMENT AND MANUFACTURING EMPLOYMENT 1960 - 1971 (X1000)

Washington State and Seattle-Everett Area

Year	Civilian Labor Force		Unemployment				Manufacturing Employment	
			State		Area			
	State	Area	No.	Percent	No.	Percent	State	Area
1971	1242.8	627.1	136.0	9.9	82.2	13.1	214.7	103.6
1970	1283.5	640.5	116.2	8.3	61.0	9.5	239.4	128.5
1969	1331.0	655.4	66.9	4.8	26.5	4.0	278.6	162.4
1968	1309.7	644.2	58.7	4.3	18.9	2.9	286.9	171.8
1967	1256.6	609.1	56.4	4.3	18.8	3.1	277.1	165.5
1966	1204.5	566.6	62.0	4.1	16.9	3.0	265.3	152.7
1965	1106.6	506.0	63.5	5.4	24.5	4.8	227.0	118.3
1964	1067.1	589.2	74.0	6.5	32.3	6.6	219.3	110.8
1963	1059.5	485.2	70.6	6.2	29.7	6.0	224.0	120.1
1962	1064.5	501.1	62.5	5.5	24.3	4.8	232.6	129.0
1961	1024.1	470.2	74.4	6.8	30.5	6.5	217.5	115.8
1960	1020.3	457.7	69.4	6.4	28.0	6.1	216.6	112.2

Source: Employment Security Department
Market and Statistics Branch

TABLE 4

ANNUAL AVERAGE EMPLOYMENT 1960 - 1971 (X1000)

Snohomish County

Year	Total Employment	Manufacturing Employment	Forest Products
1971	73.8*	19.6*	.5*
1970	86.1	30.3	.5
1969	92.6	35.9	.6
1968	79.2	24.3	.5
1967	64.9	14.9	.5
1966	56.0	12.0	.4
1965	51.4	11.0	.39
1964	49.2	10.8	.39
1963	47.6	10.5	.37
1962	45.9	10.5	.34
1961	42.9	9.9	.30
1960	42.3	9.9	.27

Source: Employment Security Department
Market and Statistics Branch

* Estimated

A relatively high percentage of The Tulalip Tribes' population is in the labor force. The participation rate for males and females, at 89.3% and 55.2%, are above the national average. The high participation rate, however reflects a desire for employment rather than the existence of job opportunities since 72% of males and 88% of females are unemployed.

Labor Force Characteristics
The Tulalip Tribes
1970

	Male	Female	Total
Population 16 and over	147	143	290
Not in Labor Force	133	90	223
Number Employed	37	11	48
Number Unemployed	96	79	175
Unemployment Rate	72	88	56
Participation Rate	89.3%	55.2%	71.9%

Source: The Tulalip Tribes Community Action Program Survey.

The type of job opportunities available are characterized in the next table where it is shown that only 40% of those employed hold full-time, full year jobs.

Characteristics of Employed
The Tulalip Tribes
1970

Type of Employment	Number	Percent
Full Time - Full Year	20	40%
Part Time - Full Year	4	8%
Full Time - Part Year	10	25%
Part Time - Part Year	22	27%
TOTAL	48	100.0%

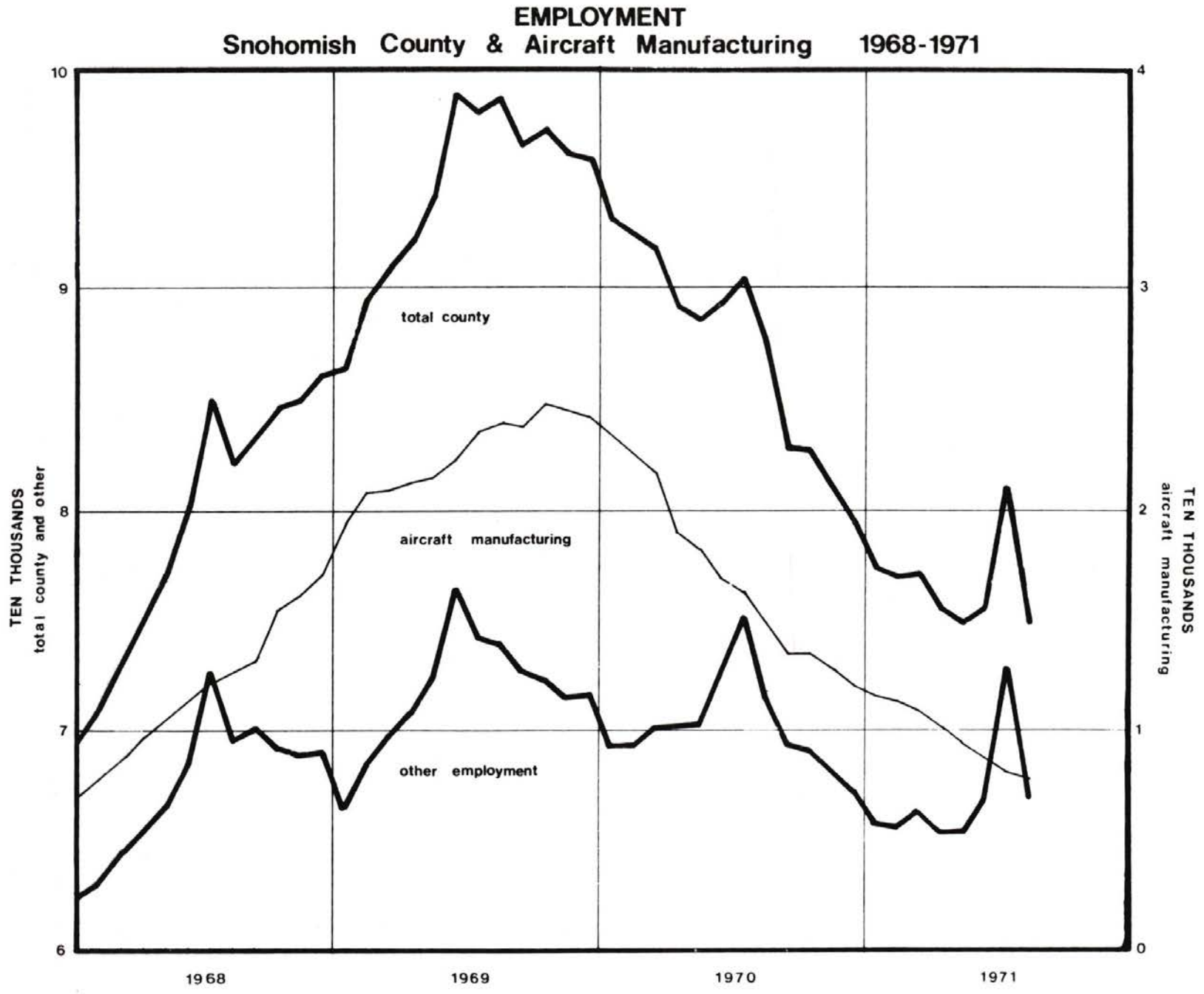
With the exception of an increase in governmental employment, every sector of the labor force has experienced a sharp and persistent decline in employment. This depressed condition extends throughout the Puget Sound region and touches every segment of the economy. Snohomish County has been particularly hard hit because of the rapid buildup following the construction of the Boeing 747 plant at Everett. Once the layoffs came, Snohomish County found itself with over expanded commercial facilities and residential development. Regional department store sales as of July, 1970 had decreased 1.1% over the previous year in spite of increases in the consumer price index. Both residential vacancy rates and mortgage foreclosures are at all time highs.

All central Puget Sound counties are now qualified for assistance from the Economic Development Administration.

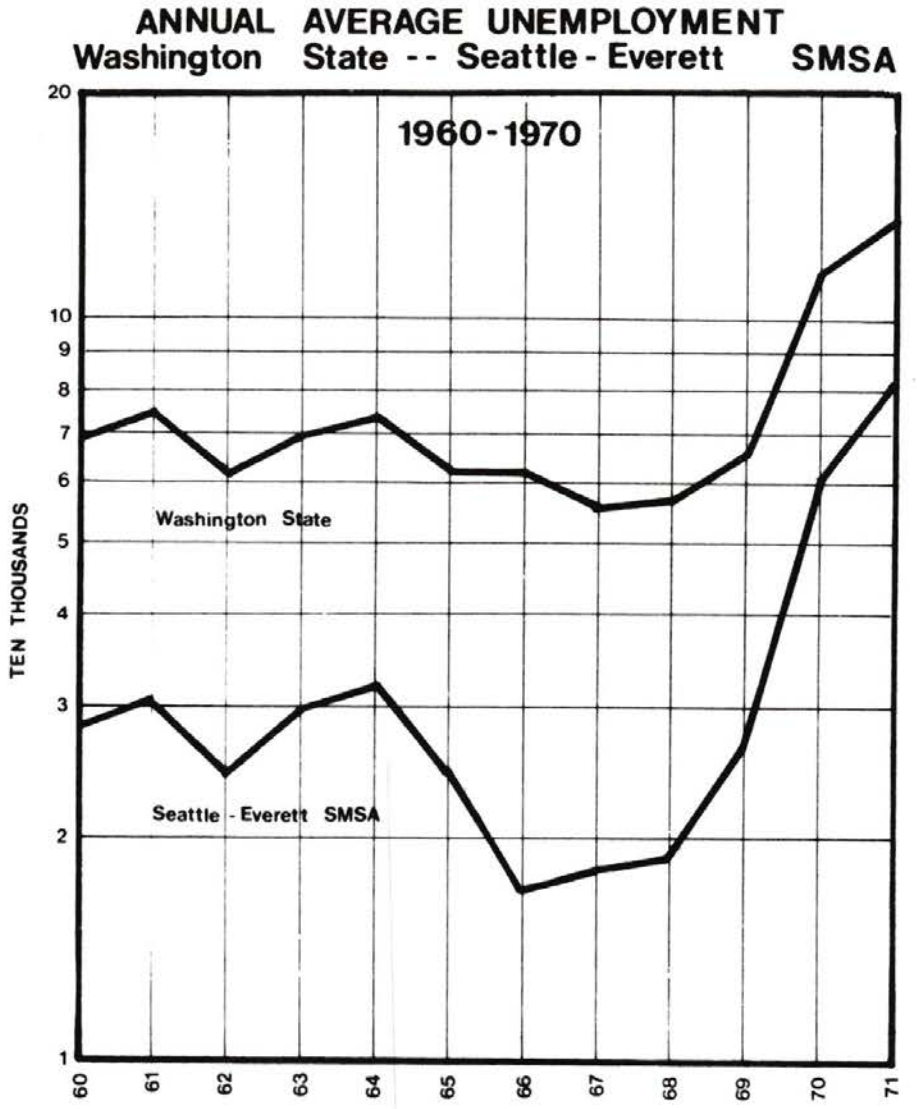
Comparative Unemployment Rates
The Tulalip Tribes, Seattle-Everett SMSA,
Washington, United States
1970

Area	Unemployment Rate
The Tulalip Tribes	56%
Seattle - Everett SMSA	16%
Washington	10%
United States	6%

The major need for jobs for the Tulalip Tribes is for full-time, full year jobs for heads of families. The traditional employment associated with the fishing industry no longer provides adequate employment or family income. Members of the Tribes



Source: Washington State Department of Employment Security



Source: Washington State Department of Employment Security

recently participated in a multi-occupational MDTA program inducted on the Reservation. This program has already resulted in placement of several individuals. The Tribes is also developing on-the-job training programs and NAB programs for its members. These programs, along with employment assistance from Employment Security, the Bureau of Indian Affairs, and educational counseling will alleviate some of the employment problems. However, they cannot compensate for the lack of local job opportunities for members of the Tribes.

There are two activities which may be classified as industrial. These are a steel barge fabrication facility located on the west bank of Quilceda Creek and leased by Arc-Weld, a Seattle firm, which employs one or two persons; and the Boeing test facility.

Family Income
The Tulalip Tribes
1970

Income Class	Number of Families	Percent of Total
Under - $1,000	21	13%
$1,000 - 1,999	62	38%
$2,000 - 2,999	36	21%
$3,000 - over	46	28%
TOTAL	165	100.0%

Source: Tulalip Community Action Agency.

The median level of education for The Tulalip Tribes is the eighth grade for members 25 years and older. Although the high school drop-out rate is still a matter of concern, the Tribes has taken steps to encourage students to remain in school and even continue into post-high school programs. The observation that 93% of the population 14 and 15 years of age and 72% of the population 16 and 17 years of age are enrolled in school, is evidence of the success of existing programs. It is also, however, evidence of the need for continued emphasis. The current job-development goals of The Tulalip Tribes will become an integral part of the educational programs though the incentive associated with local job opportunities.

Obviously the opening of meaningful year-round employment opportunities is of paramount importance. Accomplishing this in today's economic climate will be far more difficult than under more favorable circumstances; however, it is not impossible. Even though the creation of new jobs requires substantial investment of both capital and labor there are ways of generating employment opportunities for tribal members even at this time. The available resources for achieving this objective and an economic development program for exploiting these resources are significant components of this comprehensive plan.

PROBLEMS AND DEFICIENCIES

The major problem facing The Tulalip Tribes is a lack of personal and tribal income for development. Although the Tribes has used its limited financial resources to promote meaningful social and economic development, the rapid growth of the surrounding area requires a more intensive effort than tribal financial resources will allow. Specifically the Reservation needs:

Sewage Collection and Treatment System at Tulalip Bay

This is needed to alleviate the present health problem and provide the basis for further development. Becuase of numerous septic tank breakouts and drainfield failures in the Tu-

lalip Bay area, the Snohomish County Health District has declared a moratorium on all development.

A Multi-Service Center

Presently occupied tribal buildings are totally inadequate for these needs. Space for tribal offices, public meeting rooms, class rooms, neighborhood recreation, medical service, vocational education and equipment maintenance is urgently needed.

Public Recreational Facilities

A major marina and associated recreational facilities are necessary to the long range development of the Tulalip Bay tribal lands.

The Reservation is located within one hours driving time from the largest West Coast metropolitan center north of San Francisco and a two hour drive from the Greater Vancouver, British Columbia region with over two million population. Industrial areas on the Reservation are presently served with intercontinental rail service including in-place spur trackage.

Trade and Manufacturing

Shopping facilities on the Reservation presently are limited to one neighborhood grocery store. All other goods and services are provided at Marysville and Everett. With the development of land, the need for neighborhood shopping centers will develop.

Housing on the Reservation

CHAPTER 5

HOUSING ON THE RESERVATION

Housing has been identified as one of the critical problems facing The Tulalip Tribes. The supply of housing available to tribal members is inadequate; its general condition substandard.

HOUSING INVENTORY

Housing on the Reservation ranges from homes of high value to shacks; the average value being $20,700.[1] Eighty-five percent of white housing is full time occupancy with many vacation cabins now being converted for permanent year-round residency.

The value and condition of the houses seems to have some relationship to the type of ownership assigned to the land under the house. Housing with land owned by whites, vacation and permanent residences, is in the upper value range and is well maintained. Houses of whites on land leased from the Tribes are primarily vacation residences. In areas where the leased land has been recently platted, the maintenance and improvements are substantial, the value high. In older areas of leased land, the vacation homes have not been substantially improved or carefully maintained. Indian homes, with the exception of recently built Neighborhood Improvement Program (NIP) housing, are on allotted land and the majority are substandard. Even though new house construction in the county and on alien land on the Reservation is subject to the county building codes, it was not until March of 1972 that the Tribes contracted with the county to administer the building codes on tribal leased lands.

To illustrate the degree to which Indian housing on the Reservation is inadequate, an interesting comparison can be drawn between housing in Snohomish County, the Reservation as a whole and the Indian homes on the Reservation. In recent years, two door-to-door surveys have been made of Indian housing on the Reservation. The Public Health Service, using the Indian Premise and Environmental Health Survey, Form 2500, surveyed 65 Indian houses in March, 1970. A BIA Housing Inventory was conducted in June and July of 1971. Observations and conclusions made in both of these surveys were corroberated by a visual survey made by the planning consultants. In addition, the 1970 census data for Snohomish County and the Reservation provide a basis for comparison.

Because census data does not go into great detail about housing conditions and the Indian housing surveys were not able to obtain 100% coverage, it is impossible to give exact comparative figures for every condition. For example: there is some disparity between the two reports in that each has its own definitions, standards and criteria for measurement. However, each provide a general description of housing conditions which can be compared with the census data for the larger areas.

The 1970 census figures note that out of a total of 89,425 housing units for Snohomish County, the Tulalip Reservation has 1404 units. The Community Action Program Director for the Tribes numbers the Indian homes on the Reservation at 124.

The following table summarizes the housing quality information. Data on Indian housing is adjusted to correct for the incomplete sample of the environmental health survey.

TABLE 5

SELECTED HOUSING CHARACTERISTICS
TULALIP RESERVATION AND SNOHOMISH COUNTY
1970 - 1971

	Indian Housing		Balance of Reservation		Total Reservation		Snohomish County	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Standard Units	76	61.6%	1206	94.2%	1282	91.3%	85,778	96.1%
Lacking Some or All Plumbing	31	24.6%	32	2.5%	63	4.5%	2,217	2.4%
Lacking Complete Kitchen Facilities	17	13.8%	42	3.3%	59	4.2%	1,430	1.5%
ALL UNITS	124	8.8%	1280	91.2%	1404		89,425	
Persons per Unit	5.2*		N/A		3.1		2.9	

* As reported in the PHS survey; the BIA survey reports 4.7 persons per unit, while the OEO, CAP Staff census indicates 3.8 persons per unit.

Sources: Census of Housing, 1970.
USPHS Environmental Health Survey, Form 2500, 1968.

Although Indian housing represents less than ten percent of total Reservation housing, its disproportionate share of housing lacking basic facilities skews the Reservation data. Further, given the probability that the vacation homes, located on the Reservation, probably are inclined to be of lesser quality, the remaining housing on the Reservation is no doubt comparable in quality to that elsewhere in Snohomish Count. Table 5 indicates that Indian housing is indeed below the county average for kitchen and plumbing facilities and that the size of households is almost twice as large.

SUMMARY OF PUBLIC HEALTH SERVICE SURVEY FINDINGS

The PHS survey of 65 houses provides a documented description of the physical problems of Indian housing.

Structural Elements

1. Walls: holes and worn surfaces in exterior walls is an indication of the onset of decay.

   Houses with holes or worn surfaces in exterior walls: Total 22 (33.8%)

   A. General deterioration of outside walls has begun: 14 (21.6%)
   b. Deterioration of outerwall surfaces, as well as wall itself is considerably advanced: 8 (12.3%)

2. Breaks in the exterior walls indicate serious structural problems which if not already present are imminent unless immediate repairs are made.

   Exterior wall surface broken or loose: Total 18 (27.7%)

   A. Small pieces of outer wall broken off or covering is loose and warped: 12 (18.5%)
   B. Large areas of wall covering broken off, eroded or loosely held together and could easily be removed by the wind: 6 (9.2%)

3. Poor roof conditions are annoying and unhealthful to live with; they also portend damage to the structure of the house itself from water leaking down into walls and supporting members. Continual wetting and drying of wood causes dry rot.

   Roofs with holes or worn surfaces: Total 26 (40.0%)

   A. Disrepair to slight degree, not sufficient to allow rain or snow to penetrate: 11 (16.9%)
   B. Disrepair to severer degree, allowing leakage, entrance of rain and snow: 15 (23.0%)

4. Similarly, houses with windows in disrepair to such a degree as to allow weather and insects to freely enter: Total 10 (15.4%)

5. Houses with floor surface ranging from moderately cleanable, worn, rough, broken to earth surface: Total 22 (33.8%)

6. Houses with cracked ceilings with some evidence of leakage to the extreme of daylight showing through or the underside of the

roof is the ceiling: Total 25 (38.5%)

7. Houses with doors in such poor condition they are cracked or difficult to move: Total 14 (21.5%)

Utilities

1. Houses with electrical service: Total 63 (96.9%)

   A. Householders feeling that power is undependable and off often enough to cause hardships: 7 (10.8%)
   B. Houses with defective wiring: 16 (24.6%)
   C. Houses with circuit overloads: 11 (16.9%)

2. Water availability and quality; a continual problem as outlined elsewhere in this report.

   A. Indian homes using individual water sources: 44 (67.7%)
   B. Indian homes using community water from Tulalip system: 14 (21.5%)
   C. Indian homes with no water or obtain it from a source for which maintenance responsibility is unknown: 7 (10.8%)

3. Sanitation arrangements; reflects the broad range of rural problems in obtaining water and then disposing of wastes.

   A. Indian homes with running water delivered inside the home: 53 (81.5%)
   B. Homes with no running water: 12 (18.5%)
   C. Homes permanently plumbed for hot and cold water to a bathing facility: 40 (61.5%)
   D. Homes using a privy for toilet facilities: 16 (24.6%)
   E. Homes using a seepage pit for sink and toilet wastes: 9 (13.8%)
   F. Homes using open ground disposal for kitchen wastes: 6 (9.2%)
   G. Homes using a septic tank: 50 (76.9%)

4. Types of construction:

   A. Wood frame: 59 (90.8%)
   B. Log houses: 2 (3.1%)
   C. Trailers: 4 (6.2%)

HOUSING QUALITY

The BIA Housing Inventory of 89 houses did not assess in detail the specific condition of each Indian house, rather the study make judgement about general housing conditions. The inventory concludes that of the 89 housing units surveyed, 40 must be renovated and 21 must be torn down and replaced.

This leaves 26 units (29%) in "good" condition. In order to estimate the total number of units in each of these categories for all of the 124 units of Indian housing (as reported by the CAP Staff Survey) these percentages would normally be applied. However the BIA sample included all of the nine newly built NIP housing units. Since none of the 35 units omitted from the BIA survey are new and most are in isolated locations, it is reasonable to assume they are in no better condition than other Reservation units. Expansion of the sample should be accomplished as follows:

	Sample	Percent of Sample	Total	Percent of Total
Total Units	89		124	100.0%
Less "New Good" (not representative)	-9		-9	7.26%
Representative Subtotal	80	100%	115	
"Must be Torn Down, Replaced	21	26.25	30	24.19%
"Good" (excluding 9 above)	19	23.75	27*	21.77%
"Must be Renovated"	40	50.0	58	46.77%
Subtotal	59	73.75	85	68.55%
Plus "New Good"	9		9	7.26%
TOTAL "Habitable"	68		94	75.81%

* As reported by the CAP Staff Survey.

While the condition of existing housing units is important to the formation of a housing program, there is an equally important dimension to the housing inventory which is the capacity of each housing unit. When otherwise "good" housing is occupied by more than one family or by a family of a size exceeding the capacity of the house, housing needs have not been met.

In determining the appropriate size of a unit in relationship to family size, two assumptions have been made:

1. There will be no more than two children assigned to one bedroom and additional bedrooms will be provided for a separation of the sexes and a separation of children with great age disparity.
2. Since the average family has two or more children, no family houses should have fewer than three bedrooms. The number of bedrooms per house based on the number of family members is therefore as follows:

No. in Household	No. of Bedrooms	Rooms/Unit
1 - 2	1 - 2	3 - 4
3 - 4	3	5 - 6
5 - 6	4	7 - 8
7 - 8	5 - 6	8 - 9
9 & over	7 & over	10 or more

Neither of the housing surveys provided information in which size of the family and housing unit size are compared with housing quality. The PHS survey provides a tabulation of unit size by number of persons. The BIA survey indicated the number of persons per unit by each condition category. Using the occupancy standards above these two sets of findings are summarized in the two tables which follow.

Given the information presented in Tables 6 and 7 and the knowledge gained by the consultants through direct investigation, and using the standards for unit size set forth above, the composite of housing resources is made and presented in Table 8.

TABLE 6

ESTIMATED INDIAN HOUSING UNITS BY SELECTED CHARACTERISTICS, TULALIP RESERVATION, 1972

From the PHS Survey

Persons per Unit	Rooms per Unit 1 - 2	3 - 4	5 - 6	7 - 8	Overcrowded	Adequate	Totals
1 - 2	2	7	5	0	2	12	14
(%)	(3.1)	(10.8)	(7.7)		(3.1)	(18.5)	(21.5)
3 - 4	0	7	5	1	7	6	13
(%)		(10.8)	(7.7)	(1.5)	(10.8)	(9.2)	(20.0)
5 - 6	1	4	10	2	15	2	17
(%)	(1.5)	(6.2)	(15.4)	(3.1)	(23.1)	(3.1)	(26.2)
7 - 8	0	4	9	0	13	0	13
(%)		(6.2)	(13.8)		(20.0)		(20.0)
9 & over	0	3	2	3	8	0	8
(%)		(4.6)	(1.5)	(4.6)	(12.3)		(12.3)
Adequate	0	7	10	3	0	20	20
(%)		(10.8)	(15.4)	(4.6)		(30.8)	(30.8)
Overcrowded	3	18	21	3	45	0	45
(%)	(4.6)	(27.7)	(32.3)	(4.6)	(69.2)		(69.2)
TOTALS	3	25	31	6	45	20	65
(%)	(4.6)	(38.5)	(47.7)	(9.2)	(69.2)	(30.8)	(100.0)

Note: Numbers are "number of units"; percentages are of total number units

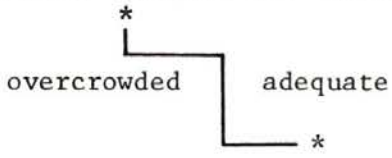


TABLE 7

ESTIMATED INDIAN HOUSING UNITS
BY CONDITION, TULALIP RESERVATION, 1972

From the BIA Survey

Persons per Unit	Good	Renovate	Replace	Total
1 - 2	9	15	8	23
(%)	(7.26)	(12.10)	(6.45)	(18.55)
3 - 4	6	10	5	15
(%)	(4.84)	(8.06)	(4.03)	(12.10)
5 - 6	13	20	10	31
(%)	(10.48)	(16.13)	(8.06)	(25.00)
7 - 8	7	11	5	16
(%)	(5.65)	(8.87)	(4.03)	(12.90)
9 & over	1	1	1	2
(%)	(0.81)	(0.81)	(0.81)	(1.61)
Subtotal	36	57	29	122
(%)	(29.03)	(45.97)	(23.39)	(98.39)
Vacant	-	1	1	2
(%)		(0.81)	(0.81)	(1.61)
TOTALS	36	58	30	124
(%)	(29.03)	(46.77)	(24.19)	(100.0)

Adjusted to represent total housing but not corrected for overcrowding.

TABLE 8

COMPOSITE ESTIMATE OF HOUSING RESOURCES
TULALIP RESERVATION, 1972

Rooms Per Unit	Equate to Bedrooms	Percent	Good	Renovate	(Subtotal) (Habitable)	Replace	Total
1 - 2	0	(4.6)	2 (29.03)	3 (46.77)	5 (75.81)	1 (24.19)	6 (100.0)
3 - 4	1 - 2	(38.5)	14	22	36	12	48
Subtotal			16	25	41	13	54
5 - 6	3 - 4	(47.7)	17	28	45	14	59
7 & over	5 - 6	(9.2)	3	5	8	3	11
Subtotal			20	33	53	17	70
TOTAL		(100.0)	36	58	94	30	124

The basic purpose of the housing inventory is to determine the means whereby housing needs can be met. In matching needs to resources, then that housing which "Must be torn down and replaced" cannot be considered as a useful resource (except in terms of short term emergency shelter, if at all). Further, the estimated 58 units which "must be renovated" can be considered a permanent resource only if an effective program of housing renovation is carried out.

[1] Census of Housing, 1970.

Goals & Objectives

CHAPTER 6

GOALS AND OBJECTIVES

The goals and objectives which follow have been developed through assembly of the interests, attitudes, opinions and desires expressed by members of the Tribes and other citizens of the Reservation, both directly and through their representative leadership. This process included discussion at meetings with The Tulalip Tribes Board of Directors, board committees and the Tribal Citizen's Committee as well as many other individuals and groups.

GOAL: FOSTER AN ORDERLY PHYSICAL DEVELOPMENT OF THE RESERVATION IN HARMONY WITH THE SOCIAL AND ECONOMIC NEEDS OF ALL PERSONS ON THE RESERVATION.

Which requires:

Planning for and implementation of a balanced and timely development through:

The preparation, adoption and periodic updating of a comprehensive plan;

The development and adoption of implementation policies and enforcement procedures.

GOAL: CONSERVE AND PROTECT THE NATURAL ASSETS OF THE RESERVATION CONSISTENT WITH THE NEEDS AND DESIRES OF THE COMMUNITY.

Which provides for:

The preservation of air and water quality, through:

Maintenance of the natural drainage ways;

Preservation of the hydrological cycle, by:

Limiting development in watersheds.

Minimizing industrial blight, by:

Prohibition against air and water pollutant emmission by industry.

Installation of water pollution control systems in future developments.

Which provides for:

Fish and wildlife development, through:

A game management program.

Which provides for:

Open space preserves to support: fish and wildlife; outdoor recreation; conservation of drainage basins and the natural beauty of the Reservation, through:

Public acquisition of critical drainage areas;

Reforestation and soils management and

Restriction on development in drainage ways and steep slope areas

Which provides for:

Outdoor recreation opportunities, through:

Public water oriented recreation facilities;

A tribal recreation center;

A trails system through wilderness areas;

A public camping site.

Which provides for:

Utilization of fishing resources, through:

Restoration of Indian fishing rights, and

Establishment of fish conservation programs.

GOAL: ENCOURAGE AND DEVELOP ECONOMIC ACTIVITY ON THE RESERVATION.

Which provides for:

Expanding employment opportunities for tribal members, through:

Development of appropriate tribal lands for immediate and future industrial use, by:

Identification and zoning of sites;

Developing roads and utilities to support industry;

Prepare and implement an industrial development program, which:

Actively solicits industry as leasees, and tenants of tribal lands which provide job training and employment to tribal members and which stimulates Indian businesses.

Determine and exploit the special benefits of Reservation locations for industry.

Seek funding for and implementation of industrial promotion activities.

Which provides for:

The development of commercial activity appropriate to the growth and overall development and encouragement to tribal and Indian enterprise, through:

Designation of planning for commercial areas for future development, by:

Limiting commercial locations by size and type appropriate to their anticipated service area and its foreseeable market demand.

Preventing strip development and conflicting land use.

Providing opportunities for Indian participation in commercial enterprise by:

Giving priority, in commercial development, to Indian and tribal owned lands.

Seeking financial and management assistance aid for Indian commercial ventures.

Establishing educational and training programs for development of investment and management skills.

Undertaking tribal sponsored projects which provide training and employment opportunities for tribal members and stimulate and support other tribal or Indian businesses.

Seeking and providing incentives to non-Indian enterprises which can:

Attract off-Reservation patrons;

Provide on-the-job training for employment positions with promotion potential or otherwise support economic development and training for tribal members.

Which provides for:

Direct services in support of employment opportunity development such as:

Child care;

Vocational and pre-vocational training;

Summer intern programs for tribal management trainees;

Youth employment.

GOAL: DEVELOP ADEQUATE AND APPROPRIATE HOUSING RESOURCES CONSISTENT WITH THE SPECIFIC NEEDS AND REQUIREMENTS OF ALL TULALIP INDIANS.

Which provide for:

An adequate supply of housing units commensurate with the housing needs of:

Indian families now living in substandard or overcrowded housing.

Tulalip Indians, who now live off the Reservation, for whom appropriate housing on the Reservation is not now available.

Dependent and semi-dependent tribal members including the elderly, foster children, and low-income families.

New Indian families which are to be formed on the Reservation within the coming years.

Such housing supply to be developed through:

Construction of new housing units and restoration of existing housing by:

Several alternative means of development financing and ownership.

Elimination of legal and financial constraints to housing development.

Establishment of a Tulalip Tribal housing authority with responsibility for preparation and implementation of a comprehensive housing program.

Which provides for:

An overall improvement in housing and neighborhood quality through:

Improved housing quality and design standards and their implementation through the enactment and enforcement of building and housing codes.

The availability of housing design, construction and maintenance aid to tribal members.

A wider variety of housing types and styles.

Promotion of interest and direct support to landscaping, public and private, and other neighborhood amenities.

GOAL: BRING INDIAN HEALTH UP TO ACCEPTED UNITED STATES STANDARDS.

Which will require:

An effective public health program, including:

Medical clinic facilities on the Reservation;

Professional personnel to provide services;

Para-professional training for selected members of the Indian community;

Special medical aid and care to meet the specific health problems of Tulalip Indians.

An effective environmental health program, including:

Preparation of standards and regulations for environmental health.

Development and implementation of comprehensive plan for sewage and solid waste disposal

An effective Reservation-wide public safety program, including:

Building and housing code inspections;

Driver education program for new drivers and for those already licensed;

Safety improvements to roads and to pedestrian walkways.

GOAL: PROVIDE THE HIGHEST EDUCATION POSSIBLE, OFFERING A BROAD RANGE OF EDUCATIONAL OPPORTUNITIES.

Which will require:

An expansion of career opportunities in the educational system, through:

Establishment of improved counseling programs which avoid channeling Indian men and women into traditional work role stereotypes;

Expansion of careers education into elementary school grade levels with illustrative "career models" to which students can aspire.

Expand special educational assistance programs including Indian scholarships and other assistance such as transportation, child care, and nonacademic scholarships to support vocational education.

Improvement of the vocational educational system, through:

Introduction of educational programs available to Indians consistent with new technology and career opportunities with special emphasis on those which relate to tribal businesses and industry and to Indian manpower and skill requirements.

Which will require:

Return of the Indian dropout to the educational system, through:

An independent study of the census of dropouts leading to a comprehensive program to remedy the problem;

Initiation of special education programs

for Indian dropout students in a relaxed pressure-free atmosphere without the stigma of a school for "slow-learners."

Which will require:

Improved teacher and counselor understanding of Indians, through:

A policy of teachers to complete a course of study in Indian culture and heritage including appropriate reference to the Tulalips, and in the legal position and rights of Indians in relationship to local, state and federal government.

Improved curriculum in local schools to present a full, fair and honest treatment of the Indian culture and heritage to Indian and non-Indian alike, including:

Recognition of Indian contributions to the arts and culture of the area.

Contemporary Indian history including intergovernmental relations in the high school curriculum.

Introduce the new programs and remove practices which perpetrate prejudicial attitudes and discrimination, by:

Petitioning the Bureau of Indian Affairs to contract directly with the tribal council to administer all Johnson - O'Malley funds.

Placing community teacher aides from the Indian community in local schools.

Creating a career ladder for teacher aides leading to certification.

Which will require:

Expanded and improved programs in special education problem areas, such as:

Alcohol and drug abuse education in the public schools, and

early childhood education.

GOAL: PROVIDE ADEQUATE, EQUITABLE AND DIGNIFIED ASSISTANCE TO ALL PERSONS IN NEED.

Which will require:

Improvement of the delivery system of all welfare and public assistance programs, particularly as they relate to tribal members by providing a one stop center for social services, to include:

a) Public health and medical care; b) Food stamp sales and other welfare services; c) Vocational and educational services; d) Alcohol and drug treatment; e) Agricultural and extension services; f) BIA representation; and g) Employment Security services.

Establishment of a social services outreach program to provide expert counseling and assistance to those who are unable or unwilling to seek out aid.

Education of and assistance to welfare personnel in understanding Indian problems and a requirement of in-service training for public assistance workers to acquaint them with the Indian cultural heritage and the status, rights and privileges of Indians and their lands under treaty and statute.

Employment of more Indians in social service

agencies through a more aggressive application of the state personnel department selective certification process so that more Indians will be hired and trained in the State public assistance system, through intern and on-the-job training programs in public welfare agencies.

Which will require:

Removal of inequitable, degrading, humiliating and discriminating practices from the welfare systems.

Which will require:

An Indian welfare council to spotlight problems and recommend solutions.

Provide special care programs for the dependent young and the elderly, including:

A comprehensive program for senior tribal members;

Housing for the elderly;

Out-reach program of social services for the elderly;

Clinical facilities for geriatric care; and

Special social and recreational programs for senior tribal members.

Opportunities for senior members to participate in tribal affairs and in cultural and educational programs;

A comprehensive program for care of dependent young tribal members with tribal authority "in loco parentis" for homeless Indian children.

Standards and regulations for Indian foster homes.

Group housing for homeless Indian children and group foster care.

GOAL: PROTECT INDIAN LANDS FROM ENCUMBRANCE OR LOSS DUE TO WELFARE POLICIES.

Which will require:

Modification of state policies to:

Exclude Indian trust income from resources to be deducted from public assistance grants.

Define Indian gift deeds of trust land as unsaleable real-estate and insure from grant reduction process.

A policy in all state departments for mandatory counseling from the Tribes before selling Indian land for any reason.

GOAL: ESTABLISH A RELATIONSHIP OF MUTUAL TRUST, UNDERSTANDING AND RESPECT WITHIN THE COMMUNITY AT LARGE.

Which provides:

Active improved community relations, through:

The development of facilities and programs to expose the public to the rich Indian heritage, such as an Indian cultural and crafts center to include a museum, crafts work space, performing arts space, sales outlet and information center.

Cooperation with local educational insti-

tution's Indian lectures and classes in Indian history, Indian folk lore, Indian art and Indian civil rights and status.

Which provides:

For joint use of facilities and programs which lend themselves to harmonious joint use between tribal members and the surrounding community, including:

Medical facilities;

Community meeting spaces;

Recreational facilities.

Which requires:

An active program of image building through:

A landscaping program for all tribal areas in the public eye.

A Reservation design program.

Identification and rehabilitation of all areas, buildings and points of historical or cultural significance on the Reservation.

A Reservation clean-up, paint-up, fix-up program.

Use of the local news media for coverage of significant events.

GOAL: INVOLVE ALL TRIBAL MEMBERS IN THE DEVELOPMENT OF THE RESERVATION AND ITS PROGRAMS AND IN ACTIVITIES TO MAINTAIN TRIBAL HERITAGE AND INDIAN CULTURAL IDENTITY.

Which will require:

Facilities and programs which will foster closer identification of tribal members with the Reservation as its social, cultural and governmental center, including:

A cultural and crafts center for display, demonstration, making and selling of Indian products.

A tribally operated educational program for members and non-members alike to foster and preserve the Northwest Indian culture.

An identifiable tribal community center for all tribal activities, including government, social services, recreation and education.

Which will provide:

Encouragement to all tribal members to live on the Reservation and participate in its development, through:

Employment for tribal members.

Housing for tribal members, including:

Housing facilities for the dependent elderly and young on the Reservation and the upgrading of

existing housing and Reservation appearance.

Social and recreational activity programs to involve tribal members in tribal affairs.

Which will require:

Development of a program for establishing ad

hoc tribal citizen committees to address special issues which arise in tribal operations.

GOAL: AN EFFICIENT AND RESPONSIVE GOVERNMENTAL ORGANIZATION TO CONCEIVE, IMPLEMENT AND MANAGE PROGRAMS FOR THE BENEFIT OF THE COMMUNITY.

Which will require:

Evaluation of the governmental structure and procedures and preparation of recommendations for improvements, including:

Present organization and procedures.

Present job categories and development of specific job descriptions including legislative and administrative functions.

Present and immediate manpower needs including numbers of required personnel and skill levels needed.

Present accounting and budgetary procedures for cost control and investment potential.

Which will require:

Management techniques to identify and implement long range tribal development programs, through:

Development of a series of comprehensive policies and procedures in the following areas:

Land development -- leasing, acquisition and construction;

Personel -- responsibilities, recruitment, training and career advancement;

Inter-governmental affairs -- lobbying and legislation, local inter-governmental cooperation.

A system of program budgeting and financial analysis to forecast tribal income and program investments.

A system of program priorities reflecting the needs of the Tribes, the resources required to undertake the programs, and the expected returns from the programs initiated.

Development and maintainence of detailed land development plans for all tribally owned lands which reflect current tribal needs and wishes.

Clarification of the role of tribal governmental authority within the Reservation, through:

Creation of a tribal law enforcement and criminal justice system separately or in conjunction with federal, state and local agencies with regulatory authority over the Reservation, including:

Zoning and land use regulations over all Reservation lands;

Tribal building codes to be administered by tribal or county authorities.

All other applicable public health, safety and welfare measures.

GOAL: ESTABLISH HARMONIOUS AND EQUITABLE RELATIONS WITH ALL LEVELS OF GOVERNMENT.

Which will provide:

Tribal government with the opportunity to function more effectively, through:

A procedure for selective retrocession to return to the State's Indian tribes whatever degree of authority over their Reservation they wish to assume.

Amendment to the inter-local government cooperation act definition of "public agencies" to include Indian Reservations as legitimate governmental units along with counties, cities, towns and incorporated villages.

Re-establishment of tribal control of water rights within the Reservation.

An independent agency for Indian housing, responsible to Indian needs, which will provide funding and continuous technical assistance for tribal housing programs.

State regional development districts with funding and powers to make grants and loans to Indian tribes and private bureaus for economic development projects.

Study and promotion of the advantages to business to locate on Indian reservations in cooperation with the Washington State Department of Commerce and Economic Development.

Which will require:

Development of more effective and responsive programs in state, federal and local agencies, through:

Cooperation between county government and Indian officials to create zoning ordinances which compliment each other.

The responsibility of county law officials on the Tulalip Reservation made equal to that service provided to other areas of the county.

Recruitment and training of Indians in law enforcement by the State at all levels.

Which will require:

A regional development authority within the Department of Commerce and Economic Development which generally would exercise these powers:

Extension of a sales tax credit to plants located in economically distressed, low growth areas on a reservation.

Insure mortgage loans secured by industrial projects which have received the approval of tribal governments.

Reservation Plans & Programs

Land Use Plan

CHAPTER 7

LAND USE PLAN

The Land Use Plan (Map 16) is in large measure the land use expression of the goals and values of those concerned with the Reservation. (See Chapter 6, "Goals and Objectives.") It shows the major land use elements: commercial, industrial, institutional areas and the residential areas with varying densities. The plan also indicates certain public facilities, such as schools and arterial highways necessary to support the human activities proposed. From this generalized picture of the desired pattern of growth on the Reservation, development regulations will be applied and public and private investment encouraged to implement the plan.

Understanding the process by which the plan was developed, the major considerations and assumptions expressed in the plan and the alternatives considered are necessary to understanding the plan itself. The plan proposed here is preliminary in the sense that while it has been adopted as the general pattern of development that best expresses the values of the community, it is incomplete in detail. Several areas of more intensive study are apparent.

The first step in any planning process is to assemble and analyze all available data influencing human activity in the study area. The information compiled for this plan covered a broad range of subjects: physical conditions, cultural, social, institutional factors. Topography, soils, slope, hydrological and other natural features set the stage for human activity on the Reservation. Transporation facilities, public utilities, private development and land ownership patterns condition both the location and rate of development that can be expected. Population growth, income and employment prospects, both local and regional, will also strongly influence the accomplishment of the plan.

Concurrently with the research effort outlined above, numerous meetings where held with representatives of the community, tribal officials and local public agencies to develop a comprehensive statement of goals, policies, objectives and programs.

With reference to the emerging land use plan, special emphasis was given to the expressed preference of living style, leisure activities and quality of environment. As the values of the community became more clear, the plan began to take shape and a draft was presented to the public at a well-attended, two-day open house. Over 1,300 notices were mailed to all property owners on the Reservation and excellent advance coverage was given in the area newspapers. Approximately 700 persons attended the open house and were given an opportunity to review the preliminary plan, question the consultant and express their opinions both in person and in writing on a questionnaire which was distributed.

The response to the proposed preliminary plan was almost unanimously supportive. Of the questionnaires received, 97% were favorable. All the suggested changes have been carefully reviewed and in many instances either added to the plan or otherwise accommodated.

The final draft of the preliminary plan was presented to the Board of Directors of the Tribes on September 11, 1971, and adopted by resolution.

RESERVATION PLANNING OBJECTIVES

Following the adoption of the preliminary overall plans by the Board of Directors, the plan was submitted to Snohomish County as an amendment to its comprehensive plan. With the exception of the industrial site on Port Susan Bay owned by Union Oil Company, there has been virtually unanimous support for the plan at all levels. Adoption of the Tulalip plan as an amendment to the County Comprehensive Plan is now before the Board of County Commissioners with recommendations for adoption, with the exception noted, by the County Planning Department and Planning Commission.

Plan Objectives

Basically, the objectives of the overall Reservation plan are as follows:

1. Provide the basis for orderly development on the Reservation. Because of no clear-cut jurisdiction over land use and development on the Reservation, growth in the past has been haphazard and in many cases substandard. Completion of this plan will provide a guide for future development.

2. Maintain the natural features of the Reservation. There are many wildlife areas, view points, watercourses and forest groves on the Reservation. Without exception everyone concerned with the Reservation has expressed in the strongest terms the necessity of preserving the natural character and beauty of the area.

3. Maintain the rural residential character of development on the Reservation. The overall density of the population should be in keeping with rural density standards.

4. Provide for specified areas within the Reservation for sufficient density to support required public utilities. Recognizing the need for sanitary sewers in the rapidly developing areas of the Reservation, densities high enough to economically justify sewer costs have to be provided.

5. Provide areas for water-oriented recreation. Because of the recreational potential of the Reservation, development of public and private facilities was given high priority.

These objectives with regard to the overall plan are equally applicable to the program of development for tribally held lands.

Additional Specific Tribal Objectives

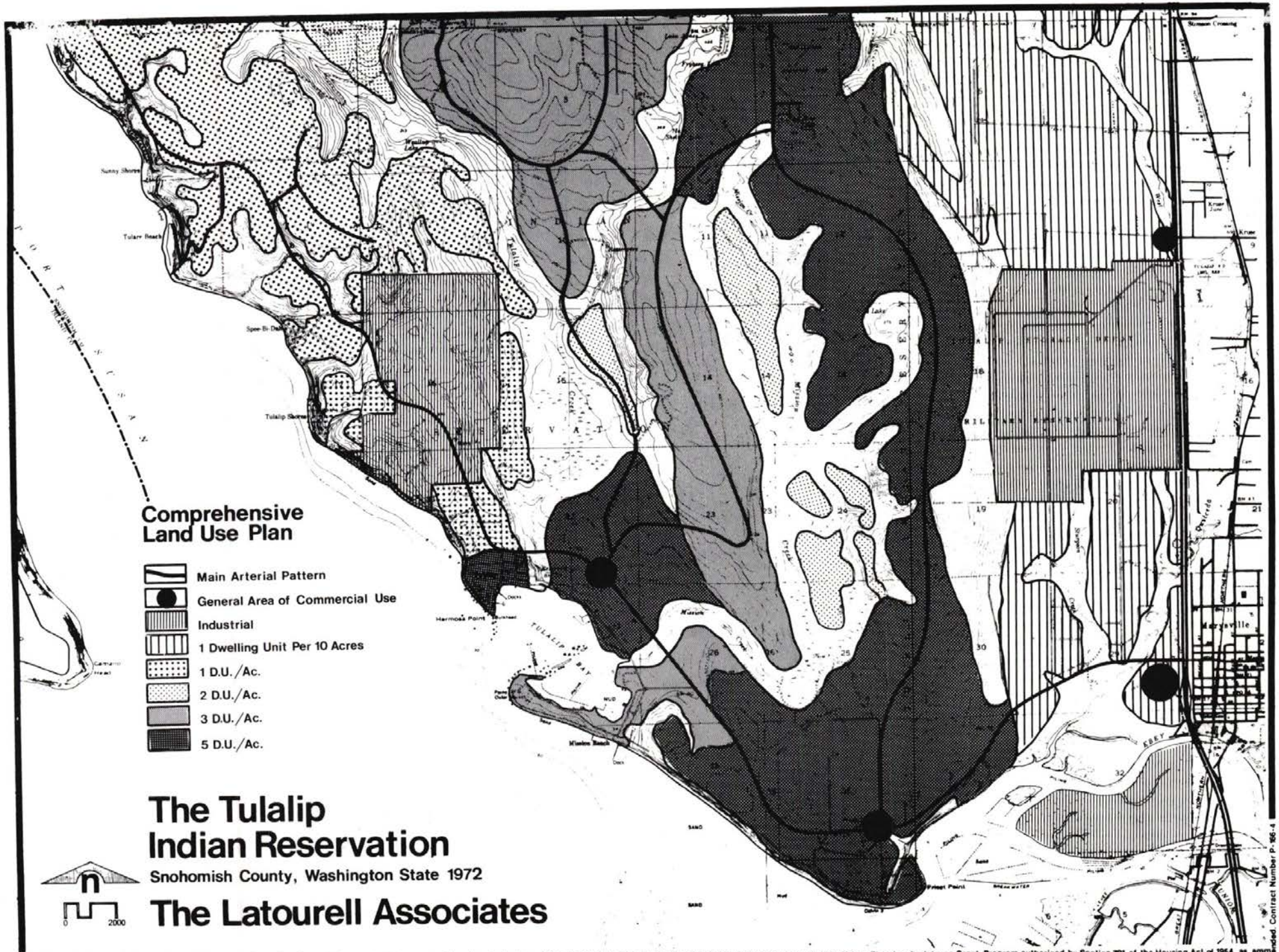
1. Preserve the visual and cultural identity of the Reservation.

2. Develop an identifiable Reservation center.

3. Provide opportunities for Indian social, cultural and economic development.

4. Generate income commensurate with the value of the tribal lands.

After reviewing the tribally owned lands with the Board of Directors, three areas were identified



The preparation of this map was aided by the Washington State Planning and Community Affairs Agency through a Federal Grant from the U.S. Department of Housing and Urban Development under the Urban Planning Assistance Grant Program authorized by Section 701 of the Housing Act of 1954, as amended. Contract Number P-166-4

as requiring extensive study; these were: Ross Lake, Spie-bi-da and Tulalip Bay and the latter was selected for the first detailed planning effort.

DEVELOPMENT PATTERNS

Early in the planning process it became apparent that the physical features of the Reservation exercised a dominant role in the development pattern possible on the Reservation. The unique features of topography, soils conditions, watercourses and wildlife areas precluded traditional alternative locations of industrial, commercial and residential activities. Instead, the alternative choices became ones of intensity and character of development. Focusing primarily on density of future residential development, the Reservation was divided into nine separate planning areas with distinctive physical and locational characteristics. Each area was analyzed as to its suitability for intensive residential development, and net dwelling unit densities were assigned to each area.

Commercial development locations and approximate acreages necessary to support the surrounding community were identified. Areas which are either presently or imminently used commercially were included for continued commercial use.

Lands either presently used or zoned industrially were included in the plan for continued industrial use.

MAJOR PLAN FEATURES

Industrial areas indicated on the plan are the Tulalip Test Site operated by the Boeing Company and the property owned by Union Oil Company. The test site is adjacent to Interstate 5, immediately south of an interchange; it is served by rail and water and can be served by sewer easily if the demand is present. The Union Oil site has been zoned for industry for many years.

Commercial activity is planned in the areas of the 4th Street Interchange connecting Tulalip-Warm Beach Road with Interstate 5; Marshall Road Interchange to the north, in the general area of the Priest Point Grange on the Tulalip-Warm Beach Road; and at Tulalip Bay.

Residential densities range from very low at one dwelling unit per net ten acres to an expected five dwelling units per net acre. (One net acre equals one acre less land required for street rights-of-way.) At the higher densities it is anticipated that a large portion of the designated areas will be used for multiple dwelling unit development. Some mix of multiple and single family dwelling units is expected in all areas except those of lowest planned density.

Because of the extensive wet lands and wildlife habitat and the existing living styles and subdivision patterns, the drainage basins of Sturgeon and Quilceda creeks south of the test site are planned for very low density development.

Immediately to the west is a large ridge running north to south ending in a wide level plateau overlooking Port Gardner Bay. This area is planned for the highest density. Physically the land affords an opportunity for very high quality residential development on gentle slopes with excellent views.

Locationally the area is well suited for intensive development because of the transportation facilities and proximity to existing public facilities.

The lands around Tulalip Bay are also indicated as high density residential. This area will become the focal point of the Reservation with intensive recreational, cultural and institutional uses. Because of the amount of land necessary to support the nonliving activities and the existing pattern of development, some of the lands bordering Tulalip Bay will not develop above an overall density of three dwelling units per net acre even though there may be extensive apartment house development.

North and west of Tulalip Bay, the area generally bounded by Tulalip Creek on the east, Port Susan Bay on the west and extending to Fire Trail Road on the north is indicated at one dwelling unit per net acre. This area is characterized by steep slopes, limited opportunities for development, remote locations and difficult provision of public service. Because of the great amount of unbuildable land, even development on moderate lot sizes would not yield more than one dwelling unit per net acre at saturation.

The ridge lying between Tulalip and Mission creeks is indicated at two and three dewlling units per net acre. Although the terrain is less severe than to the west, much of this area is moderately steep slopes and although they are developable, require larger lots and careful siting. This area is also quite remote and difficult to provide with public services. In addition, much of the area forms the watershed for the Tulalip Bay domestic water system. Development here should be restrained until permanent sources of water supply for the Reservation are established.

The flat, poorly drained lands north of the test site, between Interstate 5 and the ridge to the east is the only area now supporting agriculture. Most of the development that has occurred has been on lots of three to five acres, the remainder in much larger holdings. This area should be retained at a very low density development pending future demand for more intensive development or conversion to other uses.

It is also recommended that residential and other development be kept to a minimum in all areas which are either wetlands and water bodies or excessively steep slopes, i.e., greater than 15%.

The schematic circulation system shown on the plan map illustrates the pervasive influence of the Reservation's physical characteristics on the development alternatives. Because of either very steep grades or wetlands, east-west connectors are difficult to establish. Consequently, the final circulation system will have to be based on a careful study of the alternative routes and the anticipated development pattern it is to serve.

AREAS OF REFINEMENT

There are several aspects of this plan that need considerable refinement before the land use element of the plan can be considered complete. Foremost is the completion of utilities planning. It must be understood that any development other than single family residences on very large lots is predicated on sanitary sewers. The suitability of soils for septic tank use has been thoroughly studied by both the consultants and the Snohomish County Health District. Except in a very few isolated spots, the Reservation is not able to support individual sewage disposal systems. Therefore, the provision of sanitary sewers becomes critical to the location and pace of development within the Reservation.

Population distribution over time is another facet of the plan requiring further study. This role of population growth is highly dependent on the state of the regional economy and also upon the

provision of public facilities required to support population growth. Sewage treatment systems are but one of the critical needs of a growing area.

Once the pace and direction of development and the desired rate of growth are determined, planning for public facilities of all types can proceed. School, library, fire stations and other services can be located so as to serve the expected future populations.

Freeway Interchanges

Because of the access to freeway traffic and high visibility, the interchange areas represent a unique real estate commodity. They must be carefully planned to avoid congestion and to conserve this limited land resource. Since these interchange areas are the gateways to the Reservation, every effort most be made to insure quality development consistent with the spirit of the plan.

LAND USE SUMMARY

As indicated above and on the accompanying plan maps, the Reservation was divided into nine subareas, each with distinctive features. The ultimate configuation of physical development features upon reaching the upper limit of population (saturation) is presented for each of the nine subareas. Put another way, each subarea plan indicates the ultimate maximum population to be resident there and the facilities required to meet the planned service objectives for that population. (See map 17 and Table 9.)

Area 1:

Size: 1680 acres
Dwelling Units: 168 single family
Population Density: .1 du/acre
Population: 580

Because of the low density population in this area, no community facilities are contemplated. The adjoining City of Marysville now provides service to this area and is expected to continue to do so.

Area 2:

Size: 2220 acres
Dwelling Units: 3231 single family
5909 multifamily
Population Density: 86% at 5 du/ac.;
14% at 2 du/ac.
Population: 29,580
Schools: five elementary
Fire Stations: one

Although this area is designated high density, some of the school and fire services will be provided by units in adjoining subareas. The proposed fire station location is sited to service the expected high value, rapidly growing portion of this area.

Area 3:

Size: 1030 acres
Dwelling Units: 9041 single family
2409 multifamily
Population: 13,165
Schools: one high school
one junior high school
two elementary schools
Parks: one major park
Golf Course: one golf course
Library: one library
Fire Stations: two fire stations

The Tulalip Bay area is planned as the cultural center (see Tulalip Bay Plan which follows) and as such is the focal point for community services and recreational facilities.

Area 4:

Size: 1560 acres
Dwelling Units: 3153 single family
1127 multifamily
Population: 13,852
Population Density: 74% at 3 du/ac.; 26% at 2 du/ac.
Schools: two elementary
Fire Stations: one fire station

Area 4 represents the center of the Reservation. It is planned for moderate densities with most of the community services provided in adjoining higher density areas.

Area 5:

Size: 1740 acres
Dwelling Units: 939 single family
801 multifamily
Population: 5,288
Population Density: 100% at 1 du/ac.
Schools: one elementary
Fire Stations: one fire station

Because of the topography and resulting small population, this area has little need for intensive community facilities. Although fire service can be provided from Area 3 and 6 one fire station is recommended because of the area's relative isolation.

Area 6:

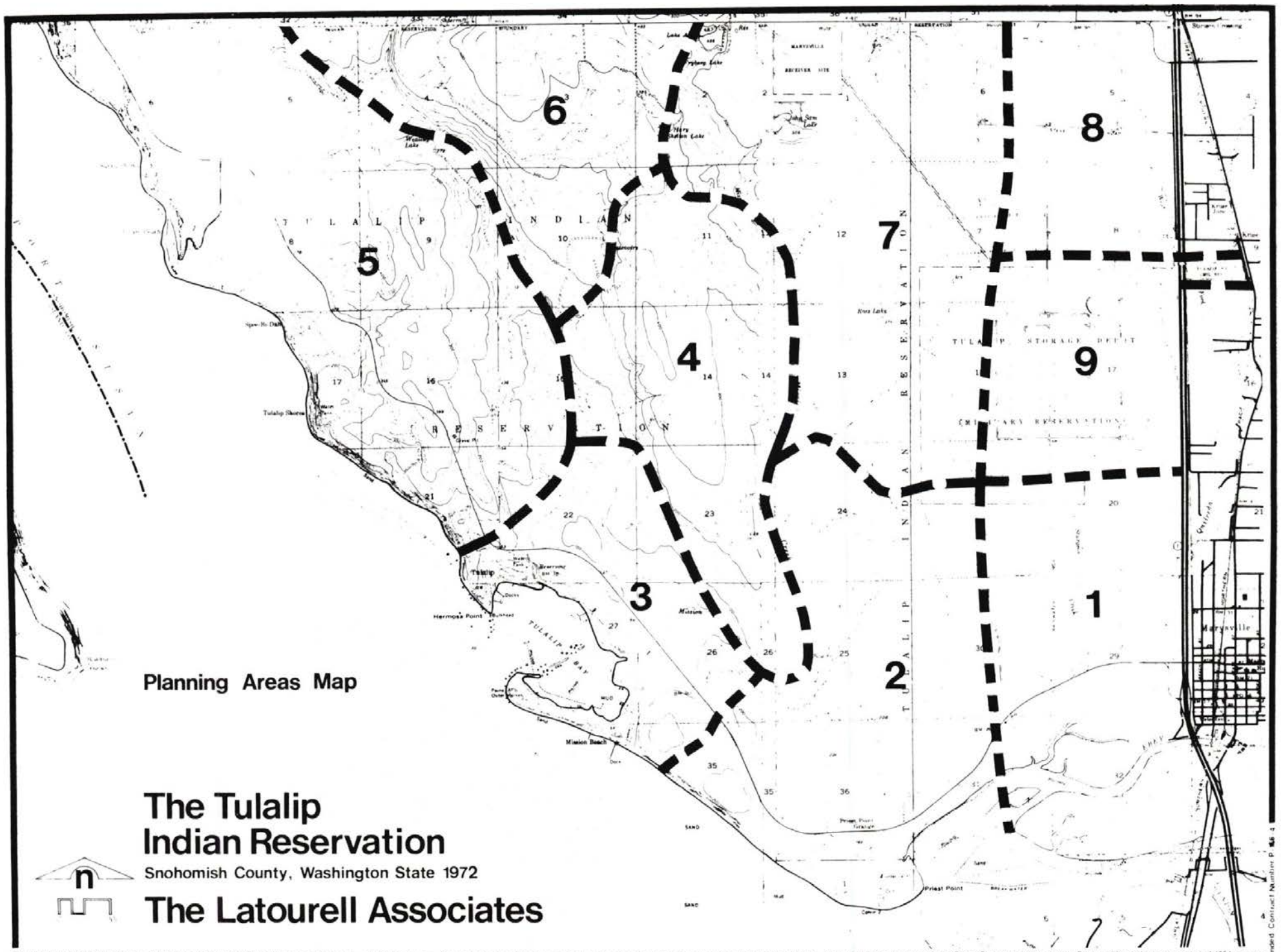
Size: 1460 acres
Dwelling Units: 3137 single family
1143 multifamily
Population: 13,836
Population Density: 93% at 3 du/ac.; .7% at 2 du/ac.
Schools: one junior high school
three elementary schools
Fire Stations: one fire station

Area 6, of moderate density itself, is expected to provide overflow school and fire service to the sparsely populated area 5 to the west and the high density area 7 to the east.

Area 7:

Size: 2340 acres
Dwelling Units: 14,784 single family
6,596 multifamily
Population: 31,272
Population Density: 81% at 5 du/ac.; 19% at 3 du/ac.
Schools: one high school
one junior high school
six elementary schools
Libraries: one library
Fire Stations: two fire stations
Parks: one major park
Golf Course: one golf course

This area is planned as the second major center of the Reservation and ultimately will need all major public facilities.



The preparation of this map was aided by the Washington State Planning and Community Affairs Agency through a Federal Grant from the U.S. Department of Housing and Urban Development under the Urban Planning Assistance Grant Program authorized by Section 701 of the Housing Act of 1954 as amended Contract Number P

TABLE 9

DEVELOPMENT POTENTIAL
TULALIP INDIAN RESERVATION

Land:

Use	Area in Acres	Percent of Total
Single Family	6,572	30.0%
Multifamily	1,160	5.3%
Roads	3,158	14.3%
Schools	212	1.0%
Commercial	81	.4%
Tribal Facilities & Vacant Land	2,028	9.0%
Miscellaneous Facilities	1,219	6.0%
TOTAL Developable Land	14,430	66.0%
Open Space	7,570	34.0%
TOTAL AREA	22,000	100.0%

Housing & Population:

Type	Dwelling Units	Saturation Population
Single Family	18,021	63,110
Multifamily	17,985	44,959

Total Dwelling Units: 36,000; Total Saturation Population: 108,069. Density: 1.6 du/gross average; 2.49 du/net average.

Area 8:

Size: 1270 acres
Dwelling Units: 128 single family
Population: 488
Population Density: .1 du/ac.

Area 8 is presently in transition from agricultural to industrial use and few public facilities are contemplated.

Area 9:

Size: 1120 acres

Thes area is currently used for industry and is expected to continue in that use. No public facilities are included in the plan.

TULALIP BAY PLAN

The Tulalip Bay Plan proposed a recreational, residential and Tribal Center on tribal lands surrounding the bay. Each element of the plan has a significant relationship to each other and together form a system. Construction of adequate public utilities makes possible intensive use of the area without contamination of the environment. Recreational development promotes both profitable tourism and future residential development. Residential development creates the demand for commercial services and provides income the the tribal social, educative and cultural programs.

The development plan map for the bay area is the result of a careful study of the user relationships between each type of activity and the physical characteristics conditioning development. Every effort has been made to retain the existing development and use to the maximum extent possible the present buildings, roads and utilities.

The Tulalip Bay Plan contemplates the major development projects and associated residential development of mixed housing types. These ten projects fall into three general categories: marina and related facilities; tribal and community service facilities; and general recreational and associated facilities. (See maps 18-19.)

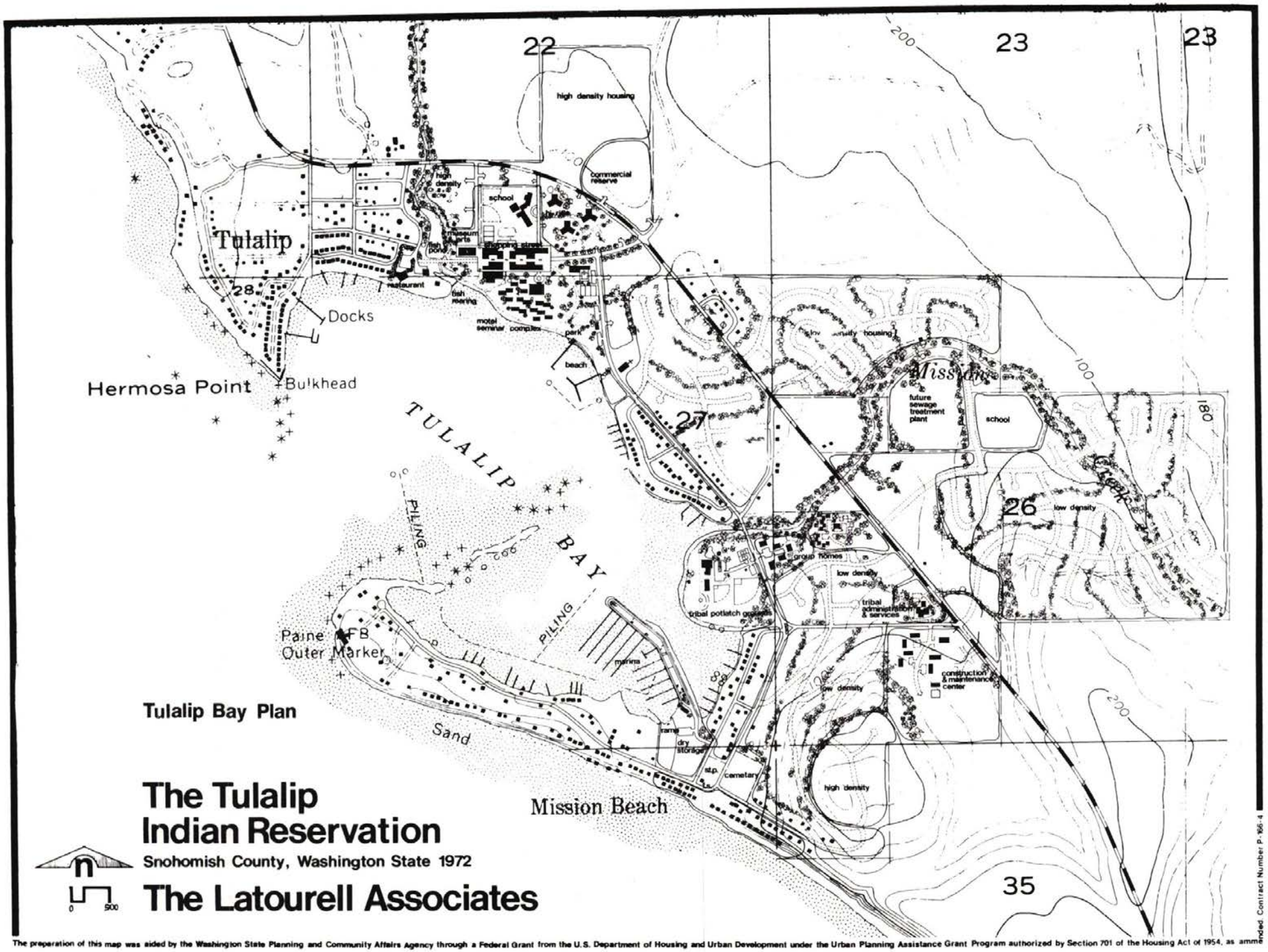
Marina Complex

The inner bay area was selected for the marina complex because of the high degree of weather protection, the availability of level backup land and the least disruption of surrounding development. The facility will be designed to accommodate resident and transient pleasure craft and commercial fishing vessels. The complete range of marina services can be located at the site including stores, coffee shop, dry land storage, lift facilities, net storage and repair. The ultimate size contemplated is five hundred moorages.

Tribal and Community Service Complex

Located in the area of the Potlatch Grounds and extending inland along Mission Creek to the Tulalip-Warm Beach Road, this complex will include:

1. Social and recreational facilities at the Potlatch Grounds.
2. Tribal housing for the elderly, foster families and low income families.
3. Tribal Administrative Center and Medical Clinic
4. Tribal Maintenance and Service Center with vocational education facilities.



Tulalip Bay Plan

The Tulalip Indian Reservation

Snohomish County, Washington State 1972

The Latourell Associates

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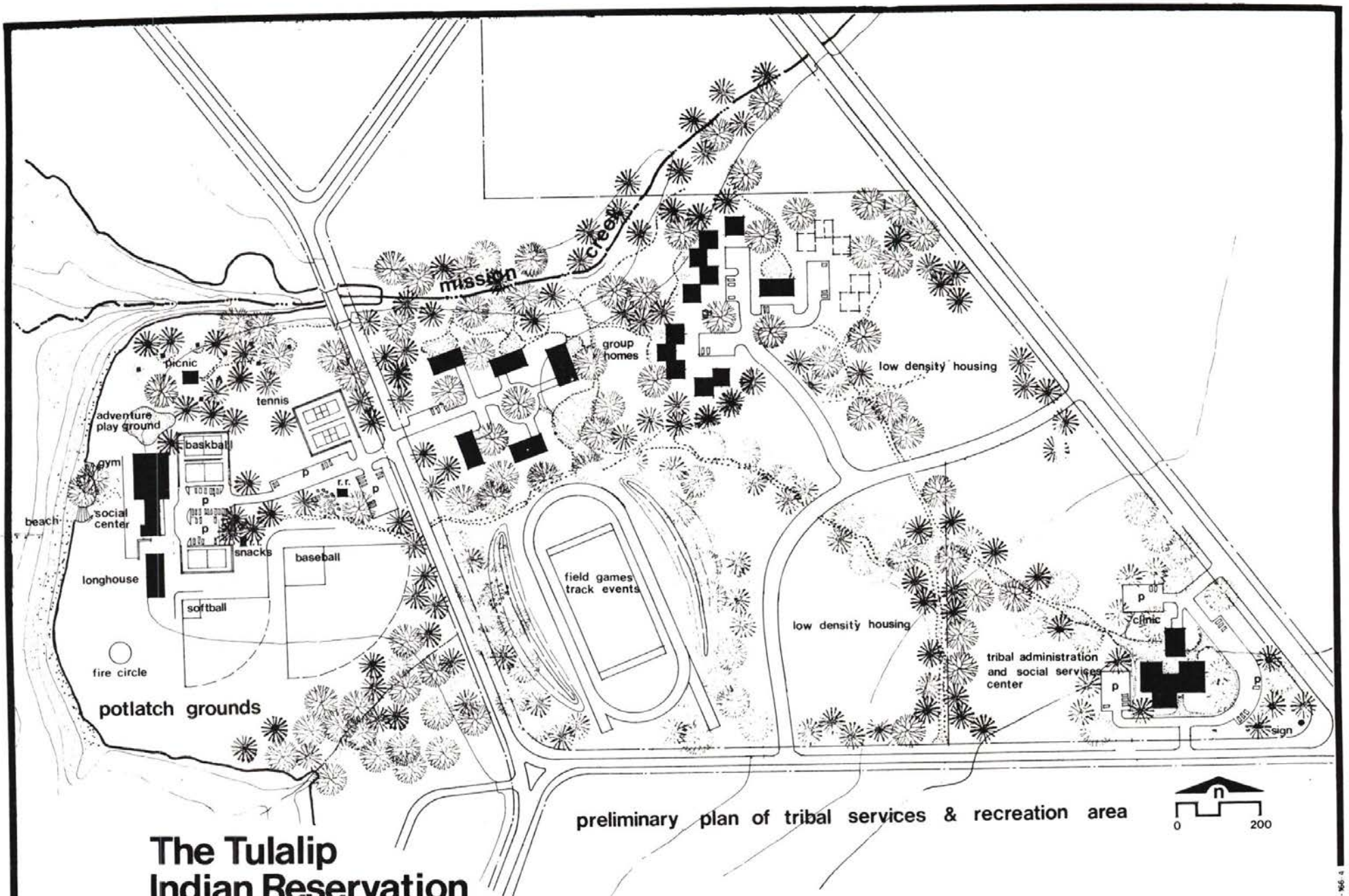

preliminary plan of tribal services & recreation area

The Tulalip Indian Reservation

Snohomish County, Washington State 1972

The Latourell Associates

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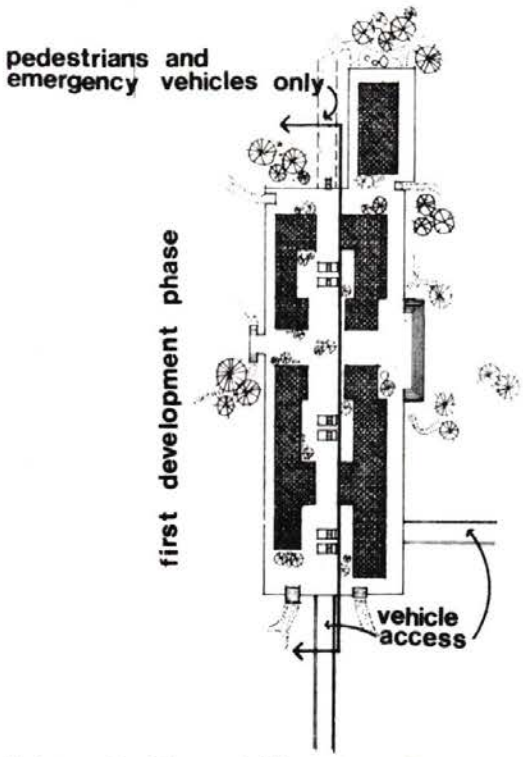
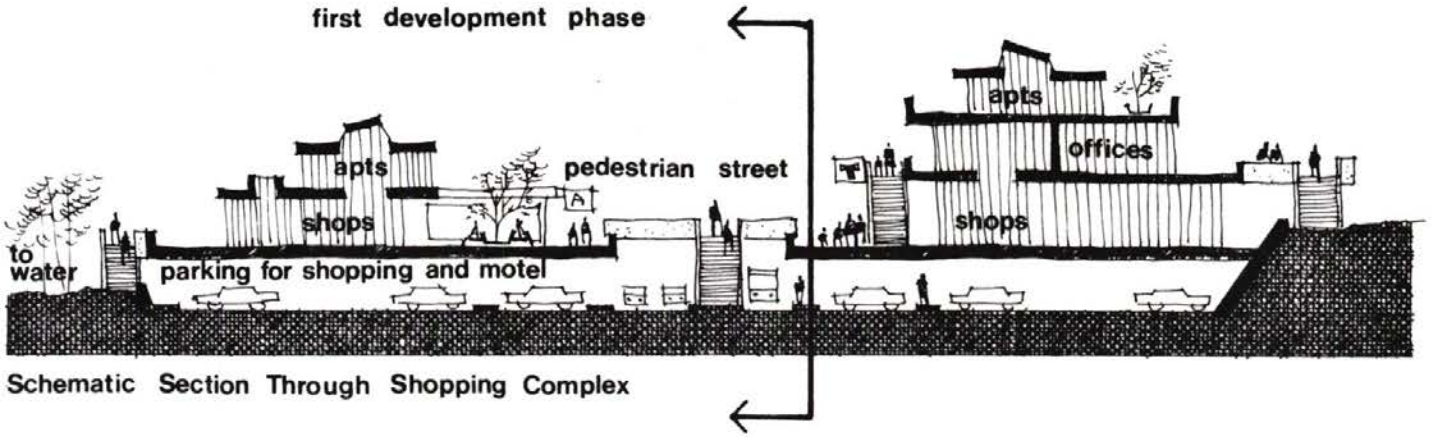
General Recreational Facilities

In the corridor extending from the reservoir on Tulalip Creek inland, the following development is planned.

1. A public park with a swimming pool, tennis courts, fishing piers, etc., will be located at the site of the old Totem Beach Resort. The road on the waterfront will be relocated inland.
2. The tribal dining hall will be converted into a specialty seafood restaurant and sales area.
3. A Museum and Cultural Center will be located at the site of the present tribal office.
4. A motel and seminar complex will be located on Totem Beach Road near Tulalip Creek.
5. Fish rearing ponds and associated public accommodations are being developed below the dam on Tulalip Creek.
6. A shopping center complex is planned on the north side of the Tulalip-Warm Beach Road east of the Tulalip Elementary School.



Schematic Plan of Shopping Center (see map 18)



Schematic Section Through Shopping Complex

Human Resources

CHAPTER 8

HUMAN RESOURCES

The development of human resources is considered to be an integral part of the overall development plan. The objective is to formulate a program which has a direct response to the needs of The Tulalip Tribes. That program needs to be based upon a long-range community development approach rather than procurement of short-range project funds for independent attacks on a series of perceived problems. Therefore, before determining the nature and extent of programs, an inventory of needs is in order.

ECONOMIC DEVELOPMENT

Family income for The Tulalip Tribes is unusually low with 72 percent of the families having under $3,000 per year. Associated with low family income and high unemployment rates is 49 percent of the population receiving welfare related services.

The median level of education for The Tulalip Tribes is the eighth grade for members 25 years and older. Although the high school drop-out rate is still a matter of concern, the Tribes has taken steps to encourage students to remain in school and even continue into post high school educational programs. The observation that 93 percent of the population 14 and 15 years of age and 72 percent of the population 16 and 17 years of age are enrolled in school is evidence of the success of existing programs. However, it is also evidence of the need for continued emphasis.

The current job development goals of The Tulalip Tribes will become an integral part of the educational programs through the incentives associated with local job opportunities.

The disproportionate number of Tulalip Indians among the ranks of the unemployed and underemployed argues for a positive manpower training program to correct these conditions. Although unemployment in the region is extremely high, job opportunities do still exist. Ordinary turnover rates, for example, will result in a significant number of new hires for replacement.

The estimated annual new hire rate in payroll employment in Snohomish County (excluding rehires of persons laid off) is about 15,000 per year, i.e., the present unemployment rate. There will be strong competition for these jobs. Although, Tulalip adults who are employable equal less than 0.2% of the County's labor force, concentrated efforts will be needed to place these persons in meaningful employment. The major opportunities for the off-Reservation employment of Indians not now working or in school appear to be in:

1. State and local government with such programs as Public Service Careers and Emergency Employment Act where federal funds provide the incentive for employment;
2. Retail trade (private employment);
3. Services (private and public employment);
4. Manufacturing (particularly paper and pulp, lumber and wood products, and food products).

In the long run, however, this source of employment is somewhat limited, due to several factors:

a) The turnover rate has probably decreased because of a lack of alternative job op-

portunities.

b) With planned reductions of work force, many firms are able to cover normal labor attrition internally without seeking new hires.
c) There is a large pool of skilled, unemployed workers seeking most available replacement jobs.

While non-Reservation industry as a source of employment for tribal members is not particularly promising at this time, pre-employment training and inservice training programs and special efforts through the Employment Security Department should be pursued.

Educational Service Delivery

The Indians of The Tulalip Tribes are confronted with a problem common to most members of America's disadvantaged subculture--their only opportunity for formal education is restricted to that provided by an alien culture. Those children who somehow manage to prepare themselves for a meaningful educational experience in the public school system risk alienation from their native culture. In short, until very recently, the Indian has had no educational choice but to adjust and to conform to the existing system. This, in part, has resulted in a level of educational achievement far below their peers in the educational system. (See Chapter 4.)

Thus, two program objectives are indicated:

1. Provide Tulalip Indian children with appropriate preparation for entry into and retention in the public school system, and
2. Modify the school system to provide a meaningful response to and recognition of the positive attributes of the Tulalip Indian culture.

The compelling need in preparing Indian children for adult life is to help them maintain self-respect and pride in their heritage. Meeting this need may very well place a responsibility on the public school system which it is not yet able to accept. Therefore, program development may have to be in incremental steps, one component at a time. Some of the essential elements of such a program are already in operation; others could be initiated with a little additional motivation and effort.

Through Everett Community College a pre-school program has been started at Tulalip Bay and has been well received. However, this is but one component of what should become a comprehensive year-round development program for all pre-school aged children. This program should provide for the integration of health, recreation and education services with extensive community involvement.

In addition, comprehensive educational supplements are needed for all those of school age. For example, these might include: (1) special tutoring services (both voluntary and contracted); (2) special weekend educational recreational programs; (3) summer enrichment and recreational programs; (4) part-time and summer work opportunities and vocational education programs for teenagers in school and school drop-outs; use of peers and older Indian children to assist in these programs for education of Indian children and recreation; (5) a career development program for all Indian youths under the age of twenty-one including those out of school; (6) pre-college assistance programs such as the present Upward Bound; (7) scholarship loans and grants for post-high school education (as at present); and (8) youth advisory council for education and recrea-

tion. Here again a significant beginning has been achieved and the groundwork laid for a more comprehensive program. Of particular note are the scholarships given for post-high school education in which over twenty Tulalips are now participating.

In order to correct the accumulated effects of under-achievement, continuing education for all those over eighteen is also needed. This should be linked to career development, vocational training and employment. Adult Basic Education is available today, but with only limited program linkages. Specifically the comprehensive educational program should:

1. Provide for parent, adult and youth involvement in program direction as a necessary condition for program success,
2. Be multisectoral in nature and include components of manpower and career development, employment, day care, recreation and social activities, as well as education, and
3. Have a meaningful component of Indian culture and heritage integrated throughout the entire program,
4. Have special focus on developing skills required in planned tribal enterprises.

Health Service Delivery

Traditional Indian health care is not responsive to the needs of the Tulalips. As in so many other cases, the programs in force are narrowly focused, unrelated to complementary programs and are difficult to participate in. A major problem in attempting to evaluate the system and make recommendations stems from the fact that there has been no thorough evaluation of health needs on the Reservation. Only after this has been accomplished can a comprehensive health care plan be designed to attack the problems. This evaluation of needs must be accomplished through community action supported by the specialists from the Indian Health Service and State and County Health Departments.

Access to convenient health facilities is a continuing and obvious deficiency. While complete health care facilities cannot be supported by the present population, a clinic is included in the planned Multiservice Center at Tulalip Bay.

Social Services Delivery

The social needs of The Tulalip Tribes are extensive. As noted in Chapter 4, few members escape the problems inherent in poverty and social disorganization. Of those under twenty-one years of age, 48% receive Aid to Dependent Children benefits through the State of Washington Department of Social and Health Services, and 72% of those over sixty-five receive Old Age Assistance.[1] All in all, a substantial proportion of personal income is derived from welfare payments. This alone should be adequate justification for application of innovative programs designed to free the Tulalip Indians from the welfare dependency syndrome into which many now seem trapped.

At present, the social service delivery system is fragmented, organized along narrow functional lines convenient to the service agencies but not necessarily responsive to user needs. An encouraging exception is the Tulalip Community Action Program which is following a more realistic community development approach to social service delivery. This start needs to be expanded and extended to the point where a complete comprehensive social service delivery system can be organized and its

programs implemented.

PROGRAM DEVELOPMENT

Programs to support the Reservation human resources and economic development must meet a very large number of interrelated needs. Even though there may be a wide variety of State and federal funding programs available to remedy each identified problem, the monetary resources and individual efforts required to generate grants from these sources precludes the Tribes from utilizing more than a few of them. Thus, the first priority is program development.

Recommended Strategy

Organization of the community and mobilization of its resources for social and economic development needs to proceed ahead of more specific efforts for implementation of program conponents. Since these objectives require full-time, continuing responsibility, they can better by met by the services of full-time paid (and qualified) employees. Seed monies for procurement of staff, and for their support, will ultimately be more productive for achieving program goals.

Program development needs fall into two general areas and suggest a parallel to the recent reorganization of the Tulalip Board of Directors. The tribal government is now divided into two major committees, Business Affairs and Tribal Affairs, each with a staff manager. An Executive Committee coordinates the activities of the two board committees.

Under the new organization, it will be necessary for each committee to define its policies, procedures, and long-range objectives. Of equal importance is the need to organize an administrative structure for carrying out the policies set forth by each committee and for maintaining a smooth coordination between the many separate programs.

While a good administrative organization is essential, it is not, of itself, the ultimate goal. Development of a comprehensive program to meet the human resource needs and economic development requirements of The Tulalip Tribes should not be deferred. It is important to proceed now not only to develop that program but to continue efforts in securing the financial assistance requisite to that program's success.

There are many grant-in-aid and technical assistance programs from federal and State sources to assist local governments in planning programs for economic development, education, health and welfare services. The Tribes should take steps to immediately tap these funding sources for the planning of human resources program. Virtually every federal agency has aid programs to involve local communities in planning for the delivery of services provided by that agency.

Economic Development

There are three basic strategies for economic development and Indian income improvement: seek off-Reservation employment, seek private development of on-Reservation jobs and develop tribal enterprises.

As pointed out above, the off-Reservation employment situation is not promising at this time. All indications seem to be that regional employment will improve gradually over a period of several years and require some time before significant

employment opportunities open for tribal members.

By seeking the establishment of industry on suitable Reservation lands, the Tribes may generate additional employment. Again, however, the prospects for substantial job creation from this activity are limited and speculative.

1. Because of the general state of the economy, very few firms are expanding or seeking new industrial sites. Much of what demand for growth does exist can be adequately met by reactivating existing unused plant capacity.

2. There is a large supply of potential industrial land on the market in competition with sites that could be offered on the Reservation.

3. Industrial sites owned by the Tribes on the Reservation are limited. The landfill area on Eby Slough, wille large and well located, requires extensive site preparation and is suited only for activities which do not require solid subsoils. The Tulalip Test Site is on long term lease and there is no indication of employment increases. The long range plans of the lessee are unknown and the availability of the site for more labor intensive industry in the near future cannot be anticipated. The Union Oil site could provide a number of jobs both in refinery operations and construction; however, Union Oil has not committed itself to any possible industrial use of the property. Any development there appears to be a number of years away. Moreover, this site is not owned by the Tribes and they may have limited influence on the employment of tribal members if a refinery, which is not labor intensive, is ever built.

The third alternative is development of tribally owned or controlled operations on tribal lands with permanent jobs which could be generated through development projects on Tulalip Bay. These would include a major marina, multipurpose center, restaurant, fish rearing and processing, motel and conference center, museum and cultural center, recreational facilities and a large on-going housing construction program. In addition to the direct employment created by these projects, substantial secondary employment in management and maintenance would be required.

This alternative has several distinct advantages over those above:

1. Because of fee ownership of the land and the availability of financial assistance, the Tribes can undertake projects profitably that would be marginal for private investors.

2. The Tribes could directly control employment to the benefit of tribal members.

3. All construction including utilization of indigenous labor sources could be controlled by the Tribes.

4. On-the-job training programs and career development can be worked into each project.

5. Most of the projects can return a long term profit to the Tribes which in turn may be re-invested in new employment generating enterprises or in additional social service and benefits to tribal members.

DEVELOPMENT OF ACTION PROGRAMS

The action programs listed below are to a high degree interrelated. The success of each is dependent upon the completion of the others. Without the development of the recreational facilities identified, income and employment generating tourist facilities cannot be supported. Without the tourist and recreational facilities to stimulate demand for the proposed housing and construction, the program cannot be undertaken. For this reason, each project must be viewed as an element or overall phase of a single comprehensive development project.

In addition to providing facilities for the social and educational needs of the Tribes, including skill centers, medical facilities and community recreational space, these projects will provide more than enough jobs than needed to meet the employment goals the Tribes has established. In addition to the payroll generated, there will be substantial revenue for The Tulalip Tribes, which will be available for many urgently needed social programs. The Charter of The Tulalip Tribes provides that up to 50 percent of the revenues of the corporation may be passed on to the membership in the form of dividends.

Tulalip Bay Marina

This facility will be designed to accommodate both pleasure craft and commercial fishing vessels. A small store, coffee shop, lift facilities, boat and net storage and repair shop will be included. The ultimate size contemplated is 500 moorages.

Benefits: 1) Provide a profitable commercial enterprise for tribal operation. 2) Improve the beach areas and other recreational facilities through land reclamation and improvement. 3) Stimulate demand for other related tribal development projects at Tulalip Bay. 4) Stimulate tribal fisheries. 5) Employment.

Position	Employees
Harbor Master and manager	2
Lift operators, boat handlers	4
Bookkeeper	1
Security, fire patrol and maintenance	3
Storekeepers	4
Coffee Shop: Waitresses	5
Cooks and helpers	5
Boat repairs, maintenance and sales	4
Total	28

Cost: $1,000,000

Sources of Financing: Economic Development Administration, Bureau of Indian Affirrs, Farmers Home Administration, Bureau of Outdoor Recreation and the U.S. Army Corps. of Engineers.

Construction, Maintenance and Automotive Service Complex

Employment in construction stems from all segments of the Tribes' long range development programs including housing.

Position	Employees
Manager and assistant	2.0
Skilled laborers	10.0
Laborers	10.0
Foremen	4.0

Equipment operators	3.0
Equipment Maintenance	2.0
Accountant	1.0
Service station and Automotive Repairmen	6.0
Total	38.0

Cost: $510,000.

Sources of Financing: Department of Housing and Urban Development, Economic Development Administration, Office of Economic Opportunity, Indian Health Service, Bureau of Indian Affairs, and the Small Business Administration.

Specialty Seafood Restaurant

The existing tribal dining hall will be converted into a 200 person capacity restaurant to serve the general public, the marina traffic and the proposed motel-conference center. It will act as an outlet for fish caught by tribal fishermen moored at the marina and processed by tribal members and provide a profitable commercial enterprise for tribal income.

Position	Employees
Manager and assistants	3
Accountant	1
Hosts	3
Cooks and helpers	10
Bartenders and waitresses	5
Waitresses	20
Total	42

Cost: $250,000.

Sources of Financing: Economic Development Administration, Small Business Administration and the Tulalip Tribes, also the Bureau of Indian Affairs and the Office of Economic Opportunity.

Fish Processing, Marketing

Specialty salmon processing facilities are planned in conjunction with the proposed restaurant. Sales of fish will be to the restaurant, the public through a retail outlet at Tulalip Bay and to the wholesale commercial market. The plant operation is planned to be open to the public as an added attraction to Tulalip Bay.

Position	Employees
Manager and assistant	2.0
Production and packaging	6.0
Fishing	3.0
Total	11.0

Cost: $200,000.

Sources of Financing: Economic Development Administration, Office of Economic Opportunities, Bureau of Indian Affairs, and the Small Business Administration.

Comment: Funding has been secured through OEO to construct a second rearing pond at the mouth of Tulalip Creek.

Housing

The housing development program of The Tulalip Tribes anticipate undertaking four types of residential development:

1. Low cost housing
2. Housing for senior citizens
3. Housing for foster families
4. Market rate residential development.

In all four areas both rehabilitation of existing structures and new construction will be employed. In addition to providing adequate housing opportunities on the Reservation for low income families, the development of Tulalip Bay will stimulate the demand for rental homes thus providing income to the Tribes and employment in renovation, construction and maintenance.

Employment: See Construction and Maintenance Center above.

Develop Overnight Camping Facility on Fire Trail Road

Surplus property is available on Fire Trail Road to develop a profitable commercial camping facility with access to John Sam Lake. Nearby Wenberg State Park is presently overcrowded and these facilities can accommodate the overflow traffic. Adjoining tribal lands afford the opportunity to develop an extensive trail system for hiking and horseback riding.

Position	Employees
Supervision and maintenance	3.0

Cost: $80,000

Sources of Financing: Bureau of Indian Affairs, Farmers Home Administration, Department of Housing and Urban Development, Economic Development Administration, and the General Services Administration.

Comment: Preliminary development plans have been completed.

Tulalip Bay Public Park

A water front park with a swimming pool, tennis courts, salt water swimming area, fishing dock and picnicking facilities will be built. Small user fees will be charged to cover operation and maintenance costs.

Position	Employees
Pool managers	2.0
Lifeguards	3.0
Maintenance	1.0
Total	6.0

Cost: $305,000

Sources of Financing: Bureau of Outdoor Recreation, Washington State Interagency Committee and the Department of Housing and Urban Development.

Motel - Conference Center

A 150 room motel and conference center is planned in conjunction with the restaurant and cultural center. Small conventions, seminars and local civic groups are expected to provide a large fraction of clientele.

Position	Employees
Managers and administrative	6.0
Food service - coffee shop	12.0
Housekeeping force	16.0
Total	34.0

Cost: $500,000

Sources of Financing: Economic Development Administration, Bureau of Indian Affairs, and Farmers Home Administration.

Museum - Cultural Center

A museum for display of tribal artifacts and historical material, performing arts and retail sales will be built near both the convention center and restaurant. Display material is presently available.

Position	Employees
Curator and director	1.0
Receptionist and guides	3.0
Total	4.0

Cost: $500,000

Sources of Financing: Economic Development Administration, Bureau of Indian Affairs, Department of Housing and Urban Development and also private interests.

The measures necessary to start this improvement program are many and varied. The most obvious steps necessary are as follows:

1. Prepare preliminary project plans and programs.

2. Prepare and submit applications to funding agencies authorized to participate.

3. Prepare detailed plans and initiate construction program.

This process has begun and several applications are now being perfected. The development of business and other profit generating programs is complicated and involves complex decisions that are unique to each project. Whether to build, own and operate a facility, lease land for non-tribal development or any of the possible variations between these two ends of the spectrum can only be decided on a case by case basis. In each instance the method of financing and operation would be considerably different and could involve many sources, both public and private.

Manpower Training and Development

Because of the long time involved in establishing the on-Reservation tribal enterprises, two manpower strategies are recommended. First, concentrate on in-service training programs, through programs such as: JOBS consortium positions, New Careers, Neighborhood Youth Corps, Emergency Employment Act and Public Service Careers. In-service training programs have the advantages that while providing training and vocational education, they provide regular employment at the same time.

Second, every effort should be made to encourage tribal members to participate in vocational and educational programs leading to careers in the management of tribal enterprises, though programs suggested in this plan provide a broad band of opportunities for tribal members to have meaningful employment serving their people. Many skills are required to develop, operate and maintain these projects: real estate management and development, civil engineering, marketing, accounting, construction trades, culinary arts, arts and crafts, law, planning, etc.

In the management of tribal affairs there is a similar array of employment opportunities: counselling, teaching, medicine, dentistry, nursing, and program management.

A careers development and counselling program should be established to: 1) identify the skill requirements of all planned tribal projects, 2) design the appropriate curriculum with local edu-

cational institutions, 3) coordinate off-Reservation employment for Program participants, and 4) counsel and assist tribal members in the program.

Educational Services

The first step in implementing a program designed to alleviate the educational needs described above should be the formation of an educational planning subcommittee under the Tribal Affairs Committee.

The membership of this subcommittee should include students, local school administrators, parents and a representiative from the Tribal Business Committee. Technical and financial assistance is available through the Bureau of Indian Affairs, Marysville School District, Washington State Department of Public Instruction and the Washington State Department of Planning and Community Affairs. (Title 1, Elementary and Secondary Education Act, HEW)

This committee should initially review the current educational programs, both formal schooling and the educational supplement components, and evaluate their effectiveness. Student participation at this stage is highly desirable. This review and evaluation procedure should be continuous and designed to provide periodic benchmarks against which progress can be measured.

A continuous and stable career counselling program should be established. Counselling for each student should be started at entry into elementary school to identify individual problems and provide supplements.

Funds should be sought to provide short term financial assistance to needy junior and senior high school students. These funds should be used to enable the students to participate more fully in the extra-curricular and social affairs of the school.

The education subcommittee should develop an extensive program of cultural enrichment for its tribal youth. Every effort should be made to encourage the youths to actively participate in the affairs of the Tribes and to retain the Indian heritage.

Concurrently with the program above, the subcommittee should develop an enlightenment program for the white community. This program should have three major components: first, to teach the cultural and social heritage of Northwest Indians. Second, tell of the achievements of American Indians and third, explain the special rights of Indians in American society and the obligations of this country under its treaties.

Social Services

The social services delivery system should be consolidated in the proposed Multiservice Center. All existing programs should be merged and coordinated by one director responsible to the Tribal Affairs Manager.

To the maximum extent feasible, the center should be staffed by full time personnel. Those services requiring less frequent client contact can be provided on a regularly scheduled basis at the center. As many tribal members as possible should staff the center and participate in in-service training. A vigorous outreach program should be maintained.

The center should have a diagnostic planning section which would screen each family as it entered the social services system. Each family would be

treated as a unit and a social services plan worked out for each individual. The social services plan would be comprehensive with specialists in health, education, vocational rehabilitation, etc. participating in the development of the plan. These family plans might include scheduling of: health care, alcoholic treatment and counselling, drug treatment, nutrition aids, homemaker services, transportation services, emergency financial aid, educational assistance, welfare assistance, and employment services.

Funding for this program can be accomplished through existing categorical aid and service programs and transfer of agency funds in so far as possible.

A Tulalip Health and Welfare Advisory Council should be established to monitor the delivery systems and make recommendations for improvements to the Tribal Affairs Committee.

Health Services

The Tulalip Health and Welfare Advisory Council, suggested above, should also function as the Comprehensive Health Planning Committee. With the assistance of the Indian Health Service and the Snohomish County Health District, the committee should undertake the following:

1. Identify the health needs of the Tribes that are not being met and make recommendations on priorities.

2. Explore environmental health problems and make recommendations for improvements.

3. Prepare a detailed comprehensive health plan which would include:

   A. Medical services delivery program
   B. Environmental health program, air and water quality, solid waste disposal, liquid waste disposal.
   C. Safety and accident prevention program.
   D. Diagnostic and preventive medicine program.
   E. Programs for special groups; retarded and mentally ill, prenatal care and pediatrics, geriatrics.

4. Monitor the operations of the proposed clinic in the Multiservice Center.

The proposed clinic should provide for emergency treatment, dental care, diagnostic and out-patient services. The operation of the clinic can be accomplished by contracting through the Indian Health Service, Group Health Cooperative of Puget Sound, the University of Washington or some other agency could act as contractor.

The Indian Health Service and other agencies can train Indian paraprofessionals in both medical services and health planning. Maximum involvement of tribal members both in the delivery system and as user-advisors should be encouraged.

One concept that should be explored for the operation of the entire health delivery system is a comprehensive prepaid insurance plan. This system is one of prepaid percapitation health services contracting in which the contractor receives a fixed annual payment per person.

Under this system all existing health expenditures would be transferred to the proposed program including Public Health Service, Medicare, County Health Department, OEO and HEW. Individual payments based on family income would supplement the funding.

On-the-job training of tribal members in health service careers can be contracted at the same time. Training funds are available from IHS, HEW and DOL.

PROGRAM MONITORING

Planning for physical development is recognized as a continuing process. The same is very true in planning for human resource development. Completion and adoption of this plan will not culminate that process. A continuing monitoring of program implementation and, where appropriate a readjustment of strategies, will still be necessary.

In the preceding section several public agencies which can assist The Tulalip Tribes through grant programs have been noted. A few of those specific grant programs have been recommended. It is important to understand that such programs, and the a availability of funds for grants are constantly changing. For that reason, some of the specific programs may not be available by the time the tribal committees are ready to proceed. Therefore, optimum utilization of these potential funds for human resource development programs requires an effective monitoring system.

Continuing monitoring involves three basic steps: 1) Evaluation of program progress and effectiveness--how well are the needs being met? 2) Evaluation of changing needs--what changes in priorities are required? and 3) Evaluation of current resources at any point in time--what revisions in resource allocations must be made?

Two different types of information are required to support the monitoring system. The first type includes social and economic indicators, which provide a measure of changing conditions. Examples of such indicators are population and employment data, school enrollment and educational achievement data and similar information providing a base for evaluation of program effectiveness and for identifying unmet needs. The second type of information is that which clarifies the sources of funding available to meet needs and the changing requirements for securing those funds.

As the various programs are developed and put into operation every opportunity for generating this information on a continuing basis should be exploited. For the most part, the social and economic indicators must be measured by the Tribes. In any event such measurment and its documentation should be a significant element of each project or program.

Keeping a close tab on changes in available resources from outside the Tribes will require a good liaison with all appropriate agencies whether or not they are able to provide immediate financial assistance at this time.

To summarize, this plan is intended to provide a framework and direction for a long-range program which is still in its embryonic stage. Since both the human resource needs and the resources available for meeting them are in a state of flux, the further program development which follows must contemplate changes. Appropriate adjustments to inevitable change are part of the planning process.

CAPITAL IMPROVEMENTS PROGRAM

In order to support the programs presented in this plan, there must be substantial improvements and additions to the Reservation's physical facilities. These facilities not only provide space and service for tribal affairs but they make possible the income generating programs to support tribal service. Capital improvements are

the community's plant and equipment--the public's machinery.

Capital projects, as distinct from revenue-generating or social welfare projects, involve the construction of fixed assets which serve the community at large. They generally require large investments and generate no revenue over maintenance and operating costs and debt retirements. The cost of capital improvements is usually borne by government through the issuance of revenue bonds, if user fees can be established, or general obligation bonds based upon the broad taxing powers of government if a specific group cannot be identified as the direct beneficiaries of the project.

On Indian reservations the problem of planning for and undertaking capital programs is far more difficult than for other general governments. Many tribes have no continuous source of income such as the property tax to finance nonrevenue capital projects. Indeed, many tribes have very little or no income of any kind. More often than not, tribal income is irregular and unpredictable in the form of categorical grants or unforeseen windfalls such as a right-of-way settlement. The result of this financial situation is that most tribes are heavily dependent upon federal and state assistance which in itself is irregular and unpredictable.

The type and amount of outside financial assistance available to tribal governments is dependent upon a host of factors: which agencies have funds, what type of projects each agency can support, the priorities of funding within each agency, and the skill of tribal governments in advancing their own program.

Given the unstable funding process, the logical sequencing of capital projects consistent with the Tribes' priorities is virtually impossible to achieve. Projects must be undertaken when the funding is available regardless of the long-range plans. Housing is built without sewers and recreational programs are funded before assistance to tribal enterprises.

Even with this chaotic situation, some guidelines for management of tribal funds can be developed.

1. Certain types of capital investment should be sought first:

   Programs that require the least tribal investments, holding in reserve tribal funds for those that require a heavy local share should they be unexpectedly funded.

   Programs that are either revenue generating or at least partially self-sustaining.

   Programs that do not require heavy local maintenance and operating expenditures that may draw down the capital investment fund.

2. Clearly establish the priorities of capital programs and in so far as possible determine:

   The social benefits of the program,

   The interdependence of each project on the other,

   The amount of capital investment required, and

   The continuing maintenance and operating costs.

3. Establish separate fund accounts for nonrevenue projects, revenue-generating projects, and tribal operating expenses.

4. Complete the planning process to the point that a project funded out of its logical sequence can be integrated into the long-range development program. This must be done to insure that each project is built in the right place and has adequate size and capacity to effectively serve the community in the years to come.

5. Start the funding cycle on as many projects as the Tribes can reasonably undertake, understanding they will likely be funded out of sequence.

Using these guidelines, the following Capital Improvement Program is recommended:

1) Tulalip Bay Sewage System-$2,200,000
This project has the highest priority and can be undertaken without investment of tribal funds. A sewage system is required to alleviate the existing health hazard due to septic tank leakage and to support all the future development planned at Tulalip Bay. In addition to providing sewage treatment, the construction of the system and the side sewers will provide considerable employment for tribal members.

Source of Funds: EDA, EPA, DHUD, IHS, Washington State Department of Ecology, FHA. These agencies could fund 100% of the cost of the system through their grant programs. Up to ten percent of the cost of construction could be financed through revenue bonds and user fees. Maintenance and operations would also be funded by user fees.

2) Public Housing Program-$1,660,000
Housing is one of the critical problems on the Reservation. These have been documented in Chapter 5 and a proposed program set forth in Chapter 9.

Source of Funds: DHUD. With the formation of a Tulalip Housing Authority, 100% of the cost of construction, maintenance and operation of the public housing program can be funded by federal agencies.

3) Reservation Road Program-$300,000
New construction of roads to service the public housing, relocation of Tulalip Bay Road, and improvement of existing bay area arterials are necessary parts of the planned development.

Source of Funds: BIA. The Bureau of Indian Affairs can fund the road program 100%. Maintenance will be provided by Snohomish County.

4) Multipurpose Complex-$510,000
Application for a Multipurpose center has been made. It will include recreational facilities, social service space, a medical clinic, and tribal administrative offices.

Source of Funds: DHUD, EDA, IHS, BIA. Tulalip Tribes, Federal sources can fund up to 100% of this facility except the tribal administrative offices. This expense will amount to ten percent of the total or about $55,000. Maintenance and operating costs will be borne in the same ratio of 9 to 1 between federal sources and tribal funds.

5) Marina-$1,000,000
A recently completed feasibility study indicates that a major marina at Tulalip Bay can be financially successful, providing both income and employment to the Tribes.[2] This marina would pro-

vide a real impetus for all recreational development at the bay.

Source of Funds: COE, EDA, BOR-IAC, SBA, OMBE. Although the extent of federal and state participation in this project is not known, the marina operation can support a $100,000 loan out of its operating revenue. Maintenance and operating costs will be funded out of operating revenue.

6) Tulalip Bay Park-$300,000
Park development at Totem Beach is an integral part of the total recreational development at the bay.

Source of Funds: BOR-IAC, DHUD, FHA, Tulalip Tribes. The extent of federal and state participation is unknown. It is assumed that at least 75% of the cost of development can be funded from outside sources leaving $75,000 as the local share. This amount plus M & O costs may be partially offset by modest user fees.

7) Maintenance & Construction Center-$100,000
A center for repair and maintenance of tribal buildings and equipment, storage of construction material and vocational training space will be necessary to support the increased construction activity at Tulalip Bay. A public service station would be operated as part of this complex.

Source of Funds: BIA, OEO, SBA, OMBE. It is assumed that these agencies could fund up to 75% of the total cost of building the site, and operating costs would be covered by the construction company revenue.

Summary of Capital Projects

Project	Local Share	Other	Total
Sewerage System	$200,000 (loan)	$2,000,000	$2,200,000
Public Housing		1,660,000	1,660,000
Roads Program		300,000	300,000
Multipurpose Center	55,000	455,000	510,000
Marina	100,000 (loan)	900,000	1,000,000
Tulalip Bay Park	75,000	225,000	300,000
Maintenance Center	25,000	75,000	100,000
TOTAL	$155,000 (cash) 300,000 (loan)		
TOTAL	$455,000	$5,615,000	$6,070,000

While the programs outlined above may seem to be a very modest undertaking, it must be remembered that there are heavy demands on the limited tribal funds for other types of programs. Revenue-generating projects necessary to maintain the flow of income can be expected to require much larger local investment shares. Land acquisition to extend the Tribe's development potential has a high priority. Investment in land for development requires large outlays with relatively slow returns.

The capital projects listed here form the basic structure for the Tribes' development plan. If the

program is to be completed as scheduled, federal-state cooperation and coordination will be the key element.

[1] Application for Community Action, CAP 5 Community Information, 1971, The Tulalip Community Action Agency.

[2] Brown, Prof. Gardner, Jr., Economic Potential of the Proposed Tulalip Bay Marina; a Preliminary Feasibility Report, (University of Washington, Department of Economics, 1971).

Tulalip Housing Program

CHAPTER 9

TULALIP HOUSING PROGRAM

To date, a housing program on the Reservation is virtually non-existant. Every year the Tribes receives federal grant funds for home improvement. This grant is currently about $30,000 per year. In 1971, one home was improved, one new single family and one duplex residence was built. In 1972, plans are to improve seven houses and construct the shells of three new homes. The residents must acquire the money to finish the interiors. The Farmers Home Administration has loan funds available for this purpose.

During 1970, the Tribes in cooperation with OEO, using Neighborhood Improvement Program funds amounting to $78,000 ($45,704 federal, $33,000 other) constructed ten new housing units for its members. These are presently being bought and rented. It is planned that all of these houses will eventually be sold to their occupants.

The primary housing goal for The Tulalip Tribes is to provide a mixture of housing types on the Reservation consistent with the needs, financial status and activities of all tribal members, both on the Reservation as well as those in the immediate service area of Marysville and Everett. It is necessary to engage in a planned program of upgrading and adding to the supply of housing on the Reservation and seek the highest quality of construction and design in all Reservation housing.

The first step in implementing a tribal housing program must be the development of a management program description. This document outlines the actions that must be taken and identifies the persons responsible for the program. The management program then serves as a manual for the Board of Directors in establishment of a housing authority and subsequently as a guide for the authority itself.

There are many problems associated with trying to establish a housing program on the Reservation. Many of these relate to the limitations of the Washington State public housing laws. No provision is made therein for the establishment of housing authorities for Indian tribes. Thus, such authorities, established under federal statutes do not have the benefit of property tax exemptions necessary to their operation. (State property taxes not being an eligible cost under their federal grant contracts.) To this is added the difficulties associated with land acquisition imposed by the lack of clear title and accurate legal description of allotted lands.

Since the federal Department of Housing and Urban Development may deal only through housing authorities, and not with the tribes, the solution has been for Indian housing authorities to enter into long term lease agreements for housing sites on lands owned by the tribe and therefore tax exempt.

The FHA minimum property standards, used by HUD, are not in all instances appropriate for Indian housing requirements, e.g.: excessive street right-of-ways for rural areas; fireplaces are not allowed in an area where a fireplace can be used daily for heat supplement; carports are not allowed when outdoor storage of large bulky items like fishing nets, motors, boats is a major need.

Because of the nature of funding housing authorities, a small housing authority has great finan-

cial problems. There is no financial assistance available to the Tribes for starting a housing authority, which is a complicated process. Money is needed for legal expenses and the initial application preparation process. Funds become available only after preliminary loan contracts have been signed. Projects with a small number of dwelling units cannot adequately finance the administration of the housing authority.

However, until such time as these problems can be resolved, the best thing would seem to be to form a housing authority in spite of the problems in an attempt to initiate immediate action.

The following summary of the programs available to tribal housing authorities was supplied by the Department of Housing and Urban Development. In addition to these programs there are a variety of non-rent subsidy housing programs provided by HUD and the Farmers Home Administration.

> "Housing authorities are organized...to take advantage of the...Federal Housing Act of 1937, as amended, by building safe and standard housing units for low-income residents. The Local Housing Authority (LHA) has the power to receive and administer federal loans and contributions for the purpose of constructing and/or rehabilitating and/or leasing low-income rental units. In the instance of the 'Turnkey III' program, it can also provide for home ownership.
>
> In 1961, the Department of Housing and Urban Development enabled tribes that are established under the Indian Reorganization Act of 1934 or with other kinds or recognized constitutions to form tribal housing authorities. These authorities are non-profit, autonomous public corporations responsible for operating safe, standard, and decent housing for low-income residents. There are approximately eight tribal housing authorities in the Puget Sound area, housing fifty families. One hundred and eighty more units are presently under development.

There are a number of things to remember about local housing authorities and public housing:

1. Public housing is only for low-income persons who cannot afford decent, safe shelter at market rates. Public housing is in no way competitive with private enterprise. In fact, in many recent programs the LHA acts as any client working through the private sector.

2. LHA's are not-for-profit corporations.

3. No local funds are required. Bonds issued by the LHA can in no instance become the debt of the city, state or tribal government. No debts of the LHA can be paid with city, state or tribal funds...

4. Costs which are not covered by the rents collected from the tenants are paid from funds already set aside for that purpose by the federal government.

5. The LHA is managed by five commissioners appointed by the Tribal Council for terms up to four years. The commissioners receive no renumeration for their services.

6. All housing projects are subject to the planning, zoning, sanitary and building laws, ordinances, and regulations ap-

plicable to the site on which the housing will be located.

7. LHA sponsored housing provides employment in the areas of design, construction, administration, management and maintenance that otherwise would not be available in the community.

The Steps to the Development of a Local Housing Authority

Step I:

The Tribal Council passes an ordinance establishing a housing authority.

Step II:

The Tribal Council appoints five citizens (without salary) to serve as the Board of Directors for the Housing Authority. The Board of Directors then appoints a Temporary Secretary (without salary) to apply for a HUD Program Reservation, planning funds.

Step III:

Upon request, the HUD Area Office will provide staff members for consultation about the organization of the local housing authority.

Step IV:

The housing authority applies to the HUD Area Office to request funding for those housing programs suited to its local needs.

Programs available to local housing Authorities

Nine methods of developing and managing low-rent public housing are available to local housing authorities through the U.S. Department of Housing and Urban Development. Although different programs are better suited to some needs than others, all may be used to provide multiple-family or single-family buildings; all may be used to develop scattered site housing or cluster development. High-rises, townhouses, garden apartments and individual houses may be created through these programs, although the high-rise concept is rarely used anymore. Various communities could use any one program alone or could use a combination of two or more programs, depending on how the low-income housing needs could best be met.

Regardless of which program is used, housing units bought or built by LHA are financed by 25, 30, or 40 year bonds which are sold on the private market. These bonds are paid off by the Federal Government, under the homeownership programs (Turnkey III or Mutual-Help) the final payment on the bonds is from a reserve fund accumulated from monthly payments of the prospective homebuyer. Rent collected from tenants (and possible contributions from the Federal Government) pay for the maintenance, repair, and replacement, utilities and salaries of the housing authority staff. Since the housing units must last for the duration of the 40 year bonds they are more substantially built than what the minimum

code requires. Quality of construction is reviewed by both the LHA and the HUD technical staff. All housing must comply with local building and sanitary codes and zoning ordinances.

The eight available programs and their possible uses are summarized below:

1. Conventional
   Initially this was the only program available and hence has become known as the "conventional" approach. Here the LHA takes complete leadership responsibility for the development and construction period. The LHA selects and acquires the site and hires an architect who designs the project to LHA specifications. After HUD's review and approval, the LHA and its architect oversee construction. While this control provides the authority with greater control over the design and quality of the project, it also requires greater technical knowledge and more actual work of the authority than do the other methods.

2. Turnkey I
   Using the Turnkey I program the LHA acts as a customer of a private builder or developer. The selected developer, using his own financing and architects, develops a project to the specifications of his customer, the LHA. Throughout the process the LHA, as would any private customer, works closely with the developer to insure its desires are met. It is the developer, however, who assumes full responsibility and risk until completion when, if the customer is satisfied, he "turns over the key" to the LHA for an agreed-upon purchase price.

   The authority selects a developer by means of a competitive process. All interested developers must submit proposals as required by HUD, and the authority must evaluate these according to cost, design, site and quality. The LHA is not required to select the lowest cost proposal but must explain its reasons for not doing so to HUD. It must select the best proposal according to all criteria. HUD must then approve the LHA's selection before funding is granted.

   The Turnkey I method is equally suited to the development of all types of projects--single- and multi-family units, single and scattered sites, etc.

3. Turnkey II
   Turnkey II allows the LHA to contract with a private firm or another agency for the management and administration of a low rent housing project, regardless of how the project was developed. In some instances a tenants' council could qualify for such a contract. The primary consideration as to whether or not to use this method has been possible cost savings. For example, a very large LHA or several small authorities in the same geographical area may find it financially advantageous to contract out management and administation.

4. Turnkey III
   Through Turnkey III, also referred to as the "Home Ownership Program for Low-Income Families," families eligible for tenancy in public housing may become home owners. Initially, the LHA constructs or acquires, through any of the development methods, detached sin-

gle-family or attached units suitable for sale. In computing rents, the LHA would set aside a certain amount for the routine maintenance costs. The tenant however, does this routine maintenance (mowing lawns, replacing broken windows, painting rooms periodically) which then enables the LHA to create for the tenant a "sweat equity" account consisting of funds which would otherwise have been used for maintenance.

When a nominal account ($200 - $300 to cover closing costs) is accumulated, the tenant is reclassified as a home purchaser. His regular monthly payments, (and any voluntary contributions he wishes to make), then go toward the purchase of his home. Should his income reach the level where he is eligible for a VA or FHA insured mortgage to cover the remaining debt, he may be required to do so. The great advantage of this program is that not only does the tenant have a chance to become a home owner, but he also is not forced to vacate his home should his income rise above the limit allowable for public housing occupants. In other words, he is not penalized for his success.

Both Turnkey III and IV (see 6 below) include provisions for training programs designed to help the tenants become responsible home owners and for organizations of tenant-community corporations to assume eventual management of the projects. Turnkey III can be used in all communities to meet a variety of needs.

5. Turnkey - Mutual Help

The LHA acts as a customer of a private builder or developer, as in Turnkey I (see items2 above), except that a major portion of the construction labor is contributed by the prospective home occupants. This labor contribution and a credit for the value of the land is put towards establishing equity in the home for the occupant family. During construction the builder or developer is responsible for supervising this contributed labor and must certify before the sale of homes to the LHA that each family has performed adequate labor on the house to establish an equity. Before the sale of homes, each family must have an equity equivalent to 10 percent of the value of the home, plus $200; in some cases, this equity may be as low as $1500 per family.

During occupancy, the family makes regular payments toward purchase of the home and performs routine maintenance. As under Turnkey III, the family may secure early ownership in the event that a raise in the family income enables the family to qualify for a mortgage.

6. Turnkey IV
With this a non-profit organization develops a project and leases it to low-income tenants at rents they can afford, the LHA making up the difference with a subsidy payment under the Section 23 leasing program (see below). It also incorporates the "sweat equity" principle, except that the tenants purchase the property from the non-profit owner rather than the LHA.

7. Section 23 Leased Housing
In the leased housing program, individual apartments and houses are leased in the private market by LHA at market rents. The low-income tenants pay a portion of their incomes for rent, as in public housing, and the Federal Government pays the LHA a subsidy sufficient to make up the difference between the tenant's rent and the market rent. Government subsidies per unit have a miximum and this serves to limit the price that can be paid on the private market. In other words, luxury apartments are not leased.

The LHA usually leases units for five years and sub-leases them to eligible tenants on a month-to-month basis. Property owners continue to pay full taxes on these units, just as they would if someone other than the LHA was the leasee. This program provides the particular advantage of making "public" housing invisible, since the units are existing ones that could be rented to anyone and are scattered throughout the community.

This program has been very popular with landlords as they are guaranteed rents during the lease and the LHA is responsible for any extraordinary repairs as a result of tenant abuse of the property.

8. Acquisition with Rehabilitation
Under this method, the authority purchases existing housing in the community that is not up to standard but can be restored. The rehabilitation may be done either through "Conventional" or "Turnkey" means. It could be used in combination with Turnkey III. It has the same adaptability and advantages of the "Leased Housing" program, except that here the city receives payments in lieu of taxes.

9. Acquisition without Rehabilitation
Here the housing authority would purchase existing standard housing and rent it at public housing rents. This could also be done in combination with "Turnkey III". Again, it has purposes and advantages similar to acquisition with rehabilitation."

HOUSING NEEDS

Both the surveys of housing conditions (BIA and PHS; see Chapter 5) included a census of families by household size. Since the two surveys did not include the same sample of households, in order to estimate the family composition of the total 122 occupied households, a composite distribution was needed. The BIA survey reported a total of 400 persons residing in the 87 units or 4.6 persons per unit. The OEO CAP Staff reported a total of 133 occupied units with a population of 502 or 3.8 persons per unit. This suggests that occupancy in the additional 35 units is predominantly of smaller households with some exceptions including one with two families.

Because of the doubling of families into a single housing unit, the "persons per household" do not equate to "persons per family." Of the 87 occupied units in the BIA survey, nine were reported as housing two families. Of the 35 remaining households on the Reservation, two more are known to include two families each. This means that there are a total of 133 "families" living on the Reservation (87 + 9 + 35 + 2). Of these, approximately 32 are really single individuals or two person households. This is estimated assuming

TABLE 10

ESTIMATED INDIAN HOUSING REQUIREMENTS
TULALIP RESERVATION, 1972

Persons per Household	PHS Survey	BIA Survey	Other Units	Number of Households Occupied	Overcrowding Adjustment	Number of Families*	Number of Persons	Percent of Total
1 - 2	14	26	20	46	+4	50	75	15%
(%)	(21.5%)	(29.9%)		(37.7%)				
3 - 4	13	15	6	21	+10	31	112	22%
(%)	(20.0%)	(17.2%)		(17.2%)				
5 - 6	17	30	5	35	+3	38	208	41%
(%)	(26.2%)	(34.5%)		(28.7%)				
7 - 8	13	14	2	16	-3	13	98	20%
(%)	(20.0%)	(16.1%)		(13.1%)				
9 & over	8	2	2	4	-3	1	9	2%
(%)	(12.3%)	(2.3%)		(3.3%)				
TOTAL	65	87	35	122	+11	133	502	100%
(%)	(100.0%)	(100.0%)		(100.0%)				

* Includes single individuals and couples.

overall household composition is similar to the BIA sample. Adjusting for "double family" and "non-family" households gives an estimated total family composition, as shown in Table 10.

Considering first the housing needs of 133 Reservation families when matched against the available resources, the estimated housing deficit is 75 units, estimated as follows.

Size of Family No. of Persons	Size of Unit No. of Bedrooms	Estimated Need	Existing Resources	Deficit
1 - 2	1 - 2	50	5	45
3 - 4	3 - 4	31	25	6
5 - 6	3 - 4	38	20	18
7 - 8	5 - 6	13	8	5
9 & over	7 & more	1	0	1
TOTAL		133	58	75

Considering the extent of overcrowding, the problem of family housing needs becomes a complex one to solve. Not only is there an immediate need to construct 75 new units, but also extensive renovation is needed for 33 out of 58 existing units. Since expansion of unit capacity (increasing the number of bedrooms) may not always be feasible in renovation and there is undoubtably overcrowding in the 20 "good" units not needing renovation, considerable "shuffling" of occupancy will be required for an optimum matching of needs to resources.

Weighing equally important family life considerations, it is not reasonable to expect families to move out of overcrowded quarters without some other incentive. The implications for housing program policy are many. It is sufficient to suggest at this point, that given an aggressive program of housing renovation and new construction, high priority must be given to families in housing which "must be torn down and replaced," followed by those now living in overcrowded units.

Housing for Those not now on the Reservation

The census of Tulalip Indians conducted by the OEO CAP Staff indicates 127 persons living in the immediate vicinity of the Reservation. Of this 127, seven are elderly, now living in nursing homes. Another eight are senior citizens who have indicated they would not return unless they could live near convenient shopping facilities. Housing needs for these 15 individuals fall with the third category discussed below. This leaves 112 persons, family members, to be considered.

By applying the average family size for families on the Reservation to this population of 112, we can get a general idea about additional housing units needed to serve them. This assumes these family compositions are similar to that of those living on the Reservation.

Number of Persons	Percent of Total*	Families Size	Number of Families
4	4%	1 - 2	3
28	22%	3 - 4	8
52	41%	5 - 6	9
28	20%	7 - 8	4
112	87%		24

* Distribution of Reservation families applied to 127 total persons.

The estimated housing need, then, to house those families not now on the Reservation, is for four units of five or six bedrooms; nine, four bedroom units; and eight, three bedroom units. It should be noted that this estimate is based upon "statistical inference," therefore any housing program to meet the actual need would have to be based upon direct discussions with each family in order to determine their explicit housing needs. Adding then, 24 units to the previously estimated deficit gives a total deficit in immediate housing resources of 99, distributed as follows:

Size by Number of Bedrooms	Reservation	Other	Total Units
1 - 2	45	3	48
3 - 4	24	8	32
5 - 6	5	9	14
7 & over	1	4	5
TOTAL	75	24	99

FAMILY HOUSING PROGRAMS

In order to meet their critical needs, the following specific housing programs are proposed:

1. Immediate formation of a Tulalip Tribal Housing Authority and preparation of an application for 100 units of low-income housing. Three separate low-income housing programs should be investigated: (a) Turnkey III and/or Turnkey IV, 75 units; (b) Section 23 Leased Housing, 25 units.

2. Investigate the availability of loans and grants from the Department of Housing and Urban Development for housing rehabilitation under the federally assisted Code Enforcement Program (FACE) or the Neighborhood Development Program (NDP).

3. Review the tribal policy with regards to leasing property (for non-Indian housing) at Tulalip Bay with the possibility of (a) extending lease terms to thirty years or longer; (b) obtaining "market value" lease payments; (c) imposing design controls and other appropriate restrictions on the use of the land of the lessee; and (d) retaining the housing, where leases have expired for potential occupancy by tribal members.

Some of Section 23 lease commitments could be used to rehabilitate existing housing on tribal land and to make it available to low-income families at public housing rental rates. The Tribal Housing Authority, under this program, could pay, to the Tribes, the going market rate for the property. The Turnkey housing programs should be ini-

tiated as soon as possible, with occupancy priority given to families now living in overcrowded, substandard units.

UNIQUE HOUSING NEEDS

Although there is a substantial percentage of dependent persons in the Tribes, there is no housing program for them. Of particular concern are the elderly. Those who are still able to care for themselves, but are unable to maintain their present house and grounds, have no private, easily maintained, community centered quarters in which to move. Those who need constant care must be taken to nursing homes away from the Reservation. The nursing home concept is alien and an anathema to all tribal members who have been used to homogenious community living and the natural environment of the Reservation.

Foster children of the Tribes are seldom placed with tribal members, again, because existing housing is inadequate. They are removed from the Reservation, usually to non-Indian homes and few ever benefit from the culture of their own community.

Housing for the Elderly

Housing needs for the elderly tribal members vary. Presently, about 26 or five percent of the Indians on the Reservation are over age 65. Seven tribal members presently reside off the Reservation in nursing homes. Eight elderly members live in Marysville and would return to the Reservation if the necessary services could be provided convenient to their homes.

Indian representatives on the planning committee pointed out that a sense of individuality for the elderly is very important. They would much rather stay on their own homesteads than move anywhere. However, as the elderly become increasingly unable to perform all of the services that they need for themselves, provision must be made for other living situations. Complete independence, unfortunately is unfeasible due to their need for many services: nursing, janitorial, shopping, transportation, etc. The Senior Citizen Aide reports that 80% of her time is spent transporting the elderly to shopping in Marysville and health services in Everett. If the elderly cannot continue to live on their own land, they would much rather maintain their own individual units rather than live in a dormitory of cells.

Three kinds of housing should be developed to answer the needs of the elderly: (1) a facility for dependent elderly; (2) clustered living units for those able to provide most of their own services; (3) living units in conjunction with the family home.

Housing for the elderly which is not connected to a larger family unit should answer the following requirements:

1. Close to available health services;
2. Close to community service centers including post office, library, shopping;
3. Have the amenities of greenery, view, privacy;
4. Close to activity of other age groups but separated for noise control.

Dependent Elderly

A facility is needed to house and care for the dependent elderly members who now reside in nursing homes. To the extent that we are able to measure the need at this time, such a facility should have

a minimum capacity of ten residents with modified and/or full nursing care available for not less than ten persons. In the event neither of the alternatives to this facility are provided, then its capacity should be increased accordingly.

There are perhaps ten additional tribal members who require dependent facilities though this may mean something less intensive than nursing home care. One alternative to meeting these needs is to provide a single housing facility which could be flexible in form of the range of service levels it could provide. A "housing for the elderly" complex, designed to serve from 20 to 30 residents, could accommodate those needing full nursing home service, some requiring only an intermediate level of nursing care as well as those who are relatively much more independent.

Ideally it would be primarily for tribal members and staffed by Indians. It should avoid the sterile atmosphere usually associated with nursing homes. In fact, the architectural design should be carefully conceived to provide as much independence for the residents as possible; a closeness to nature; privacy for those who desire it; easy access to social and activity areas. It should include a communal dining facility, yet some of the living units might have their own limited cooking facilities. Each living unit should have access to the out-of-doors via a deck or patio with a pleasant natural view. The facility itself needs to be located close to the tribal social services center and clinic.

Independent Elderly

Another type of housing for the elderly could be independent units with a private outdoor area and view of the bay. They could be clustered around or near a social gathering place which might include laundry facilities, a pick-up point for transportation, hand tool storage for minor maintenance and gardening. These units would vary in size to accommodate one or two persons. They must be close to shopping, health facilities and other tribal activities. Provision of nursing home service to all but those requiring intensive care would probably be feasible if the units were located in general proximity to each other.

A third alternative housing solution for the elderly is to add a small apartment unit to some of the new family housing units to be constructed, which is separate from the family living area but attached. In this way the elder family member may live with the family but retain independence and privacy when it is desired. Here again, nursing care shared by family members and a visiting nurse service would be adequate for all except those requiring intensive care.

Foster Children

The Indian Affairs Task Force reports in Are You Listening Neighbor? the serious complaints of the Indians regarding foster child care: "We protest the uprooting of Indian children from the tribe and reservation and transplanting them into white middle-class homes far from the reservation where they lose their ties with their tribe and of equal importance, their individual Indian identity. It is important that the state assist tribal governments in establishing group homes for Indian adolescents on Indian reservations."[1] Equally important, welfare requirements and regulations in standards for foster homes are not adapted for Indian children and are not relevant to Indian standards, traditions and desires. To the extent that the tribal housing programs will raise the physical housing quality on the Reservation, children may be returned to the Tribes who have been excluded because of housing stand-

ards for foster homes.

Currently three foster children reside on the Reservation with two different families. There are 27 Tulalip foster children residing off the Reservation. However, in addition, there are many children living with friends or relatives in a quasi-foster parent-child relationship.

One alternative for immediate return of the 27 foster children to the Reservation is the establishment of group homes for foster children of all ages. Not only would this provide a healthy living arrangement for children but provide an armor of protection for the children, difficult to provide in individual families, until such time as the children can be returned to their natural parents or adopted.

The structures envisioned are large homes, non-institutional in character, each housing approximately six to ten foster children of differing ages. Each home would have parenting adults who might be a married couple without children of their own, or with grown children; possibly two adult males, two adult females, a brother and sister team, any combination of adults who can provide a loving and nuturing atmosphere for the children.

There is a need for four of these homes initially. They could be clustered in a complex for sharing of services such as play equipment, play supervision, transportation, etc. and for sharing of staff responsibilities when the group parents have their time away from the home.

The homes should be located near the Potlatch Grounds in order to easily use the social center and recreational facilities which are developing there; close to the social services center and clinic for ease of administering these services.

The present choice of locations is directly across the road from the Potlatch Grounds along Mission Creek. This location will reinforce the feeling that in fact the children are in the very hub of tribal life.

[1] Report of the Indian Affairs Task Force, Are You Listening Neighbor? (State of Washington: February, 1971), p. 49.

Urban Organization & Form

CHAPTER 10

URBAN ORGANIZATION AND FORM

For many years The Tulalip Tribes has been actively developing their lands on the Reservation. Realizing that urbanization will occur at an ever increasing pace as the Seattle-Everett metropolitan area expands, they recognize the potential benefits from developing tribal holdings. While development of their land resources is a paramount objective, at the same time the Tribes is unalterably committed to the preservation of the wilderness environment. The forests, waters and wildlife are a fundamental part of the heritage of the Tribes.

These fragile features are easily and permanently destroyed by thoughtless development. One has but to look at any city, town, or suburb in the country to learn this lesson. The dilemma facing the Tribes is to find the delicate balance between these two conflicting goals -- development or preservation.

Our look at urbanized America quickly teaches us another lesson: most urban development is chaotic and uninteresting. From city to city, suburb to suburb, there is little to distinguish one from another. But the Reservation is a unique place and demands unique and thoughtful development.

To achieve these goals there must be strong guidance and effective controls. The Reservation today is largely uninhabited, free from the mistakes of the past and offers us all the opportunity and challenge to create a unique community. at peace with nature.

In contemporary urban society, humans congregate for many kinds of activity other than those necessary for survival. The spaces and places in which these activities occur comprise the urban form. The physical organization of the urban form affects not only the efficiency of performing activities of any kind, but the quality of our experience.

Urban activity can be broadly categorized as public, semipublic, semiprivate and private activity. Generally public activities occur in public places and private activity occurs in a private place, however, the places are often physically related and may even overlap. For example, within a public place where the individuals gather to conduct business, have recreation or simply circulate, there is also a need for spaces dedicated to more private activity, permitting an individual to withdraw temporarily. Conversely, there is an opportunity to emerge from within the most private chamber of the home for communal activity at the hearth.

Urban communities, like homes, need to be arranged in such a manner to allow free and easy access between community places and private places, at the same time discouraging interference of one upon another.

Because contemporary mobility and speed dominate our life style, all activity areas are now designed to have direct access by vehicle. This discourages opportunities within public places for diversified pedestrian experiences and threatens private places with the intrusion of noise and hazards.

By clearly understanding the organization and

interrelationships of human activity and implementing a physical plan which reflects this organization, a balance between community activies and private activities can be established. In order to understand the organization of an activity and to plan a space and place for it involve grading the elements in the activity in their order of importance.

Let us use the activity of exchange of money for consumer goods as an example. Two major activities are important, buying and selling. However, there are many other related elements. The merchant must receive stock from a vehicle, transfer it to the sales place, and display the stock. The customer must reach the sales place, enter, select the goods and make a purchase.

Which of these activities is most important varies with the location of the sales place in the greater community. For an isolated sales place ease of access for the customer might be considered the most important element in encouraging customers to enter to buy goods. Within a shopping complex, the merchant may consider display of goods the most important element in encouraging customers to enter. The customer at one time may consider ease of access the most important element to buying goods and at another time consider shopping a recreation and wish for an opportunity to incorporate leisurely and more private activities such as sitting, chatting, eating, along with purchasing.

Similarly, each human activity can be analyzed not only for a gradation of elements within the activity, but the activity itself can be analyzed for its position in the sum total of all surrounding activities.

For example, the activity of buying and selling goods may be the most important activity within a shopping center, with circulation, display and delivery designed to support it. However, in an area of primarily residential activity, a place for buying and selling goods will only be a subordinate convenience activity, with the community planned for the dominant activities of living, circulation and recreation.

Every activity can be analyzed for the dominant elements which should be emphasized and the subordinate elements which are necessary but less prominent.

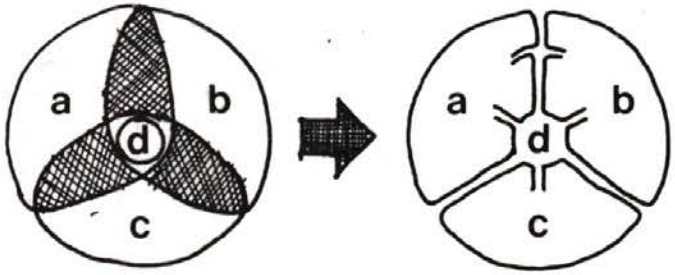
It is important to analyze and recognize the essential elements of each activity, and to recognize which activities are rightfully dominant within a series of activities in order to create an environment which answers social, functional and technical needs in the order of their importance.

Contemporary urban form has not always expressed this consideration. We experience public activities encroaching into what should be private areas, we experience vehicles encroaching into pedestrian areas and utilities encroaching into social areas. The result is inefficient use of space and frustrating experiences.

Design Considerations

1. Each kind of space and place for human activity has its own scale, structure, character and speed of movement.
2. At some point spaces, places and activities will come together or overlap.
3. Where diverse activities and their place come together or overlap there must be a clearly defined boundary, often physical in nature, such as a wall, a sign, a change in levels.

4. These transitional areas should control speed, scale or character as an individual moves through an area.



a	public	governmental	adult
b	semi private	institutional	children
c	private	individual	pets
d	community	community	hearth

5. Some activities which overlap or abut are related and can be organized together. Other activities oppose each other but should still be considered together in the urban plan as they can be so positioned as to create activity and interaction between them. For example, within a commercial complex the busy supermarket and quiet library are opposite activities, yet can be so located as to encourage pedestrians to walk between them and experience other activities along the way.
6. While grouping of like activities is desirable in that it creates districts with distinct character, over-concentrations of like functions should be avoided.
7. There should be a discriminate mixture of activities to produce vitality, interest and stimulate movement within an area. Because some activities are more appropriate to an area, they will dominate; however, other activities which are useful but subordinate will also be planned for the area, recognizing that they are usually more appropriate elsewhere. For example, a residential area may have a few convenience stores located there and a commercial complex may have a few residential units included.

The Development Phase

While the land use plan of the Reservation sets out at large scale the general types of land uses and activities that will occur, the development plans within this framework determine the quality and character of the environment. It is at this level that all of the physical and social elements of the environment and their inter-relationships must be analyzed and organized. This first step, the design program, is essential for any development proposal on the Reservation. The design elements and criteria, set out below, are basic to the design program and are intended to provide a guide for both the design and review of the development projects. These standards and suggestions are not meant to restrict taste or individual preferences but rather to foster careful planning and environmental quality.

DESIGN PROGRAM ELEMENTS

Land Forms

There are six types of land forms on the Reservation. Each type lends itself naturally to specific building types and circulatory systems. (See map 20.)

1. Type A: 0 to 1% slope; flat ground with drainage problems. This terrain occurs primarily in a mile-wide strip running the length of the eastern border of the Reservation. With proper attention to drainage and bearing problems, this terrain can sustain residential, agricultural and industrial uses.

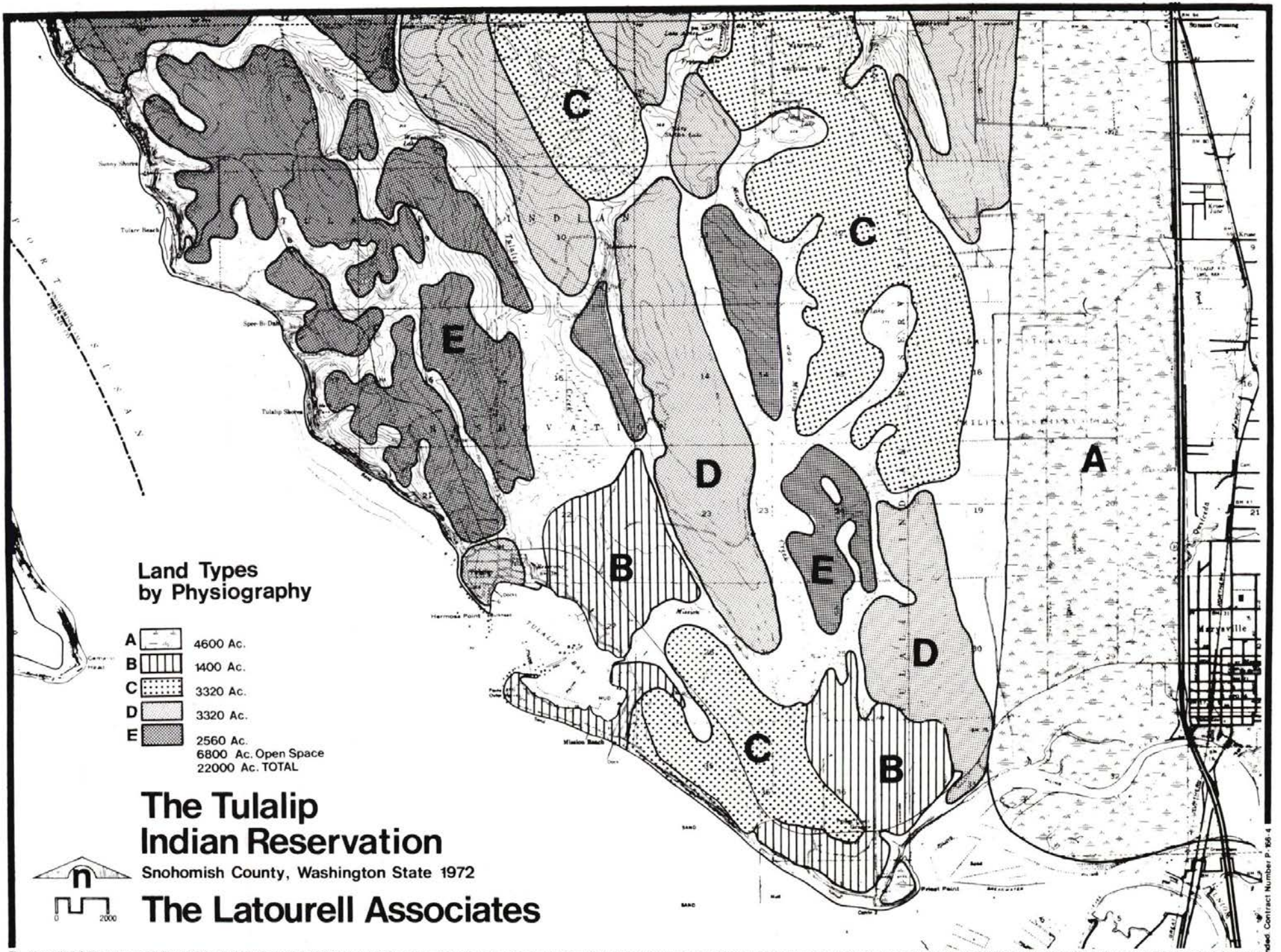
2. Type B: 1 to 5% slope; gentle land forms with no access problems. This terrain occurs in two areas along Warm Beach Road at Priest Point and at Tulalip Bay. Building forms, land use and circulation systems have no restrictions on this land type.

3. Type C: 4 to 6% slope; rolling ground with interspersed areas of 8 to 10% gradients, primarily at the edges. Type C has few physical building restrictions, but more than Type B. This land type is restricted primarily to residential and institutional uses due to the necessity of siting buildings and roads to a varying terrain.

4. Type D: 1 to 7% slope; hillside terrain interspersed with areas in excess of 10% slope, primarily at the edges. This is more difficult terrain than in Type C. While the terrain does not vary, but remains primarily at an even gradient, residential uses are most appropriate due to special siting conditions for buildings and roads.

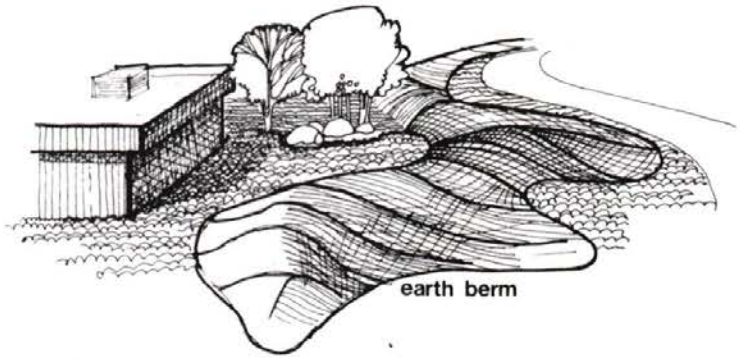
5. Type E: 4 to 10% slope; isolated areas of rolling hillside terrain with difficult access, interupted by many steep ravines and areas of 11 to 15% grades, bounded by steep slopes or drainage ways. Individual residences with isolated opportunities for multiple residences is the most appropriate use for this terrain due to the difficulty of establishing circulation systems, providing utilities and the necessity of siting buildings with great care.

6. Type F: Areas of special significance - wetlands, watercourses, steep slopes. This special terrain is primarily a protected wilderness area with uses restricted to pedestrian paths and parks subject to continual use review.



The preparation of this map was aided by the Washington State Planning and Community Affairs Agency through a Federal Grant from the U.S. Department of Housing and Urban Development under the Urban Planning Assistance Grant Program authorized by Section 701 of the Housing Act of 1954, as amended. Contract Number P. 56-4

Site and building design should be adapted to the land type; while it is technically possible to reshape the topography, this is seldom accomplished successfully. On the Reservation, the one exception would be Type A land, where the topography is monotonously flat and shapeless with areas denuded of trees and wildlife. Surface modeling would be appropriate particularly in cleared industrial areas to screen service areas and parking lots. Minor surface modeling can also effectively create privacy in residential areas.



Siting

When contemplating the design of a road or building the following siting principles should be kept in mind: [1]

1. When the long dimension of a structure or road is parallel to the contours, the natural ground form and vegetation are left relatively undisturbed and the most graceful visual relationship is established.

2. Siting the building or road directly across the contours often emphasizes the topography in a strong and dramatic way.

3. The most difficult situation is when the building or road axis is diagonal to the contours. While this is possible and can be successful, it is most often awkwardly handled.

4. Buildings of uniform height may be arranged step fashion down a hill to give the illusion of piling up.

5. To accentuate the existing topography, tall buildings are often placed on the ridge top with low structures in the valleys.

The natural contours are inevitably disturbed by development. The designer must decide whether to fit the new shapes harmoniously into the old landscape or to be obvious with the intrusions as a strong contrast with the natural forms.

Details within the Urban Scene

Details, often referred to as "street furniture," within urban spaces are as important to the appearance of the whole as the basic special structures. These details include such things as fences, seats, signal boxes, utility poles, light poles, meters, trash cans, fire plugs, manhole covers, wires, lights, curbs and steps.

Design and placement of these details should not be left to chance, but must be included in the design program.

Art as a public experience is ignored for the most part, yet the need exists. Indian art and totems are already included in the Reservation landscape. Further expressions of local artists should be included in the design program at every opportunity.

Ground Textures

The visual importance of the ground is often ignored yet it is the element which can set the general character and scale of an area. Two basic principles should always be considered:

1. Fine ground textures such as mown grass, monolithic paving and small pebbles emphasize the form of the land and are visual backgrounds for structures which rise above them.

2. Coarse textures such as ground covers, tall grasses and cobblestone, call attention to themselves rather than to the ground form below or structures above.

In the urban-public areas to be developed on the Reservation, the ground surface should be enriched. This is particularly important in the complex which will grow around Tulalip Bay where the character of the outdoor envelope is so critical to sound development. Grass and monolithic pavement are most commonly used for open-space and public-space and are often quite unsuitable for the intended use of these areas. The range of available materials is as wide as imagination and include such things as ground covers other than grass, river-rocks, bark, sand or gravel, asphalt or concrete with fillers, jointings or surface designs and aggregates, wood blocks, deckings, tiles, bricks, or stones and cobbles. Innovative materials should be explored. For example, in Great Britain concrete quatrafoil pavement has been used which permits a smooth walking and driving surface, yet lets the grass grow between the joints and drainage to penetrate the soil thus avoiding excessive runoff.

Water

Water is an important elemental material on the Reservation. With fourteen miles of coast line and Tulalip Bay itself as a focal point for marine activity and marine views, water is a prime orientation feature. Equally important, though less dramatic in scale, are the natural water courses of streams and creeks--which support wildlife, provide drinking water and natural drainage--pleasant natural amenities within the environment. A main goal of this plan is to preserve and enhance these existing conditions through: (1) encouraging use of water in public places, (2) judiciously controlling development to avoid erosion which will cause sedimentation in the creeks, and (3) controlling drainage conditions so that water is not carried away from the Reservation but is put back into the ground aquifers, so that the natural water cycle will continue.

As water is always the center of interest in a landscape, near or distant, encouraging and providing other uses of water within the public places and spaces of the Reservation will not only be an enhancement but will reflect and reinforce the importance already given to the Reservation water resources. Basic principles regarding the use of water may be helpful.

1. Moving water gives a sense of activity

and growth.

2. The form of the container can be designed to intensify the sound and movement of water: watercourses can throw water into the air, pour it over obstructions or increase its activity at certain desired points.
3. Still water imparts serenity and should appear to lie naturally within a land form.
4. Still water can be used as pavement and enhance the visual aspect of the site plan and is usually best placed at the lowest point within the ground plan.
5. Still water can be used as a mirror to catch bright light or as a reflector; reflectance is improved if the water body is dark on the bottom, shallow and still.
6. Treatment of the water's edge imparts a distinct feeling to the viewer of clarity and stability if the edge is smooth and simple, expectance and excitement if the edge is complex.

PRESERVATION OF WATER AND SOIL RESOURCES

Urban development is a threat to the water resources of an area. Paved and roofed areas can produce almost 100% runoff from every storm.[2] Sediment yields for an average construction site have been estimated at 200 times greater than for grassland and 2,000 times greater than for forest areas.[3]

When rain water is channeled into storm sewer systems and carried away from the area, ground water, which maintains summer stream flows, is depleted. Runoff from pavement and roofs which finds its way into streams and ponds carries petroleum products and other harmful materials into the stream system. Runoff from bare scraped earth of construction and logging projects carries heavy loads of silt, causing sediment deposits elsewhere to the detriment of the fish and wildlife. Runoff from lawns and fertilized gardens carries nutrients into ponds and lakes, causing pollution through algae blooms and weed growth.

Controlling siltation and returning storm water to the ground is a main objective on the Reservation if the natural amenities of water, wildlife and vegetation are to be preserved for the benefit of all the residents. (See Chart 9.)

Incorporating innovative and creative siltation and drainage solutions with urban development, as it occurs, will be far more successful than to ignore the problems or continue standard practices which have not preserved the environment elsewhere. A siltation-erosion ordinance should be prepared regulating the clearing and grading of property on the Reservation. It should set forth the rules and regulations to control land clearing, excavation, grading and earthwork construction, including fills and embankments; establish the administration procedure for issuance of permits; and provide for approval of plans and inspection of clearing and grading projects.

Following are some suggestions regarding erosion to be considered when reviewing urban development on the Reservation.

Road and Highway Construction

1. Avoid wherever possible construction on areas of unstable soil or rock formations.

2. Use bench and ridge rather than sidehill and streambank locations.

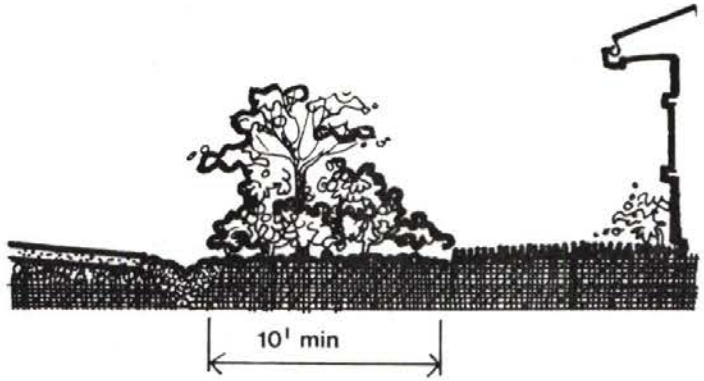
3. Keep excess soil and rock out of stream channels, hauling excess to locations safe from erosion.

4. Dispose of road drainage where it can filter into undisturbed soil rather than flow directly into stream channels.

5. Stabilize exposed soil in cuts and fills.

6. Lay culverts on channel gradients with a minimum of channel disturbances providing both inlet and outfall protection against erosion at culvert ends.

7. Prepare and maintain road surfaces to avoid rut formation and drainage concentrations.



Residential Areas and New Development

1. Drainage ditches beside residential roads should be dug extra deep and filled with gravel and capped with natural porous sod.

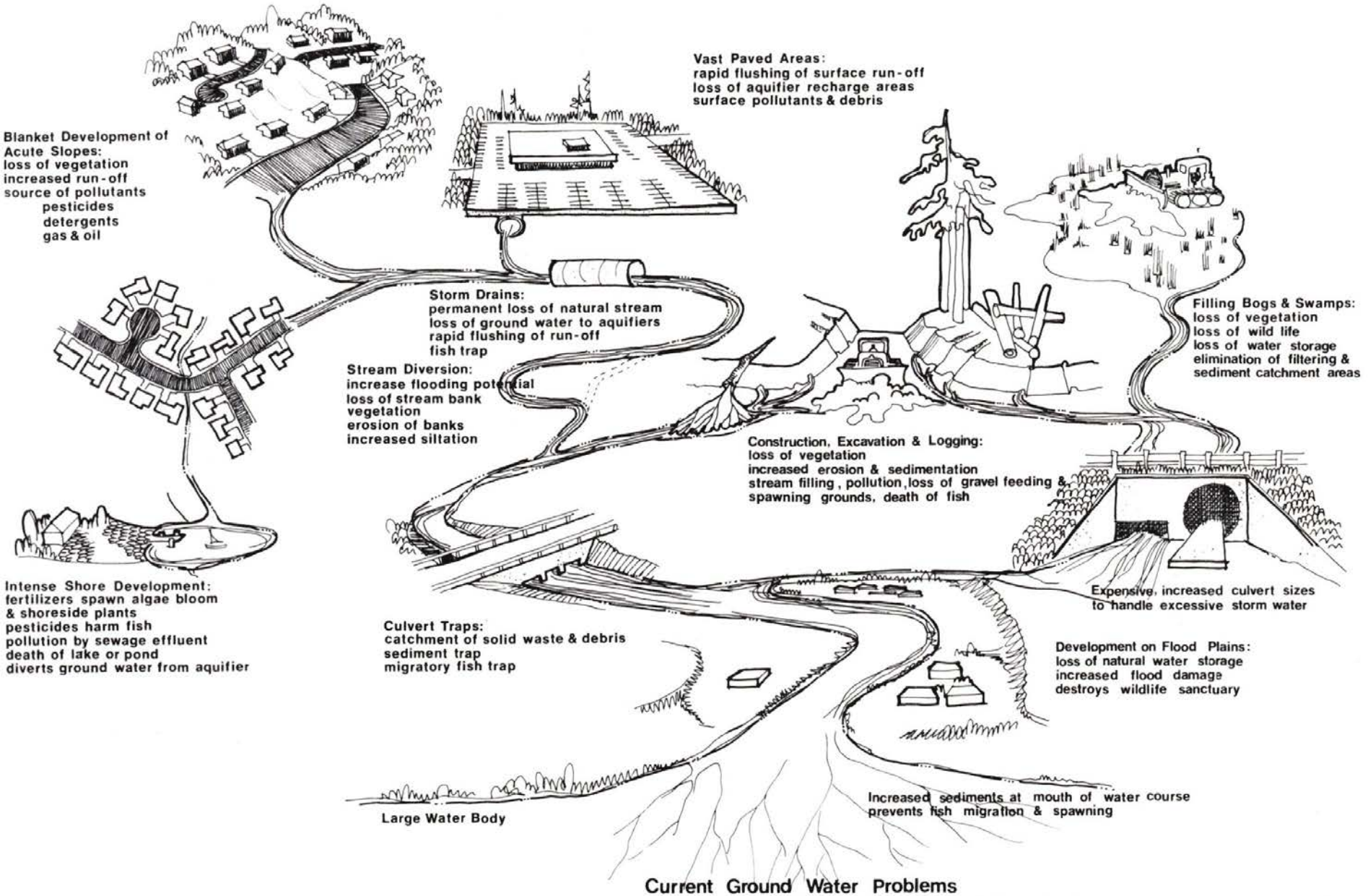
2. All new residences, including multiple, should retain at least ten feet in natural vegetation between the road and the cultivated yard or parking area. Where this has not been done, the property should be re-landscaped to include ten feet of bushes, trees and ground cover to trap and slow drainage, allowing as much water as possible to seep back into the ground before entering the roadway or storm drainage system.

3. Natural swales can be installed in large lawn expanses for on-site storage of storm water for short periods of time. Absorbtion may be improved with sand and gravel and other porous material used during finish grading.

4. When existing residences change from septic tanks to sewer systems, roof runoff should be re-routed into existing drain fields.

5. The smallest practical areas of soil should be exposed to the elements at any one time during development.

6. Exposed soil should be kept to the shortest period of time possible; when extended exposure is necessary, temporary vegetation, mulching, matting or plastic cover should be used to protect soil areas from erosion during development.



Current Ground Water Problems

adapted from City of Bellevue Planning Study of Kelsey Creek

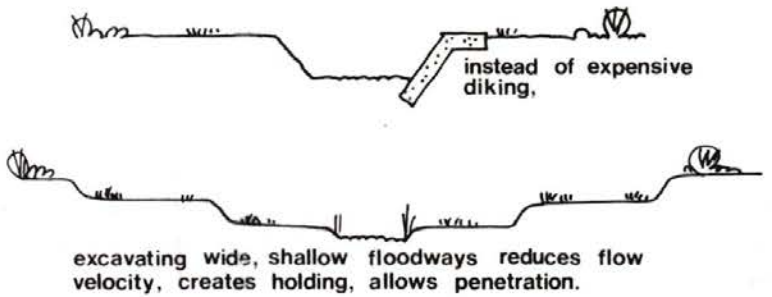
7. During the development period, sediment basins should be installed and maintained to remove sediment from runoff.

8. Permanent structures and vegetation should be installed as soon as practical after development has commenced.

9. The development plan should be fitted to to topography and soils so as to create the least possible erosion potential.

10. Natural vegetation should be retained and protected as much as possible.

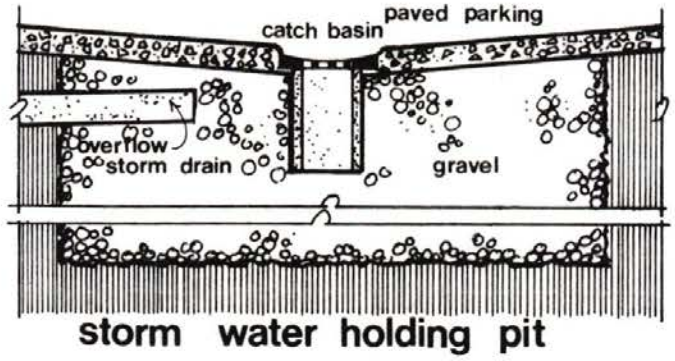
11. Innovative provisions should be made to accommodate the increased runoff caused by development and to return the water to the ground.



Commercial Areas

In areas of large pavement such as parking lots, storm runoff can successfully be recycled into the earth and retained on the site to reduce peak runoff flows into streams and drainage ways.

1. A large pit can be dug at the low point of the paved area, filled with gravel, a catch basin installed and the pit is paved over. A drainpipe from the top of the pit runs to the closest drainage way. During storms, the runoff water enters the pit but does not begin to discharge until it reaches the level of the drain pipe. In this way, the peak runoff is stored under the paved surface and is filtered through the gravel before it is discharged. The water that remains in the pit after the storm percolates back into the ground.

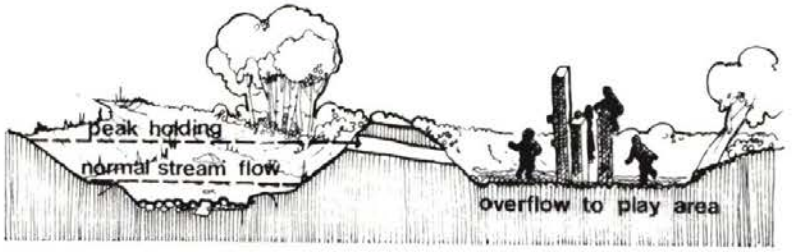


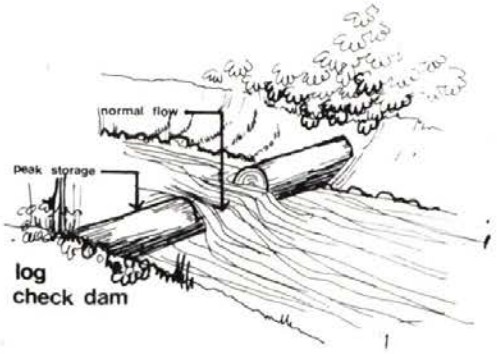
storm water holding pit

2. All timber harvest on the Reservation should (a) adapt logging methods to the slope of the land and condition of the soil; (b) avoid the use of heavy equipment along channels and channel banks; (c) remove logs without dragging them across water channels; (d) avoid repeated use of the same skid trails; (e)

use post-operative treatment to control drainage and stabilize disturbed soil.

3. Clear-cutting logging practices should not be allowed on the Reservation. Landslide and surface erosion cause loss of soils faster than their natural rates of formation in all measured water sheds in the Pacific Northwest where there is extensive logging road construction.[4] In addition to the necessity of soil conservation measures, clear-cut logging scars and scabs the hillside which will one day be residential and recreation areas. Removing all the natural vegetation through clear-cutting procedures violates all the standards of design being established for the Reservation.





Open Space

Additional innovations are necessary to reduce peak runoffs in open areas. One such innovation is the "Blue-Green" concept developed by the Federal Housing Administration [5] for the permanent integration of water areas within the open space system. This protects against extreme water level fluctuations and provide storage basins for excessive runoff to help reduce or eliminate downstream flooding.

This can be accomplished by a series of dams across small waterways, with each dam impounding a permanent pond. Spillway valves maintain normal water surface elevation several feet below the top of the dam. The potential flood storage available in the series of ponds distributes the peak flow over a longer period of time with a smaller rate of flow.[6]

Plants

Living plant materials are one of the fundamental forms in the environment. However, good urban design is not accomplished simply by the addition of grass or shrubs. Urban development will remove a great deal of the natural vegetation on the Reservation and this vegetation must be replaced in one form or another. Plantings in an urban setting, especially around Tulalip Bay, must be considered as much a part of the plan organization as the structures and circulation and be included in all development budgets. They should not be left as a frill for the future occupant to supply. It is recommended that a comprehensive planting program be prepared for the Reservation with an outline of plant groupings, appropriate to each area, showing how plants can be grouped together for texture and

character, with specific illustrations for residential, commercial and public use.

The following are some basic principles to consider regarding the integration of plant forms in the urban environment:

1. Plantings must be suitable for their climates.

2. Individual specimens are not as important as the texture, character and groupings of plants.

3. Species selected must be hardy for the climate and soil conditions; they must stand up to the expected traffic and demand no more care than can be expected with given maintenance conditions.

4. Masses of vegetation may define major spaces or places.

5. Lines of tall trees, visible from a distance may delineate a major axis in the plan.

6. The scale of the planting should be harmonious with the scale of the structures, circulation and open spaces.

SIGNS AND SYMBOLS

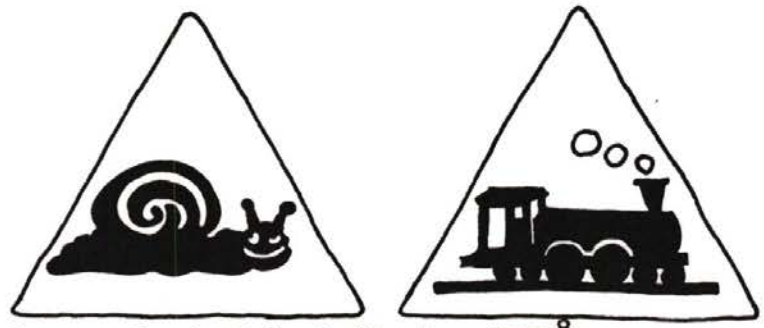
Signs today are usually ugly, thoughtlessly used, and fiercely competitive. While the zoning ordinance defines the physical limitations for signage on the Reservation, that control cannot influence the quality of communication.

Informational Signs

1. There should be a coordinating theme for those signs and symbols denoting tribal activities and enterprises so that these functions are immediately identifiable and give continuity to the community efforts which are located around the bay and elsewhere.

2. Informational signs should be designed to make minimum use of verbal symbols, standardizing as much as possible road signs, community, recreational, service and directional signs.

3. New designs for signs identifying landmarks such as greenbelts, fishing piers, swimming areas, shopping and telephones should follow the design criteria:[7] (a) One glance should reveal the most important feature of the object depicted. (b) A second glance should disclose less important features of the object. (c) A third glance should add mere details.



A suggestion for Swiss traffic signs, 1923[8]

Pictographic symbols should require no more than three glances to reveal all its information. Therefore, unnecessary details must be omitted, nonessential variations avoided, and the message restricted to the bare minimum necessary for the desired effect.

Commercial Signs

1. Whenever a complex of commercial activities is grouped or of sufficient size to merit extended identification, such as the Marina, the group should present a unified signing system which enhances the project rather than allows any one activity's sign to dominate.

2. Signs extraneous to the Reservation, such as advertisements for products used elsewhere, should not be allowed.

3. The zoning ordinance should be flexible enough to allow innovative signs and symbols, expressly designed to orient the observer to the environment and enhance its meaning.

PARKS AND OPEN SPACES

A comprehensive park and open space plan which includes both public and private open spaces should be developed.

1. Public open spaces such as street ends, utility easements and school yards are seldom developed or used for recreation and offer an excellent opportunity.

2. Well designed commercial areas provide recreation in the form of walking, window shopping, etc.

3. Private yard space can be linked with public open space areas to effectively increase the private open space.

4. Homeowners associations and community clubs can hold and maintain open space such as steep slopes or small parcels that would be difficult to achieve through individual ownership.

RESIDENTIAL DESIGN AND BUILDING TYPES

1. While construction of dwelling units of similar or identical design of high architectural quality are permitted, it should be the policy to limit near duplication to sites out-of-sight of the next closest comparable house, except in planned-unit areas where dwelling units are designed as an integral whole and are being build in their entirety by one developer.

2. Most plans published in typical plan books are not appropriate to the environment on the Reservation, as they do not take into consideration local conditions of climate, soils and topography. If they are to be used, adaptation of such plans to the local environment by a qualified architect should be required.

3. Pre-fabricated vacation homes offer an

opportunity for less expensive construction. However, most packaged cabins, such as chalet and A-frame models, have no architectural relationship to the Reservation environment as they were designed originally for physiographic conditions in another part of the world. Designs for pre-fab, pre-packaged or plan-book homes should be reviewed and revised by a qualified architect to assure that the structure will fit into the native environment and site development of the Reservation.

4. Because cost is the major limiting factor in building construction, innovative use of space, forms and materials is encouraged in all structures.

5. Imitations of building materials used for exterior purposes should be discouraged.

6. Exterior colors and stains should be appropriate to the building materials used. For example, natural wood siding is most appropriately stained in natural tones, related to earth and vegetation colors. Colors should be strong or strident only as an expression of the architecture, which in itself must be a completely designed package.

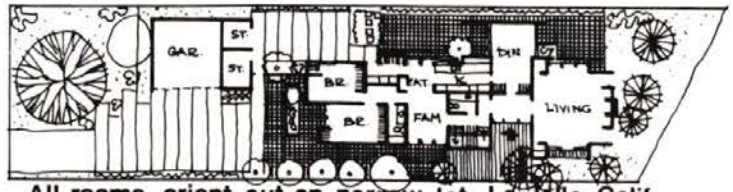
7. Wooden shake or shingle roofs are particularly appropriate in the wooded residential areas of the Reservation. Where other materials are used, the roof colors will be natural and indigenous to the nearby landscape.

8. Shelters for vehicles should be attached to the dwelling unit whenever possible or integrated into the landscape plan.

9. Fencing is encouraged along roads.

10. Closely cropped and fertilized lawns should be limited to a small percentage of the residential property; the perimeter of the property should be naturally landscaped.

11. Careful control should be exercised to avoid over-building of lots. Excessively wide dwelling units which, in conjunction with neighboring dwelling units, create a solid wall of structures along a street front will be discouraged. Dwelling units which use the lot depth and develop private outdoor areas to the sides should be encouraged.



All rooms orient out on narrow lot, La Jolla, Calif.

12. Each dwelling unit should be specifically sited, using natural lot contours whenever possible. Dwelling units which are forced onto lots, thus creating unnatural drainage conditions or causing an unnecessary need for grading or retaining walls, should not be allowed.

13. The orientation of each dwelling unit to its neighbor should be carefully reviewed to insure visual as well as noise privacy and to insure a maximum amount

of usable living space within and without the structure. As open space or common areas will usually lie to the rear of the lot, dwelling units should be designed to orient living space away from the service street and towards the more pleasant spaces.

14. Existing trees, shrubs and undergrowth should be retained on each lot to the greatest extent possible. Bulldozing sites bare and flat for the purpose of building residential units should not be allowed.

15. Children will need neighborhood play areas, located away from the street, within walking distance of their homes.

16. Children should not have to cross dangerous streets to get to school or playgrounds; underpass tunnels for road crossings are appropriate to prevent on-grade pedestrian crossings.

17. Underground telephone and utility lines should be required.

Housing

The Indian representatives who have been active in the planning process have voiced the preference of most of the tribal members about the character of future housing. Most wish to live in a wooded setting on large tracts of at least one acre; they desire a cohesive community but wish to retain the maximum privacy for each household and they wish to share in the magnificent views available on the Reservation.

The ailments of existing older Indian housing have already been documented. (See Chapter 5.) However, there are important criticisms leveled against new Neighborhood Housing Program housing recently completed. Common complaints registered are: (1) the houses are generally too small for the numbers in the household, (2) all of the houses are essentially identical, (3) the houses were sited on a landscape barren of vegetation, (4) the houses were sited with no thought given to privacy from other houses, (5) no provision was made for the outdoor storage of cars, boats, nets, motors and other large equipment, and (6) the interiors of the houses lack adequate storage.

These are universal complaints of all low cost housing developments. The traditional conception of how to accomplish low cost housing seems to be to shrink the typical builder's house--cut back on floor space and the quality of materials and design. In fact, giving careful attention to programming, planning and design of the housing, buildings and grounds which will improve in value over the years rather than begin to immediately deteriorate--is the only way to accomplish quality housing for a reduced cost.

It is a mistake to design low cost housing after the remembered images of builder houses. Given, a traditionally slow moving building industry, still low cost housing is the one area in which the luxury of choice of traditional styles should give way to accomplishing the intangible qualities of good living through development of our technology and through innovation. It is also possible and highly desirable to use the traditional less costly materials in innovative and unconventional ways.

Cluster Housing

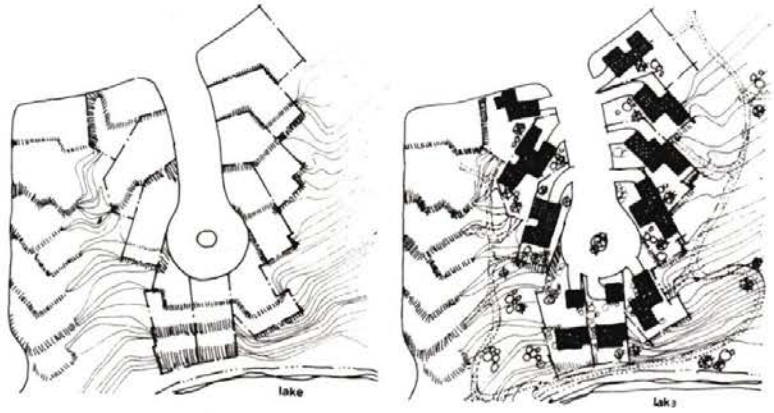
The cluster plan is not a standardized kind of lay-out; it is a principle of planning. How-

ever, the cluster plan has become stereotyped as a series of identical cul-de-sac streets, each with a little circle of houses at the end. The concept of clustering structures has been interpreted by developers as a land-jamming device and has too often been used repetitively and unimaginatively.

Almost every outstanding residential site plan makes use of the cluster to some degree. Its immediate function is to maintain the density of a site while preserving privacy and natural amenities; its broad function is to create communities that use the land more efficiently. Toward these ends, the cluster can be used in an almost infinite variety of forms and patterns.

1. Hillside terrain can make use of the back-to-back clusters to avoid heavy grading and hillside scarring to create the usual house pad. A sloping strip between clusters can handle the rise in grade in small increments. More of the wooded land can be left undisturbed.

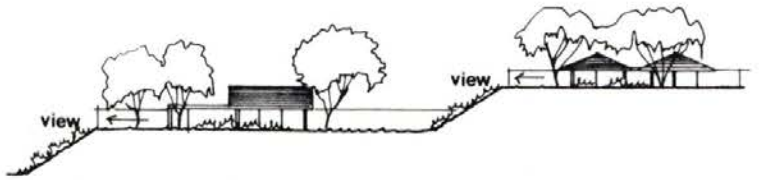
2. Cluster housing oriented toward a view can make good use of the cul-de-sac street by using an unconventional lot configuration. Instead of rectangular lots on the straight road portion and pie-shaped lots around the circle, lots can be offset and irregular in shape so that each lot has a section facing in the general direction of the view. The house design should be an integral part of determining the outline of each lot. Tapering greenbelts can be left between clusters as a visual corridor so each lot has a view. Changes in elevation can be used to advantage in this scheme as changes in level let one house look over another's shoulder without infringing on privacy.



Part of Calabas Park, a 6,000 acre community near L.A. Calif.

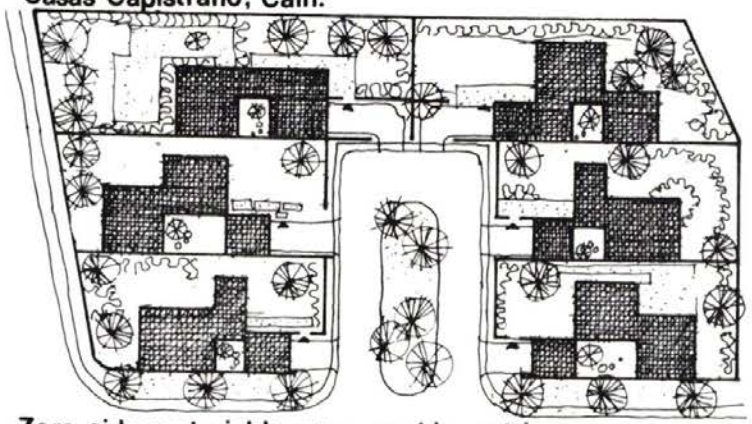
Patio Houses

The term "patio house" is generally defined as a lot with a wall wrapped around it making the entire lot private living space. It is particularly suitable for flat terrain. However, the same principle can be adapted to sloping terrain if the entire neighborhood is designed in concert.



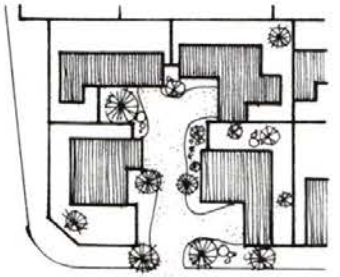
1. Patio houses represent the maximum privacy and outdoor living possible for moderate-density housing. Every room can open to a walled outdoor area.

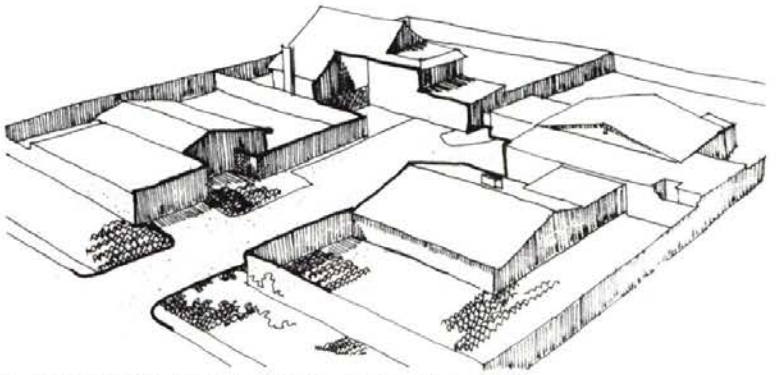
Casas Capistrano, Calif.



Zero side yard yields more usable outdoor area

2. Patio houses can be arranged in groups of four and six around a short street or motor court, then the streetscape becomes a series of landscaped recesses, with only one or two garage doors visible. Road costs can be cut considerably with this method with more money going to landscaping and fencing.

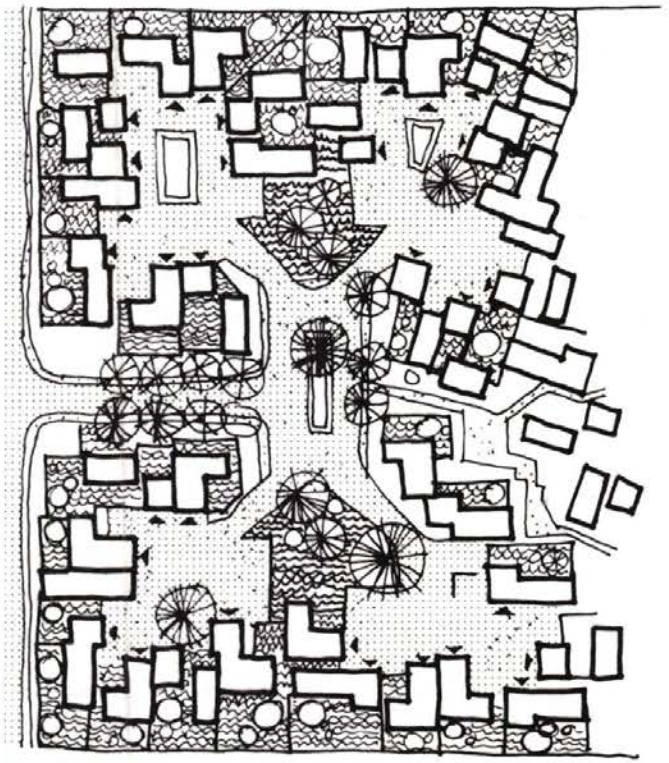




Lake Forest project, Orange County, Calif.

3. Patio houses with zero side yards (some houses abuting, some patio walls touching their neighbors) are encouraged if the site is appropriate and if the land

plan is innovative in its attention to the automobile. Motor courtyards can successfully serve as a core for houses to be grouped around and as play areas.



High density detatched (9du/a) housing, some houses and all patio walls touch neighbors.

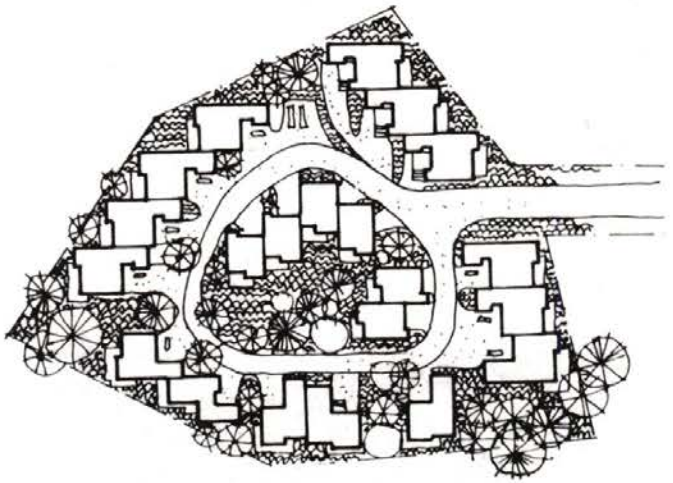
Townhouses

"Townhouse" is the term that has been applied to row dwelling units, usually more than two, with two living levels and often common party walls.

Townhouses represent the maximum density for single family homes, but no other housing type is so consistently misused. In transferring the townhouse from city to suburb, developers and builders seem to forget that long rows of houses were dictated by city blocks, and there is no reason whatsoever to maintain them outside of the city.

Townhouse units have almost no yards to maintain in front or rear, but may open to a common greenbelt to avoid a feeling of being hemmed in; where they do not back onto a greenbelt, the entire rear courtyard should be walled in.

1. Suburban townhouses should not be built in rigid urban patterns.



Townhouses, Carmel Valley, Calif., sited on knoll, road is depressed.

2. Landscaped motor courts should put permanent and guest parking adjacent to each unit; the courts can impart a bas-

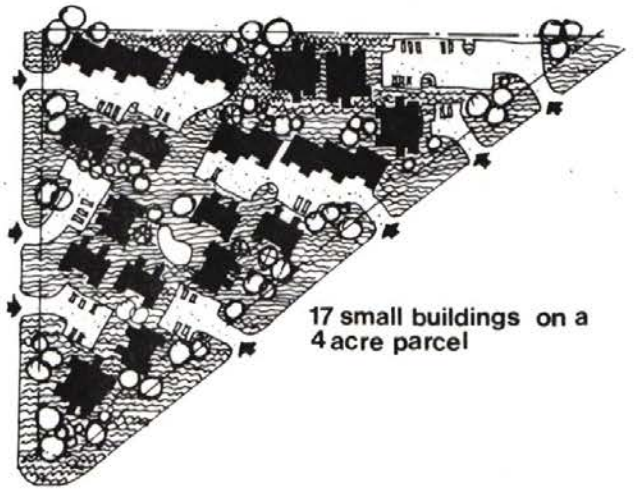
ic core for the cluster configuration of the plan.

3. Where topography and view make it desirable to more or less align townhouse units, there should be sufficient jogs and setbacks to keep the lines uncitified.

DESIGN FOR HIGH DENSITY AREAS

Some development on the Reservation will achieve high densities and attention must be given to the structures and their siting to insure they are integrated into the overall plan and enhance the Reservation rather than present an impersonal wall of living cubicles, surrounded by a sea of parking pavement.

1. Block-like buildings sheltering many dwelling units with no thought for the individual should be discouraged. Groupings of smaller building clusters, organized to create community and private areas should be encouraged.



2. Structures must be sited to insure the privacy of each dwelling unit. Often staggered clusters give the privacy of detached housing with the advantages of less heat loss, common recreation, service and utility areas.

3. Landscaping is an important part of the high density complex: the complex should be planted heavily for quick coverage and low maintenance. Looking at a building through foliage makes it seem further away.

4. Grading can enhance the siting: a change of grades creates interest; opposite buildings set at different levels aid privacy; lowered common walks often allow fewer fences around patios. Step-down siting following hillside contours preserves the site, minimizes soil disturbance and generates privacy for each unit.

Commercial Shopping Facilities

The community shopping center generally serves families within a one- or two-mile radius. It should not be a random collection of stores, but a fairly specialized entity generally ranging in size from 30,000 to 60,000 square feet of building area, usually on three- to five-acres of land. The services will be those related to frequent purchases or use: a supermarket, cleaning shop, a bank, a pharmacy, a variety store, beauty parlors, barbershops, coin-op laundries, small eating shops, professional offices.

1. The shopping center architecture should be in pedestrian scale and designed as a complete complex.

2. Parking areas while they must be convenient to the shops should be broken into several areas instead of one big area.

3. Parking should have landscaped areas throughout to soften the expanse of paving.

The interrelation between the circulation of cars, service trucks and shoppers on foot is a standard problem. Generous parking, short walking distance, easy service and a pleasant pedestrian environment are all desired and are in conflict. For small centers, service access on one side of a strip of stores and shopper parking on the other with a pedestrian walk in front of the stores is acceptable, although it makes for an ugly view of parking lots from the main road and prevents development of a special pedestrian environment.

4. There should be protected walkways and aisles that point toward the center.

5. An orderly architectural framework for the individual store fronts should be created.

6. The following items should be creatively designed and coordinated: (a) landscaping and paving, (b) outdoor furniture and other detail, (c) use of color, sculpture, fountains and special displays; (d) inclusion of facilities such as outdoor restaurants, kiosks, resting places, auditoriums, meeting rooms, exhibit space, libraries and nurseries and play space for children.

7. Signs should be carefully coordinated for harmony and legibility so they become ornamental.

8. In a shopping mall, a pedestrian street of about 40 to 60 feet is recommended.

9. The plan should allow for future growth without disruption. The development must be able to work as a whole from the beginning.

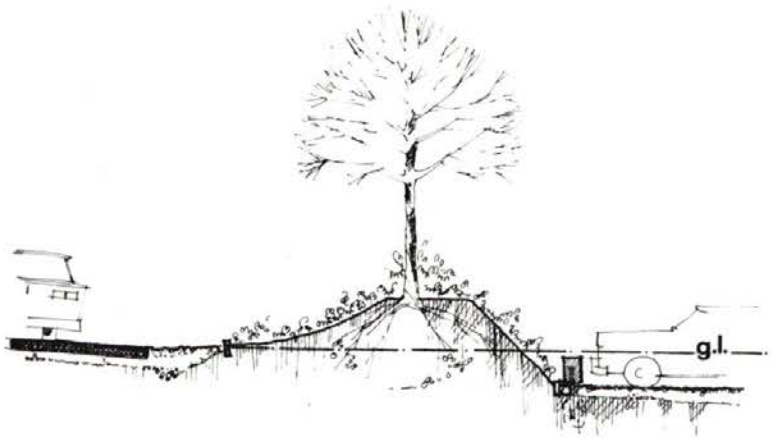
The Industrial Park

The design of industrial areas should contain the following design elements and techniques:

1. Utilities should be underground and access roads paved.

2. Building setback areas must be devoted to carefully designed landscaping, using mostly indigenous plant materials with a minimum of lawn.

3. Parking must be accommodated in an unobtrusive manner: using berms; combinations of sinking the parking and using berms; dividing parking into many small areas rather than one large area; softening parking areas by plantings and trees.



Combination of sinking parking and berming earth.

4. Outside storage must be screened from view.

5. Signs should be architecturally integrated with the building design.

6. Metal pre-fab sheds for industrial uses should not be permitted unless colors are carefully selected to blend with the environment.

7. Native trees and vegetation should be preserved throughout the site.

8. Loading and unloading areas should not face public streets nor use public streets for maneuvering.

9. Waste materials must not be stored in public view unless in approved containers.

10. Exits and entrances should be clearly identified with appropriately designed symbols or signs.

[1] Much of the information in this chapter regarding design details of the environment has been drawn from: Lynch, Kevin, Site Planning, (Cambridge, Mass: MIT Press, 1962). This text is highly recommended to anyone involved with or interested in the design of the environment.

[2] Journal of Washington Professional Civil Engineering, XXXVIII (April 19, 1966) 4, p. 646.

[3] Woolridge, David, Soil Erosion, (Seattle: University of Washington, 1970).

[4] Aweeka, Charles, "Ecology Prof Hits Forestry School," The Seattle Times, (May 10, 1972), p. B-3.

[5] "Urban Hydrology--A Redirection," Civil Engineering Magazine, XXXVII (August, 1967), 8.

[6] National Association of Home Builders, Land Development Manual, (Washington, D.C.: 1969), p. 292-7.

[7] "Signs and Symbols in Graphic Communication," Design Quarterly, No. 62, (Minneapolis, Minnesota: Walker Art Center, 1965), p. 22.

[8] Ibid.

A

Appendixes

OPINION ON STATE JURISDICTION TO IMPOSE
LAND USE CONTROLS ON FEE PATENT LANDS
WITHIN INDIAN COUNTRY

As legal counsel for the Tulalip Tribes of Washington this office has been requested to give its legal opinion regarding the various aspects of The Tulalip Tribes powers and authority over lands located within the boundaries of the Tulalip Indian Reservation.

A brief history of the Reservation and the tribe should be first reviewed. It is as follows:

1. The right to occupy lands of the area was accorded to the Indian people by the Treaty of Point Elliot (Jan. 22, 1855; Stats at Large, Vol. 12, Page 928) Such constituted a cession of all lands of Western Washington in King, Snohomish, Skagit, Whatcom and Island Counties preserving unto the tribes involved the right to occupy a portion of their aboriginal lands and was not a grant of such lands to the tribes by the United States. (U.S. v. Winans, 198 US 371; U.S. v. Romaine, 255 Fed. 253.)

2. The portion of ceded lands to be occupied by the treaty tribes was surveyed and established by Executive Order of President Grant on December 23, 1873, and the boundaries of the Tulalip Indian Reservation accordingly fixed.

3. The treaty Indians residing on the Tulalip Reservation were given authority by the Indian Reorganization Act of June 18, 1934 (225 USC 468 at seq; 48 Stat 984) to adopt a formal organization by way of a Constitution (Sec. 16) and a business Corporate Charter (Sec. 17) which they did on January 18, 1936 and October 3, 1936, respectively. The name of this tribal organization became The Tulalip Tribes of Washington for the political entity and The Tulalip Tribes for the corporate entity.

4. By reason of the Indian Reorganization Act and the Tribal Constitution the Indian people residing on the Tulalip Reservation were given authority: to veto any disposition or encumbrance of the tribal lands; to lease tribal lands; to purchase lands; to deal with tribal members in acquiring lands by the method of assignments; to levy taxes and license fees; to exclude from the reservations persons not legally entitled; to maintain law and order; to regulate the use and disposition of property; and to conduct business with land for profit (Constitution Art. VI & VIII; Charter, Sec. 5).

5. Pursuant to Public Law 280 (28 USC 1360) The Tulalip Tribes enbraced state jurisdiction in the manner provided by Washington law (RCW 37.12) on May 8, 1958.

The lands of the Tulalip Indian Reservation consisting of some 22,000 acres are vested in three different ways.

Tribal lands constituting over 5,000 acres of uplands and tidelands are held by the United States in trust for The Tulalip Tribes of Washington. These are denominated for purposes of classification as "trust" lands.

Individual Indians hold title to over 3,000 acres by reason of allotment made pursuant to Article 6 of the Treaty of March 16, 1854 with the Omahas (10 Stat 1043; Article 7, Treaty of Point Elliot). These titles are restricted by the United States against alienation without the consent of the Secretary of the Interior and are denominated "restricted fee" lands.

The remainder of the lands of the reservation, although at one time "restricted fee" lands, have now become vested in white and Indian persons by removal of the restrictions under various legal authorities granted the secretary as fee simple titles.

Article 1, Sec. 8 of the Constitution of the United States giving Congress the power to regulate commerce with the Indian tribes and the Constitutional provision (Article 6) declaring a treaty to be the Supreme law of the land are the foundations of the exclusive federal power and jurisdiction over the Indian people. It is uniformly held that Indian treaties have the same dignity as treaties with foreign nations (Holden v. Joy, 17 Wall, 211; Worcester v. Georgia, 6 Pet 515). It is equally true that Congress having ratified a treaty can aborgate it by subsequent legislation (Long Wolf v. Hitchcock, 187 US 553; Ward v. Race Horse, 163 US 504).

In 1953 the Congress passed Public Law 83-280 (67 Stat 588, 18 USC 1162, 28 USC 1360) conferring civil and criminal jurisdiction over Indian tribes upon the United States.

The State of Washington responded by Chapter 240, laws of 1957 (RCW 37.12) and assumed the jurisdiction consented to and tendered by the Congress.

The Tulalip Tribes (the corporation and not the political entity and governing body) subjected itself to state jurisdiction which was proclaimed by the governor effective on and after May 8, 1958. This defect standing alone may make the entire question of state assumption of both criminal and civil jurisdiction moot as not conforming to Requirement of RCW 37.12.020.

The nature and extent of the federal and state jurisdiction over and affecting the trust, restricted and fee simple lands of the Tulalip Reservation immediately became a source of legal controversy.

Fundamentally the confrontation arose because The Tulalip Tribes of Washington is a government possessed of constitutional and inherent powers over its Indian citizens (tribal members) vested in it by treaty and Congressional Acts (25 USC 468 et seq.; 48 Stat 984, Sec. 16). It also exercised proprietary functions for the pecuniary profit of its citizens through its congressionally chartered corporation (48 Stat. 984, Sec. 17).

The Tulalip Tribe recognizing that control of the manner of use of land is as important to an owner as is the nature of the title vested justifiably feared the exercise of the police powers of the state as such relate and may be enforced on land and its uses.

The first clarification of State vs. Tribal powers over land as affected by Public Law 280 was soon coming. By decision in Snohomish County vs. Seattle Disposal Co., 70 Wn.2d 688 (1967), the Washington Supreme Court although recognizing that a county zoning ordinance was a valid exercise of police power inherent in state civil jurisdiction ruled that the state or its political subdivisions could not interfere with the title or use of trust or restricted Indian lands

by reason of the Congress having specifically not given to the State of Washington such jurisdiction (28 USC 1360; RCW 37.12.060).

There remains, however, the question of the quantum and extent of land control over Tulalip Reservation fee simple lands granted the state or its political subdivisions, on the one hand, or left in the Congress and The Tulalip Tribes of Washington, on the other, by the enactment and implementation of Public Law 280.

Without attempting to enumerate all exercises of police power that can affect the use and profits to be derived from land, a few examples are pertinent, to-wit: county zoning, imposition of building, electrical, plumbing and fire codes, environmental protection laws, licensing of activities, etc. Such differ from police powers calculated to regulate people a few of which are enumerated in Chapter 36, Laws of Washington 1963, RCW 37.12.010 as amended, as follows: compulsary school attendence, public assistance, mental illness, juvenile delinquency, adoption, dependent children and operation of motor vehicles.

As to the exercise of state civil jurisdiction through police power affecting the fee simple lands located within the boundaries of the Tulalip Indian Reservation The Tulalip Tribes of Washington take exception on the grounds such is not granted to the state and its political subdivisions by the Congress by Public Law 280.

The reasons for this are as follows: the plain wording of Public Law 280 as intended by the Congress does not authorize because; (a) such infringes and destroys the Federal scheme for the advancement of the Indian people; (b) is violative and in breach of the provisions of the Treaty of Point Elliot; (c) is an aborgation of the federal wardship of the Indian people and the legal and moral responsibilities attendant thereupon.

To fully comprehend these contentions it must be understood that what a neighbor does or does not do on his adjoining land has impact and effect upon one's own land and the ability to conduct one's own activities thereupon. The Indian on trust or restricted land is affected personally and pecuniarily by what occurs or is not allowed to occur on adjoining and intermixed fee simple lands. If the Indian is to control his destiny, protect his tribal sovereignty, exercise his treaty rights, or employ the governmental authorities granted by Congressional Act or Secretarial Regulation (25 CFR), within the reservation boundaries, either individually or through tribal organization, such must be accomplished without the intervention of another governmental entity exercising powers for a completely different purpose and without a scheme or design nor primary legal or moral responsibility for the Indian rights or welfare.

If the premise is accepted that land use control is essential to the carrying out of the federal responsibility to the Indian people than to interpret Public Law 280 as giving state's civil jurisdiction by way of police power over fee simple lands of the reservations is to acknowledge the abdication of federal supremacy and congressional control over Indian affairs

This the Congress clearly never intended to do.

Public Law 280 first grants to 5 listed states jurisdiction over civil causes of action arising in Indian country to which Indians are parties to the same extent that those 5 states have jurisdiction over other civil causes of action. It further provides "those civil laws of such state that are of general application to private persons

or private property shall have the same force and effect within such Indian country as they have elsewhere within the state." (28 USC 1360 (4) (a))

The only grant of power is over "civil causes of action". The consent of the United States is expressly so limited. Clearly, the application of general civil laws is solely for the purpose of the determination of the cause of action between the litigants. It is not a grant of general civil jurisdiction to the states authorizing the extension of the police power of the state to the regulation of trade, personal conduct and land use.

That it was the congressional intent to confer upon the state only such jurisdiction as would allow individual Indian litigants to avail themselves of state courts and state laws and to avail themselves of individual rights afforded by state civil laws is further buttressed by Sec. 4 (c) of Public Law 280 (28 USC, 1360 (c)) wherein the individual Indian had preserved to him rights accorded by tribal custom and ordinance if not inconsistent with applicable civil law of the state. Such additional rights derived from tribal affiliation were "given full force and effect in the determination of Civil Causes of Action". (Emphasis Supplied)

In order to implement Public Law 280 nationwide in all states regardless of the varying state relationships established with the federal government by differing statutes, judicial decisions, enabling acts and state constitutions the Congress enacted Sections 6 and 7 of Public Law 280.

Section 6 gave advance consent to a state to amend its enabling act, its constitution, or its statutes to remove any legal impediment to the assumption of civil jurisdiction. Recognizing that "civil jurisdiction" is considerably broader in scope and purport than "jurisdiction over civil causes of action", Section 6 might be arguably construed to be a grant of large power were it not for the included words "in accordance with the provisions of this act". Such words clearly refer to Sec. 4 (a) (28 USC 1360 (a)) and its limited granting of state jurisdiction over civil causes of action, only.

As to the State of Washington and its assumption of juristiction over civil causes of action pursuant to authority of Public Law 280 it must have assumed such under Section 7.

It had no legal impediment to such assumption by reason of any existing statute nor did it amend its Constitution. (Article 26, Disclaimer of Jurisdiction) Instead it accomplished the assumption by affirmative legislative action. (State v. Paul, 53 Wn. 2d 789; Tanasket v. State, 79 Wn. 2d 607; Quinault v. Gallagher, 368 Fed 2d 649).

On April 11, 1968, Congress amended Section 7 by first repealing Section 7 of Public Law 280 prospectively only so as not to effect any cession of jurisdiction made pursuant to the section prior to its repeal. Thus it remains effective as to The Tulalip Tribes of Washington despite its repeal. In its place Congress enacted a new section which no longer mentioned assumption of state jurisdiction by legislation only. (Public Law 90.284, Title IV, f 404; 25 USC 1323 and 1324)

This changing of wording is significant. It clearly discloses an express purpose to prospectively combine the old Sections 6 and 7 and to abandon the legislative method of assumption. It is submitted this came about because the legislative method is superfluous and already available to the states as a method of assumption of jurisdiction over civil causes of action where no impediment thereto is existant. As a safeguard it conditioned state assumption of jurisdiction over civil

causes of action upon the consent of the majority of Indian people (25 USCA 1326) which Public Law 280 did not require.

The State of Washington assumed the limited jurisdiction afforded it by Section 7 of Public Law 280 by legislatively enacting RCW 37.10 et seq. (Laws of 1957, Chapter 240). It could not and did not enlarge upon the federal cession of power and specifically provided that it was assuming civil and criminal jurisdiction "to the extent authorized by federal law" (RCW 37.12.020 and 050).

It did not remove any legal impediment (Sec. 6) to its assumption by amending its constitution or existing statutes.

The legal impediment which the State of Washington had, and still has, to assumption of jurisdiction is worth examining. It is Article 26 of the State Constitution, and reads as follows:

> Second: That the people of this State do agree and declare that they forever disclaim all right and title to..... all lands lying within said limits (boundaries of the State) owned or held by any Indian Tribe .....

Obviously, Article 26 is no impediment to state jurisdiction over Indian litigants and their causes of action unless the issue involves title to land and that type of issue was reserved to Congress by the exceptions contained in Sec. 4 (b) of Public Law 280 (28 USC 1360 (b)) and exempted by the State (RCW 37.12.060).

Jurisdiction over individual Indian rights not related to land was available to the State without impediment or prohibitory statute. There was no need to invoke Sec. 6 of Public Law 280 as long as the State of Washington did not wish to exercise complete civil jurisdiction over Indian affairs and even if it did invoke Sec. 6 the exclusions of Sec. 4 (c) (28 USC 1360 (c)) of Public Law 280 prohibited it from assuming jurisdiction over Indian lands and personal property.

Therefore, legislative action only pursuant to Sec. 7 was most adequate and gave the state for practical purposes substantial measure of jurisdiction over civil causes of action.

It can not be presumed that Congress used idle words or carelessly wrote them when it adopted Public Law 280. Every word and phrase should be construed to give meaning and purpose to the legislation. The grant of federal jurisdiction to the states must be express and is strictly construed (Kirkwood v. Arena, 243 Fed 2d 863, Snohomish County v. Seattle Disposal Co. supra) Accordingly, "civil causes of action" cannot be interpreted to mean the same thing as "civil jurisdiction".

Public Law 280 and RCW 37.12 were enacted to benefit the Indians and not to enhance the power of the State over individuals. The Indian individual was given greater rights by reason of allowing him to litigate in state courts with all rights afforded to white citizens by state laws of general application being placed at his disposal.

There is serious question whether or not the State of Washington as distinguished from some other states needed to assume jurisdiction over Indian "civil causes of action" because it's courts and general civil laws were already available to Indians as litigants in matters not affecting either the federal government or tribal affairs (Felix v. Patrick, 145 US 317; 13 LRA 542).

There was no state constitutional or statutory

impediment; Indians were accorded full federal and state citizenship (8 USC 3, 43 Stat 253; 8 USC 1401; 14th Amendment, U.S. Constitution); no judicial decision impeded them by reason of federal wardship from asserting their individual rights as citizens. (In Re Celestine 114 F 551; Brown v. Anderson, 160 Pac. 724) and Public Law 280 withheld from the state any jurisdiction arising out of restricted and trust fee lands, personal property and treaty and tribal rights, thus reserving the broad area of jurisdiction over Indian lands, personal property and treaty rights to the exclusive federal power.

The changes in the 1968 reenactment of Public Law 280 (Public Law 90-284, 25 USC 1322) are significant as such disclose an effort by Congress to clear up the ambiguities of Public Law 280 relating to civil jurisdiction (28 USC 1360). In USC 1322 (a) the consent of the United States to assumption of civil jurisdiction by the States is only given to those States "not having jurisdiction over civil causes of action between Indians and to which Indians are parties arising in Indian country", such States so legally situated acquired the consent of the United States to assume jurisdiction over Indian civil causes of action. The application of state general civil law to Indian cases was made a mandatory condition. Thus was the extra privilege of allowing an Indian access to State Courts in States where this privilege and legal right had heretofore been denied given meaning and force by federal authority.

One must also keep in mind that Public Law 90-284 (25 USC 1302 et seq.) is a civil rights law and Title IV thereof is to advance,preserve and protect the Indian minorities' civil rights.

It emphatically does so by repeal of Sec. 7 of Public Law 280 and reenactment in clearer language of Public Law 280's rather convoluted and amateurish legislative attempt in the difficult field of civil jurisdiction over Indians.

Such being the true meaning of Sec. 4 and 7 of Public Law 280 (28 USC 1360 (a)) it is apparent that the State of Washington was not one of the states denying civil rights of litigating in state courts to Indians.

Washington accordingly gained no measure of civil jurisdiction relating to Indians that it didn't already have by its enactment of RCW 37.12. Parenthetically, the Washington Court has never examined civil jurisdiction over Indians as all cases before it relating to Public Law 280 were concerned with criminal jurisdiction.

As to criminal jurisdiction a different situation existed and there was a need in the interest of orderly and effective law enforcement to protect the public interest, both Indian and white. Such need is clearly evidenced by the Congress' almost total concern over criminal law enforcement in discussing Public Law 280, prior to its enactment. (Senate Report 699; House Report 848, 83rd Congress, 1st Session.) Civil jurisdiction received relatively little congressional consideration in its pre-legislative deliberations and most comment it did receive related to causes of action.

In summation, the State of Washington has assumed jurisdiction over the Indians of the Tulalip Reservation pursuant to Section 7 of Public Law 280 and that jurisdiction under that action is limited to civil causes of action between Indians or to which Indians are parties which arise on the Tulalip Indian Reservation. (Indian Country).

It is not submitted this limited jurisdiction under Public Law 280 is not sufficient to permit the state or its political subdivisions to impose land use controls or other police power regulations

related to land upon fee simple lands located within the boundaries of the reservation (Indian Country). It is further submitted that the State of Washington by its assumption acquired no enlarged civil jurisdiction over Indians than it already had. The areas of jurisdiction denied it by the exclusions of 28 USC 1360 (a) were the only areas in which it wasn't exercising civil jurisdiction.

Granted that fee simple lands of the Tulalip Reservation are owned by white or Indian citizens of the State of Washington and County of Snohomish; who are resident therein; hold title in fee pursuant to state law and are subject to its police power and regulatory control, (Dickson v. Tuckland Co., 242 US 371; U.S. v.Waller, 243 U.S. 452), yet the federal interest in the welfare of its Indian wards and the solemn obligations it has contracted by treaty or otherwise make the control of land use within the reservation a matter of paramount federal concern and a matter which falls within the constitutional scope of exclusive federal authority.

Indian nations have always been considered distinct independent communities, occupying their own territory, with boundaries accurately described (Worcester v. Georgia, 6Pet 515 at 559 and 560).

Each Indian tribe begins its relationship with the federal government as a soverign power recognized as such by treaty and legislation. The statutes of Congress are limitations on tribal sovereignty rather than sources of authority and what is not expressly limited remains within the domain of tribal sovereignty. (Cohen-Treatise on Indian Law, Chapter 7).

This principle is recognized in Public Law 280. (28 USC 1360 (c); 18 USC 1162 (c); RCW 37.12.070)

So basic is tribal sovereignty that tribal law and customs have been held to supercede and deny to Indian members the privileges of the Bill of Rights (Talton v. Mays, 163 US 376 (1896); Grounhog v. Keeler, 442 F2d 674 (1971)).

Only recently did Congress by statute supercede tribal law in this respect by enacting the Civil Rights Law of 1968 granting the Constitutional Bill of Rights to individual Indians (25 USC 1302, Public Law 90.284, Title II, Sec. 202.)

Cohen-Treatise on Indian Law, Chap. 7, Page 122, announces three fundamental principles: (1) An Indian tribe possesses, in the first instance, all the powers of a sovereign state; (2) conquest renders the tribe subject to legislative power of the United States and terminates the external powers of the tribe but not its internal power, ie., its power of self government; (3) these powers are subject to qualification by treaties and by express legislation of Congress, but, save as thus expressly qualified, full powers are vested in the Indian tribes and in their duly constituted organs of government. (Barnes v. U.S, 205 F. Supp 97; Iron Crow v. Oglala Sioux, 231 F2d 89)

The Wheeler Howard Act (Indian Reorganization Act, 25 USC 461, et. seq. 48 Stat 984, Act of June 18, 1934) afforded federal statutory recognition of these powers of local self government. As above indicated The Tulalip Tribes of Washington have organized under that act.

It is pertinent to relate what The Tulalip Tribes powers of self government are. From that we can determine what is the federal concern and whether or not the establishment of state land use controls on fee simple non-Indian lands within the reservation hampers, impedes or affects the sovereignty of the tribe and the federal scheme.

Article 2 of the Treaty of Point Elliot provides a reserving of lands by the signatory tribes and states "all of which tracts shall be set apart and so far as necessary surveyed and marked out for their exclusive use; nor shall any white man be permitted to reside upon the same without permission of said tribes and bands...."

Sec. 16 of the Wheeler-Howard Act of June 18, 1934 (25 USC 476) states:

> In addition to all powers vested in an Indian Tribe by existing law the constitution adopted by said tribe shall also vest in such tribe the following rights and powers: (enumerating)

The Tulalip's Constitution provided its Board of Directors power in Article VI, Sec. 1, (e) as follows:

> "To safeguard and promote the peace, safety, morals and general welfare of the Tulalip Reservation by regulating the conduct of trade and the use and disposition of property upon the Reservation, provided that any ordinance directly affecting non-members of The Tulalip Tribes shall be subject to review by the Secretary of the Interior." (emphasis supplied)

Public Law 280, although herein contended to be inapplicable and not effective, is an expression of congressional understanding of extent of Indian Tribal authority. Therein the Congress consents to assumption of State jurisdiction over civil causes of action in "Indian Country".

In accepting such consent the State of Washington interpreted the words "Indian Country". It assumed jurisdiction over "Indians and Indian territory, reservations, county and lands" (RCW 37.12.010, laws of 1957, Chapter 240). The legislature's wording is also indicative of its recognition of the sphere of tribal interests, and authority, to-wit: the entire reservation, regardless of ownership of land.

"Indian Country" is a term the legal significance of which has not always been free from doubt. As applied to criminal jurisdiction it has had substantial judicial definition and applies to all lands in Indian ownership, tribal or individual, trust or restricted fee. (United States v. McGowan, 302 US 535) Whether it applies to lands in fee simple located within an Indian reservation is an open question (Cohen-Treatise, Supra Page 8). Obviously the State of Washington sought to foreclose the question by the words used in RCW 37.12.010 and, inferentially, recognized the Indian and federal interest in what went on upon all lands of the reservation.

The words "Indian Country" in Public Law 280 were used with intent and meaning by the Congress. Although previously a term used in connection with criminal law and offenses Congress saw fit to apply the term "Indian County" to civil jurisdiction as well. It therefore has the same meaning whether used in a criminal or civil jurisdictional context.

That meaning is set forth in 18 USC 1151, adopted May 24, 1949, wherein the term is defined as follows:

> "....Indian Country as used in this chapter means (a) all land lying within the limits of any Indian Reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and including rights-of-way running through the Reservation....." (emphasis supplied)

Clearly, the State of Washington was aware of this definition whereby the Congress had declared the federal interest and responsibility paramount over entire Indian reservations, regardless of the fact certain lands therein have gone out of Indian trust or restricted ownership and have become fee simple (fee patent) lands. (State v. Satiacum, 80 Wn. 2d 492)

Inasmuch as The Tulalip Tribes are an Indian Reorganization Tribe (25 USCA 464 et seq.) with a constitution and charter pursuant to Section 16 and 17 of that Act (25 USCA 476, 477) the federal purpose, responsibility and plan for The Tulalip Tribes can best be enunciated by Senator Wheeler's comments on his legislation (Senate Report No. 1080, 73rd Congress, 2d Session, May 1934) wherein he declared:

> The purposes of the bill are as follows:
>
> 1. To stop the alienation through action by the government or the Indians, of such lands belonging to ward Indians as needed for present and future support of these Indians.
>
> 2. To provide for the acquisition, through purchase of land for Indians, now landless, who are anxious and fitted to make a living on such land.
>
> 3. To stabalize the tribal organizations of Indian Tribes by vesting such tribal organizations with real, though limited, authority.
>
> 4. To permit Indian tribes to equip themselves with the devices of modern business organizations, through forming themselves into business corporations.

The Indians had lost 90,000,000 acres of their land in the last 50 years. (House Report No. 1804, 73rd Congress 2d Session). Ten million dollars was made available for Indian loans (Sec. 10 of the Act, 25 USC 470).

This federal policy continues. Representative Clausen of California reported on December 15, 1971, that the Economic Development Administration has designated over 100 Indian Reservations as eligible for its monetary assistance for economic development to enable them to realize their full economic potential and to build a better life based on economic growth with over 100 million allocated by September, 1971, and 26 million earmarked for 1972 (117 Congressional Record 197, E 13551, 12/15/71).

The Tulalip Tribes are eligible and have a pending application for sewer construction.

At the time of adoption of Public Law 280 (Aug. 15, 1953), federal Indian policy was termination of tribal affairs (House Resolution 108, 83rd Congress). Today it is completely different as stated by President Nixon and reflected in Senate Concurrent Resolution 26 which is entitled "Resolution on National American Indian Policy". It reads in part as follows:

> (4) There should be a recognition of Federal responsibility to see that those Indians residing beyond the areas served by special Indian programs and services are given equal consideration with other citizens in the provision of services by other Federal, State, and local agencies.

(5) Indian property will be protected; Indian culture and identity will be respected; and Congress will commit and dedicate itself to support and policy of developing the necessary programs and services to bring Indians to a social and economic level of full participaing citizens;

(6) The Office of Management and Budget should submit an annual report to the Congress showing combined expenditures made by all departments and agencies of the Federal Government for the social and economic betterment of Indians;

December 11, 1971; 117 Congressional Record 194.S21325

It is submitted that this policy cannot become effective on the Tulalip Reservation or elsewhere in Indian areas unless control of the use and development of all reservation lands both trust, restricted and fee simple, is oriented for the benefit of residual Indian lands in Indian or federal control.

Land use controls, particularly zoning, platting, subdivision, building, plumbing, electrical codes, constitute a restriction upon land development of the nature of an encumbrance (Snohomish County v. Seattle Disposal, supra).

They are instruments for the welfare of the citizens of the state and its political subdivisions which have no governmental responsibility to Indians such as the federal government has.

If such police power regulations are applied to fee simple lands on Indian reservations adjacent, vicinal and contiguous to Indian trust and restricted lands the impact thereof will override and control the value, use and utilization of the Indian properties.

It will mean that the Tulalip Indians will be unable to control the developing land use patterns on their reservation, but, instead will be inevitably directed by the social and economic pressures of the adjacent white community using its fee simple lands for its private gain and public purpose.

The policy of Congress is to allow the Indian culture and identity to be respected while protecting his property and supporting his programs calculated to bring him social and economic gain.

Public Law 280 being ineffective, The Tulalip Tribes are left to govern themselves and to work out their destiny in accord with national Indian policy--and no state intervention by law or regulation can stand which hampers or makes ineffective the federal goal. As said in Willimas v. Lee, 358 U.S. 217, "Essentially, absent governing acts of Congress, the question has always been whether state action infringed on the right of Reservation Indians to make their own laws and be governed by them. Congress has also acted consistently upon the assumption that the states have no power to regulate the affairs of Indians on a reservation..... It is immaterial that Respondent is not an Indian. He was on the reservation and the transaction took place with an Indian there. The cases in this Court have consistently guarded the authority of Indian governments over their reservation. Congress recognized this authority in the Navajos in the Treaty of 1868 and have done so ever since. If this power is to be taken away from them, it is for Congress to do it." Citing Lone Wolf v. Hitchcock, 187 US 553)

The Tulalip Tribes cannot make what it deems to be the highest and best use of tribal trust and restricted fee Indian lands in order to take advantage of national Indian policy if the state acting

for the general welfare of all its citizens determines to allow the land to be used for another purpose and has authority under the police power to do so regulate adjoining fee simple properties.

The main premise of land use control is recognition of the fact that some uses are incompatible with others and that the rights of all landowners will be diminished unless the rights of all are subjected to reasonable restraint. Those restraints in Indian Country should be such that Indian lands are not diminished in value nor made impossible of economic development for Indian advancement by imposition of State regulation which is not by law required to consider Indian plans of highest and best use as the first priority and public responsibility.

Although Indian lands are outside state jurisdiction in regard to land use controls (25 CRF 1.4 (a) (b)) unless the Indian can control neighboring properties those lands' uses can be incompatible with the highest and best use of the Indian land and thus destroy their value and future promise.

A case in point may illustrate. The Tulalip Tribes wanted industry to build on fee simple (patent) lands within the boundaries of the reservation adjoining Indian lands because it would give Indian employment, provide domestic and industrial water supply, sewers, electrical power and improved roads to the reservation and create added values and demand for the adjoining Indian lands. The County of Snohomish desired the land constituting the manufacturing site to be open space and residential housing of a suburban (view) nature because the county had a plethora of industrial land of a developed nature next to transportation, power, sewers, etc., but not enough open space to satisfy its public demand. If the county can zone, the Indian economic and social opportunity is foregone and the federal policy is a nullity.

In conclusion:

(1) The State of Washington by reason of Public Law 280 and RCW 37.12, assuming no civil jurisdiction over fee simple lands located within the boundaries of the Tulalip Indian Reservation which it did not already have.

(2) The federal scheme and responsibility for the economic advancement of the Indian people together with tribal sovereignty and Treaty Right excludes the exercise of state police power reglations by way of land use controls affecting fee simple lands within the Indian reservations to the detriment of adjacent Indian lands.

(3) Because the arguments herein advanced are not free from doubt, legislation should be enacted by the Congress amending Public Law 90-284 to clearly provide as follows: "or shall authorize regulation of the use of any real property within Indian Country as defined by 18 USC 1151 in a manner inconsistent with any Federal Treaty, agreement, statute, tribal ordinances, or with any regulation made pursuant thereto." (see 25 USC 1322 (b); 28 USC 1360 (b).) Further Retrocession of State jurisdiction should be aggressively fostered and the states pressured to legislatively provide a means of such in order that Indian tribes may avail themselves of the unequivocable federal protection on land use controls the amended statute would provide.

LEWIS A. BELL, of Bell, Ingram, Johnson & Level

B

CONSTITUTION
OF THE TULALIP TRIBES OF WASHINGTON

ARTICLE VI - POWERS OF THE BOARD OF DIRECTORS

SECTION 1. Enumerated powers - The Board of Directors of the Tulalip Indian Reservation shall exercise the following powers, subject to any limitations imposed by the statutes or the Constitution of the United States, and subject further to all express restrictions upon such powers contained in this constitution and the attached by-laws and subject to review by the general council:

(a) To negotiate with the Federal, State, and local governments on behalf of the tribes and to advise and consult with the representatives of the Interior Department on all activities of the Department that may affect the Tulalip Reservation.

(b) To employ legal counsel for the protection and advancement of the rights of the Tulalip Indians, the choice of counsel and fixing of fees to be subject to the approval of the tribe and of the Secretary of the Interior.

(c) To approve or veto any sale, disposition, lease, or encumbrance of tribal lands, interests in lands, or other tribal assets which may be authorized or executed by the Secretary of the Interior, the Commissioner of Indian Affairs or any other official or agency of government, provided that tribal lands may be mortgaged or sold as now or hereafter provided by law, with the consent of the Secretary of the Interior on such terms or conditions as the Tulalip Board of Directors may prescribe.

(d) To advise the Secretary of the Interior with regard to all appropriation estimates or Federal projects for the benefit of the Tulalip Reservation prior to the submission of such estimates to the Bureau of the Budget and to Congress.

(e) To make assignments of reservation land to members of The Tulalip Tribes in conformity with Article VIII of this constitution.

(f) To manage all economic affairs and enterprises of the Tulalip Reservation in accordance with the terms of a charter to be issued to the Tulalip Indians by the Secretary of the Interior.

(g) To appropriate for salaries of tribal officials or for public purposes of the reservation any available tribal funds, provided that any such appropriation made prior to July 1, 1940, shall be subject to review by the Secretary of the Interior.

(h) To levy taxes upon members of The Tulalip Tribes and to require the performance of community labor in lieu thereof, and to levy taxes or license fees, subject to review by the Secretary of the Interior, upon non-members doing business within the reservation.

(i) To exclude from the restricted land of the Tulalip Reservation persons not legally entitled to reside therein, under ordinances which shall be subject to review by the Secretary of the Interior.

(j) To enact resolutions or ordinances not inconsistent with Article II of this constitution governing adoption and abandonment of membership.

(k) To promulgate and enforce ordinances, which shall be subject to review by the Secretary of the Interior, governing the conduct of members of

The Tulalip Tribes, and providing for the maintenance of law and order and the administration of justice by establishing a reservation court and defining its duties and powers.

(l) To safeguard and promote the peace, safety, morals, and general welfare of the Tulalip Reservation by regulating the conduct of trade and the use and disposition of property upon the reservation, provided that any ordinance directly affecting non-members of The Tulalip Tribes shall be subject to review by the Secretary of the Interior.

(m) To charter subordinate organizations for economic purposes and to regulate the activities of all cooperative associations of members of The Tulalip Tribes.

(n) To regulate the inheritance of property, real and personal, other than allotted lands within the territory of the Tulalip Reservation, subject to review by the Secretary of the Interior.

(o) To regulate the domestic relations of members of the tribes, subject to review by the Secretary of the Interior.

(p) To provide for the appointment of guardians for minors and mental imcompetents by ordinance or resolution, subject to review by the Secretary of the Interior.

(q) To cultivate and preserve native arts, crafts, culture and Indian ceremonials.

(r) To adopt resolutions regulating the procedure of the board itself and of other tribal agencies and tribal officials of the reservation.

(s) To delegate to subordinate boards or to cooperative associations which are open to all members of the tribes any of the foregoing powers, reserving the right to review any action taken by virtue of such delegated powers.

SECTION 2. Manner of Review - Any resolution or ordinance, which by the terms of this constitution is subject to review by the Secretary of the Interior, shall be presented to the Superintendent of the reservation no later than 10 days from its enactment. Within ten (10) days from receipt thereof, the Superintendent shall approve or disapprove the same.

If the Superintendent shall approve any ordinance or resolution, it shall thereupon become effective, but the Superintendent shall transmit a copy of the same, bearing his endorsement, to the Secretary of the Interior, who may, within ninety (90) days from the date of its receipt by him rescind the said ordinance or resolution for any cause by notifying the board of directors of such decision.

TREATY OF POINT ELLIOTT

1855

Articles of agreement and convention made and concluded at Muckl-te-oh, or Point Elliott, in the Territory of Washington, this twenty-second day of January, eighteen hundred and fifty-five, by Isaac I. Stevens, governor and superintendent of Indian affairs for the said Territory, on the part of the United States, and the undersigned chiefs, headmen, and delegates of the Dwamish, Suquamish, Sk-tahl-mish, Sam-ahmish, Smalh-kamish, Skope-ahmish, St-kah-mish, Snoqualmoo, Skai-wha-mish, N'Quentl-ma-mish, Sk-tah-le-jum, Stoluch-wha-mish, Sno-ho-mish, Skagit, Kik-i-allus, Swin-a-mish, Squin-ah-mish, Sah-ku-mehu, Noo-wha-ha, Nook-wa-chah-mish, Mee-see-qua-quilch, Cho-bah-ah-bish, and other allied and subordinate tribes and bands of Indians occupying certain lands situated in said Territory of Washington, on behalf of said tribes, and duly authorized by them.

ARTICLE 1. The said tribes and bands of Indians hereby cede, relinquish, and convey to the United States all their right, title, and interest in and to the lands and country occupied by them, bounded and described as follows: Commencing at a point on the eastern side of admiralty Inlet, known as Point Pully, about midway between Commencement and Elliott Bays; thence eastwardly, running along the north line of lands heretofore ceded to the United States by the Nisqually, Puyallup, and other Indians, to the summit of the Cascade range of mountains; thence northwardly following the summit of said range to the 49th parallel of north latitude; thence west, along said parallel to the middle of the Gulf of Georgia; thence through the middle of said gulf and the main channel through the Canal de Arro to the Straits of Fuca, and crossing the same through the middle of Admiralty Inlet to Suquamish Head; thence southwesterly, through the peninsula, and following the divide between Hood's Canal and Admiralty Inlet to the portage known as Wilkes' Portage; thence northeastwardly, and following the line of lands theretofore ceded as aforesaid to Point Southworth, on the western side of Admiralty Inlet and thence round the foot of Vashon's Island eastwardly and southeastwardly to the place of beginning, including all the islands comprised within said boundaries, and all the right, title, and interest of the said boundaries, and all the right, title, and interest of the said tribes and bands to any lands within the territory of the United States.

ARTICLE 2. There is, however, reserved for the present use and occupation of the said tribes and bands the following tracts of land, viz: the amount of two sections, or twelve hundred and eighty acres, surrounding the small bight at the head of Port Madison, called by the Indians Noo-sohk-um; the amount of two sections, or twelve hundred and eighty acres, on the north side Hwhomish Bay and the creek emptying into the same called Kwilt-seh-da, the peninsula at the south-eastern end of Perry's Island, called Shais-quihl, and the island called Chah-choo-sen, situated in the Lummi River at the point of separation of the mouths emptying respectively into Bellingham Bay and the Gulf of Georgia. All which tracts shall be set apart, and so far as necessary surveyed and marked out for their exclusive use; nor shall any white man be permitted to reside upon the same without permission of the said tribes or bands, and of the superintendent or agent, but, if necessary for the public convenience, roads may be run through the said reserve, the Indians

being compensated for any damage thereby done them.

ARTICLE 3. There is also reserved from out the lands hereby ceded the amount of thirty-six sections, or one township of land on the northeastern shore of Port Gardner, and north of the mouth of Sno-homish River, including Tulalip Bay and the before-mentioned Kwilt-seh-da Creek, for the purpose of establishing thereon an agricultural and industrial school, as hereinafter mentioned and agreed, and with a view of ultimately drawing thereto and settling thereon all the Indians living west of the Cascade Mountains in said Territory. Provided, however, That the President may establish the central agency and general reservation at such other point as he may deem for the benefit of the Indians.

ARTICLE 4. The said tribes and bands agree to remove to and settle upon the said first above-mentioned reservations within one year after the ratification of this treaty, or sooner, if the means are furnished them. In the mean time it shall be lawful for them to reside upon any land not in the actual claim and occupation of citizens of the United States, and upon any land claimed or occupied, if with the permission of the owner.

ARTICLE 5. The right of taking fish at usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting and gathering roots and berries on open and unclaimed lands. Provided, however, That they shall not take shell-fish from any beds staked or cultivated by citizens.

ARTICLE 6. In consideration of the above cession, the United States agree to pay to the said tribes and bands the sum of one hundred and fifty thousand dollars, in the following manner--that is to say: For the first year after the ratification hereof, fifteen thousand dollars; for the next two years, twelve thousand dollars each year; for the next three years, ten thousand dollars each year; for the next four years, seven thousand five hundred dollars each year; for the next five years, six thousand dollars each year; and for the last five years, four thousand two hundred and fifty dollars each year. All which said sums of money shall be applied to the use and benefit of the said Indians, under the direction of the President of the United States, who may, from time to time, determine at his discretion upon what beneficial objects to expend the same; and the superintendent of Indian affairs, or other proper officer, shall each year inform the President of the wishes of said Indians in respect thereto.

ARTICLE 7. The President may hereafter, when in his opinion the interests of the Territory shall require and the welfare of the said Indians be promoted, remove them from either or all of the special reservations hereinbefore made to the said general reservation, or such other suitable place within said Territory as he may deem fit, on renumerating them for their improvements and the expenses of such removal, or may consolidate them with other friendly tribes or bands; and he may further at his discretion cause the whole or any portion of the lands hereby reserved, or of such other lands as may be selected in lieu thereof, to be surveyed into lots, and assign the same to such individuals or families as are willing to avail themselves of the privilege, and will locate on the same as a permanent home on the same terms and subject to the same regulations as are provided in the sixth article of the treaty with the Omahas, so far as the same may be applicable. Any substantial improvements heretofore made by any Indian, and which he shall be compelled to abandon in consequence of this treaty, shall be

valued under the direction of the President and payment made accordingly therefor.

ARTICLE 8. The annuties of the aforesaid tribes and bands shall not be taken to pay the debts of individuals.

ARTICLE 9. The said tribes and bands acknowlege their dependence on the Government of the United States, and promise to be friendly with all citizens thereof, and they pledge themselves to commit no depredations on the property of such citizens. Should any one or more of them violate this pledge, and the fact be satisfactorily proven before the agent, the property taken shall be returned, or in default thereof, or if injured or destroyed, compensation may be made by the Government out of their annuities. Nor will they make war on any other tribe except in self-defence, but will submit all matters of difference between them and the other Indians to the Government of the United States or its agent for decision, and abide thereby. And if any of the said Indians commit depredations on other Indians within the Territory the same rule shall prevail as that prescribed in this article in cases of depredations against citizens. And the same tribes agree not to shelter or conceal offenders against the laws of the United States, but to deliver them up to the authorities for trial.

ARTICLE 10. The above tribes and bands are desirous to exclude from their reservations the use of ardent spirits, and to prevent their people from drinking the same, and therefore it is provided that any Indian belonging to said tribe who is guilty of bringing liquor into said reservations, or who drinks liquor, may have his or her proportion of the annuities withheld from him or her for such time as the President may determine.

ARTICLE 11. The said tribes and bands agree to free all slaves now held by them and not to purchase or acquire others hereafter.

ARTICLE 12. The said tribes and bands further agree not to trade at Vancouver's Island or elsewhere out of the dominions of the United States, nor shall foreign Indians be permitted to reside in their reservations without consent of the superintendent or agent.

ARTICLE 13. To enable the said Indians to remove to and settle upon their aforesaid reservations, and to clear, fence, and break up a sufficient quantity of land for cultivation, the United States further agree to pay the sum of fifteen thousand dollars to be laid out and expended under the direction of the President and in such manner as he shall approve.

ARTICLE 14. The United States further agree to establish at the general agency for the district of Puget's Sound, within one year from the ratification hereof, and to support for a period of twenty years, an agricultural and industrial school, to be free to children of the said tribes and bands in common with those of the other tribes of said district, and to provide the said school with a suitable instructor or instructors, and also to provide a smithy and carpenter's shop, and furnish them with the necessary tools, and employ a blacksmith, carpenter, and farmer for the like term of twenty years to instruct the Indians in their respective occupations. And the United States finally agree to employ a physician to reside at the said central agency, who shall furnish medicine and advice to their sick, and shall vaccinate them; the expenses of said school, shops, persons employed, and medical attendance to be defrayed by the United States, and not deducted from the annuities.

ARTICLE 15. This treaty shall be obligatory on

the contracting parties as soon as the same shall be ratified by the President and Senate of the United States.

In testimony whereof, the said Isaac I. Stevens, governor and superintendent of Indian affairs, and the undersigned chiefs, headmen, and delegates of the aforesaid tribes and bands of Indians, have hereunto set their hands and seals, at the place on the day and year hereinbefore written.

Isaac I. Stevens, Governor and Superintendent.

STATEMENT OF THE TULALIP TRIBES OF WASHINGTON ON ITS OWN BEHALF AND ON BEHALF OF OTHER INDIAN TRIBES SIMILARLY SITUATED, CONCERNING PUGET SOUND AND ADJACENT WATERS COMPREHENSIVE STUDY BEFORE THE PUGET SOUND TASK FORCE OF THE PACIFIC NORTHWEST RIVER BASINS COMMISSION AT PUBLIC HEARING IN SEATTLE, APRIL 22, 1971

Appendix II, Political and Legislative Environment, of the Comprehensive Study of Water and Related Land Resources, Puget Sound and Adjacent Waters, in part six thereof at pages 6-1 through 6-7, clearly and distinctly recognize Indian Water Rights, the federal authority exclusively vested in the Congress over them by Article I, s8 (3) of the Constitution of the United States, the limitations placed upon the jurisdication of the State of Washington in relation thereto by that state's Enabling Act and the disclaimer of interest in Indian land contained in this Constitution in Article 26, s2.

There is further recognized in the pages cited that the Indian's rights arise from treaty, which treaties fall under the protection of the United States Constitution and are treated as if made with a foreign nation and are the supreme law of the land.

However, the full import of these statements contained in part six is nowhere considered in the voluminous reports and appendices of the entire Comprehensive Study.

By reason of the fact that the Indian rights, though acknowledged, are not given full credence or study, the entire Comprehensive Study and its conclusions and summary and any action be be based thereupon must inevitably proceed from false premises, in effect, have feet of clay and result in eventual confrontation with the Indians by any person or party relying thereupon. The doctrine of supremacy of Indian Water Rights is based upon the cases of United States v. Winans, 198 U.S. 371, and Winters v. The United States, 207 U.S. 564.

The Indians in the study area are governed by treaty with the United States, called the Treaty of Point Elliott, or other treaties having similar provisions, which treaties were made on or about the year 1855 and provide that the Indians shall have the exclusive occupancy of lands reserved to them as well as the right of taking fish at all usual and accustomed places.

It is essential to the understanding of the Indian's water rights to first fully appreciate the nature and extent thereof.

The Winans and Winters decisions as well as others clearly establish that the Treaty did not constitute a grant of right in water to the Indian people from the federal government, but was a ceding of rights from the Indians to the United States, with a reservation in the Indian of those rights not so granted to the United States. The correct light in which the nature of the title of the Indians to water under the treaties and between them and the United States is to affirm that Indian title thereto does not stem from a conveyance to them, but, rather, the title which resides in them to their lands and waters, was one which they always had and was retained by them when they granted away the title to the other vast areas of the State of Washington which had been theirs.

It is also of primary importance to realize and

comprehend that water rights of Indians are usufructs and constitute real property to which they have a title and are not public rights in water withdrawn or reserved unto the United States as the sovereign. This distiction is analogous to the right in fee simple of a citizen to use water upon the lands he owns as compared to the rights of the United States as a sovereign to have water for the public benefit on lands it owns and puts to public use, such as a national forest.

Seen in this light, statements relating to Indian Water Rights contained on pages 6-1 and 6-2 of part six are misleading for they tend to the average mind, to equate the water right which the Indian reserved unto himself as part of his property with a water right reserved by the United States for the public benefit. The Winans and Winters doctrine enunciated by the Supreme Court of the United States is that at the time the United States created the Indian Reservations there was reserved by the Indians, through treaty, unto themselves their water rights to make use of waters of streams flowing upon and adjacent to their lands which reservation of water was not limited to existing uses but included sufficient water for future requirements of the Indians to carry out the purposes for which their lands were set aside.

These studies on page 6-2 thereof, part six, makes the following statement:

> "Thus, any determination of the extent of the quantity of water necessary for the Indian's use would require a study of present uses as well as future uses for which water would be required."

As far as the Indians know, no such study has been conducted nor included in the Puget Sound and adjacent waters comprehensive study. Without such a study included, the entire effort is abortive and unreliable to any user thereof or planner therefrom.

This is for the reason that until the present and future uses of water on Indians lands has been fully comprehended and evaluated, no other individual person or governmental agency can, with safety, assume any given quantity of water for such one's present or future needs.

In effect, any water user other than Indians, takes the same at the peril that when the Indian lands require water, theirs will have the first priority and other users will have to yield.

In short, the waters available for appropriation in the Puget Sound Basin are those waters left at any time, both present and future, after Indian demands and needs of water have been met.

It is appropriate to inquire what are the needs of Indians for water, both present and future.

As to the present, those needs are basically for fishery which requires sufficient flow of waters to and through Indian reservations to perpetuate and forever sustain anandromous fish runs, which flow must not be so contaminated or obstructed or cutoff as to interfere with its natural propagation.

In addition, the Indian lands must have water for domestic use and agriculture, and the consumptive use required by industry and economic development.

The policy of the United States has recently been enunciated by President Nixon who, saying that such was to correct injustices to the Indians of the past, stated,

> "My administration will promote the economic development of the reservation by of-

fering economic incentive to private industry to provide opportunities for Indian employment and training."

On September 12, 1968, Senate Majority Leader Mansfield placed in the Congressional Record Concurrent Resolution No. 11, entitled, "National American Indian and Alaska Native Policy Resolution," which stated:

"The Resolution would assure our Indian citizens that federal programs will be concentrated where the problems are most acute - on the reservations and that it is the sense of Congress that Indian and Alaska native trust property continue to be protected; --that efforts be continued to develop natural resources."

At this time, there is at least seventy to eighty thousand acres, or more, of Indian Reservation lands that are pockets of poverty and economic depression lying within the burgeoning urban area of Puget Sound lying wholly or mostly undeveloped. Such lands have tax exempt status, are free of state and county zoning, are uninhabited and lie at the mouths of the major rivers of the Puget Sound area with an assured ample supply of water, generally close to rail and highway networks and with assured power and communication facilities.

By the very reason that such are undeveloped and of special beneficial status in the same work of our society, and its laws, they constitute the first and create opportunity for economic development on a large and massive scale, basically unfettered by the bureaucratic rules and regulations of our society.

It is therefore apparent that if national policy as enunciated by the President and the Congress is implemented, and the assumption must be that it will, the Indian lands on Indian Reservations being open and unused, yet ideally situated, both under law and geography, will become the focal point for the industrial and economic development of the Puget Sound area. This increase in their use will require substantial consumptive uses of water for industrial purposes which under the Winans and Winters doctrine will mean in the event of insufficient water to satisfy all needs, the taking of water from white water users and the delivering of it to Indian lands as a matter of first priority.

The success of any program in furtherance of development in Puget Sound Basin is, of necessity, predicated not only upon a present firm supply of water, but likewise upon a firm supply in the future. What amount of water will be required for future purposes may not be determined with absolute accuracy at this time but the Indians hereby assert their right to whatever water may be reasonably necessary for the development and use of their lands, not only for present uses, but for future requirements.

Therefore, it is imperative that the Puget Sound and adjacent waters comprehensive study first and foremost undertake an inventory of all of the Indian rights to the use of water in the streams and other sources of water arising upon, bordering upon, traversing or underlying their lands, and that there then be determined the highest and best use which can be made of these invaluable rights to the use of water, together with an invaluation from the standpoint of their maximum potential in the future by reason of the fact that those water rights must be exercised in perpetuity and in contemplation of the ever changing environment of the Puget Sound area with its increasing population and increasing water demands.

Until such is done, all of the assumptions, con-

clusions, summaries and recommendations of the Puget Sound and adjacent water study are fallacious and should not even have been commenced. Two years ago, the Indian people requested inclusion into the planning and such request has been ignored. Today, they again request it and sound the warning that any planning or study which does not first determine their water rights and recognize the priority thereof, will not be accorded verity by them nor can it be by any person considered a reliable plan for future water uses.

Respectfully submitted,

Lewis A. Bell
Attorney for the Tulalip Tribes.

C

TULALIP WATER SYSTEM

The following report has been prepared to determine the feasibility of a domestic water system for the Tulalip area located west of Marysville, Washington.

Topographically, the area lies west of Interstate 5 extending to Puget Sound, north of Eby Slough and Everett, and south of the Seven Lakes area.

This is a semi-rural area with a future planned range of between one D.U./10 acres to five D.U. acre. There are also some recreational developments within the area.

The existing Tulalip Bay Water System is a gravity system coming from two earth reservoirs which are fed by springs. The present storage capacity is good at approximately 1 MG. At the service area there is additional storage of 165,000 gallons. The transmission line is 10 inch Cl. 150 A.C. from the reservoirs to the bay. Presently the water is chlorinated also. The service lines in the bay area are adequate for present demands. With some replacements, they should be adequate for at least twenty years.

At the present time, the sources of domestic water for the residents in the area include individual wells, springs and impoundments. The majority of the water now being used for domestic purposes is of variable and uncertain quality with the main source being two dammed reservoirs serving Tulalip Bay. With the number of septic tanks increasing each year, contamination of individual home water supplies will become more of a health hazard.

PROSPECTIVE WATER CUSTOMERS

Tabulations of latest Water Facilities Inventory, Washington Department of Health and Social Services as of January 28, 1968, indicate that the existing systems served the following number of single family residences:

1968 Use Area	Number of Services	Full Time Population	Part Time Population
Tulalip Bay	400	1200	30 (est.)
Tulalip Shores	37	10	100
Spee Bi Dah	20	4	20
Priest Point	50	135	15

This breaks down into 91% permanent and 9% part time users. In addition there are small private systems at Priest Point, Tulare Beach, Sunny Shores and Arcadia.

In order to examine present and future water needs, we have studied present and future projected population data for 1975 and 1990. This data is broken down by Snohomish County into four planning analysis zones.

Population Projections
By Planning Analysis Zones

Number of Zone	1970	1975	1990	2000
8800	1889	2133	3124	4280
8804	470	727	2152	2930
8806	32	50	866	1180
8100	506	662	1698	2310
TOTALS	2897	3572	7840	10,700

In planning the development of the Tulalip area, ultimate densities have been figured at saturation of projected development. The total values projected are: 38,909 dwelling units, and a population of 116,000, based on an average of 3.0 persons per unit.

Since the years 1990 and 2000 are both somewhat distant, we will do our planning on the basis of 1975 and the year 2000 projections. This will give good data for planning purposes.

In the absence of any other data, we will use the ratio of permanent to seasonal population indicated by the Washington State Inventory. This is 91% permanent and 9% temporary.

Design Criteria

The following definitions are for abbreviations that are used through the report:

gpcd = gallons per capita per day
gpd = gallons per day
gph = gallons per hous
gpm = gallons per minute
psi = pounds per square inch
MG = million gallons
MGD = million gallons per day

The following are the design values used:

Unit Water Consumption Values

Full Time Water Users	75 gpcd
Part Time Water Users	60 gpcd
Commercial Areas	1000 gpd/acre
Light Industrial Users	500 gpd/acre
Peak Daily Flow Ratio	1.5:1
Peak Hourly Flow Ratio	2.5:1

Unit Occupancy Criteria

Dwelling Units - Permanent	3.5 persons/unit
Dwelling Units - Seasonal	3.0 persons/unit
Dwelling Units - Temporary Overnight	3.0 persons/unit

System Design Values

There are several terms which are pertinent in expressing water usage or water demand. One term is "Average Day Demand." This term is used to express the average water usage per day over a period of one year.

Another term in general use is "Maximum Day Demand." This is the total water usage during the day in which the total amount of water delivered to the distribution system exceeds all other individual days during the year. The year may be either a calendar year or a fiscal year.

The day referred to herein will be an 18-hour day based on the fact the hours of domestic water use

for a system with no large commercial or industrial users generally occurs between the hours of 4:00 a.m. and 10:00 p.m.

It is also common to express water usage in terms of hourly flow. The "Maximum Hour Demand," or hourly peak, is an expression to designate such peak flows that occur during an 18-hour day.

In addition to the actual water used by the individual consumer, there are also water losses within any water system. These losses are termed "unaccounted-for water" which is defined as water purchased or otherwise produced but is not sold, measured or otherwise accounted for.

Water System Design Values:

Component	Required Capacity
Source of Supply	Maximum Day
Transmission Main to Service Reservoir	Maximum Day
Service Reservoir	Average Day (min.)
Distrubution Mains	Maximum Hour

Estimated Demand for a Summer Weekend Use Period (Year 1975):

Full Time Users	3250 x 75 gpcd	= 244,000 gpd
Part Time Users	322 x 60 gpcd	= 19,300 gpd
Commercial (Motel & Trailer Courts)	100 acres x 100 gpad	= 100,000 gpd
Industrial (excludes Boeing Test Site)	100 acres x 500	= 50,000 gpd
Sub-Total		413,300 gpd
10% Unaccounted Water		41,330 gpd
Average Day Demand		454,630 gpd
Average Day Continous Flow		316 gpm

The following are indicated for the 1975 population:

Maximum Day Demand	1.5(454,630)	= 680,000 gpd
Maximum Day Continous Flow		474 gpm
Maximum Hour	2.5(454,630)	=1,135,000 gpd
Maximum Hour Continous Flow		790 gpm

The 1975 capacities for the various components are as follows:

Component	Required Capacity
Source of Supply	474 gpm
Transmission Main to Service Reservoirs	474 gpm (Total)
Service Reservoirs	454,630 gallons
Distribution Mains	790 gpm

Estimated Demand for a Summer Weekend Use Period (Year 2000):

Full Time Users	9740 x 75 gpcd	= 730,000 gpd
Part Time Users	960 x 60 gpcd	= 57,600 gpd
Commercial (Motel & Trailer Courts)	300 acres x 1000 gpad	= 300,000 gpd
Industrial (Excludes Boeing Test Site)	944 x 500	= 473,000 gpd
Sub-Total		1,560,600 gpd
10% Unaccounted Water		156,060 gpd
Average Day Demand		1,716,660 gpd
Average Day Continous Flow		1,190 gpm

The following are indicated for the 2000 population:

Maximum Day Demand 1.5(1,716,660) = 2,570,000 gpd

Maximum Day Continous Flow 1,790 gpm

Maximum Hour 2.5(1,716,660) = 4,300,000 gpd

Maximum Hour Continous Flow 2,980 gpm

The year 2000 capacities for the various components are as follows:

Component	Required Capacity
Source of Supply	1,790 gpm
Transmission Main to Service Reservoirs	1,790 gpm (total)
Service Reservoirs	1,716,660 gallons
Distribution Mains	2,980 gpm

PROPOSED WATER SYSTEM

Source of Supply

Several alternate courses of supply are available for consideration including:

1. Seven Lakes Water System
2. City of Everett System
3. Present Tulalip Sources
4. City of Marysville System

It seems valid to discuss each of these potential sources from the standpoint of present and future capacities and difficulty of providing service.

1. Seven Lakes System: the present system has as its source three wells of 45, 55 and 100 gpm capacity. The total of 200 gpm is only adequate for the approximate present service area and no current planning for more wells is known. It appears unlikely that a new well would be able to provide the flow amounts necessary since virtually a whole new system of equal or greater size would be added. Also, it is questionable if a well system will be capable of meeting the needs for the growth area 30 years from now.

2. City of Everett System: the system presently has a 12" cast iron water main running along the north end of the city in Norton Avenue. The pressure is 120 psi.

   However, in order to reach Tulalip, the line would have to be extended approximately 8000 lineal feet across the open water interface between Possession Sound and the Snohomish River. This means the construction would be moderately difficult and expensive, and the pipeline material would have to be cast iron ductile iron to assure a reasonable service life. Although the Everett water line size and pressure is good at 12 inch and 115 psi, this line extension is not a planned one. Therefore, the City would have to supply a reservoir on either side to assure adequate flow capacity during peak usage periods. This, together with the high initial cost of the line extension, makes this alternate unfeasible.

   There is another alternate line from the Everett system. This is an eight inch

line serving Smith Island. However, it would have to be extended even further and at least three waterway crossings would have to be made. Therefore, this alternate will not be considered.

3. Present Tulalip Sources: the sources in the Tulalip area serve only the immediate local area with the possible exception of the Tulalip Bay system. Since the sources consisting of both wells and surface flows are spread along a long shoreline area, it would be impractical to connect them in a common system. Both the water quality and quantity would be too variable and would not lend themselves to economical maintenance. A large number of maintenance personnel would be required to keep the system going.

4. City of Marysville System: when the City's Engineers were contacted regarding service to Tulalip, they indicated the City would readily supply water. There are water lines presently along Marysville-Tulalip Road as far as the plat of Marysville West near Rainwater Road. The City has a 12 inch line serving this area which could be extended another 4000 feet. From there they have plans for a booster pump to reach a site for a future storage tank. The site is already set aside.

   Marysville also has plans to run a large main through the Boeing Test Site to reach Tulalip. They will have the flexibility to serve the whole area if required.

   The source capacity is adequate for any immediate needs coming for a well at Lake Ki and Edwards Springs. Also they have planned a new well at 5 to 10 MGD which will meet any future needs.

   Since these sources are properly protected from surface contamination, no treatment would be required. On the basis of economics of getting service from a readily available source and avoiding any later costs of treatment, the Marysville system appears most feasible to serve the entire Tulalip area. Treatment facilities, intake facilities and their maintenance will not be required. Marysville would construct any necessary transmission facilities which would be paid back by the service area. Any individual developments would have to pay their own construction costs and then dedicate the lines to the City so they can maintain them.

   Further calculations will be based on getting service from the Marysville system.

Reservoir Storage

It is desirable to provide storage in the quantity of at least one day's supply. For the 1975 system, it is recommended that 460,000 gallons additional storage be provided at the tank site planned by Marysville. This will then provide storage capacity for both the immediate Tulalip and Marysville areas. The present storage capacity of the Tulalip Bay system can continue to be used in that area, meaning that the water system lines would not have to be joined to the Marysville tank immediately. In addition, the Priest Point Water System has additional capa-

city to serve a somewhat larger populations. If population does not grow rapidly, the 1975 system could be constructed at a later date without enduring serious shortages.

For the year 2000 system an additional storage of 1,265,000 gallons is recommended. The placement of this capacity will depend in part on the pattern of development. Also, if the Tulalip Bay storage reservoirs are protected from surface contamination they could be utilized as part of this ultimate capacity.

For our planning purposes, we have placed 500,000 gallons of capacity at this point and divided the remaining 765,000 gallons to the north at two high locations, one near the planned industrial area, and the other to service the northwest zone.

This storage has been placed to provide emergency storage for line flow protection as well as capacity for system demands.

Water Distribution Mains

In the Design Criteria, the required capacity of the transmission main to the service reservoir is equal to the maximum day, while the distribution mains are equal to the maximum hour. Since in this system, the two supply mains from the source also serve as distribution mains, they should be sized to jointly carry the maximum hourly flow at 1500 gpm. Proposed 12 inch lines will carry these flows with minor head losses.

Besides carrying enough flows to meet domestic water requirements, these mains will be capable of carrying fire flows required. Fire hydrants will also be included in the cost estimates. By having hydrants in the water system to provide fire protection, it is possible to take advantage of lower insurance rates when fire stations become available.

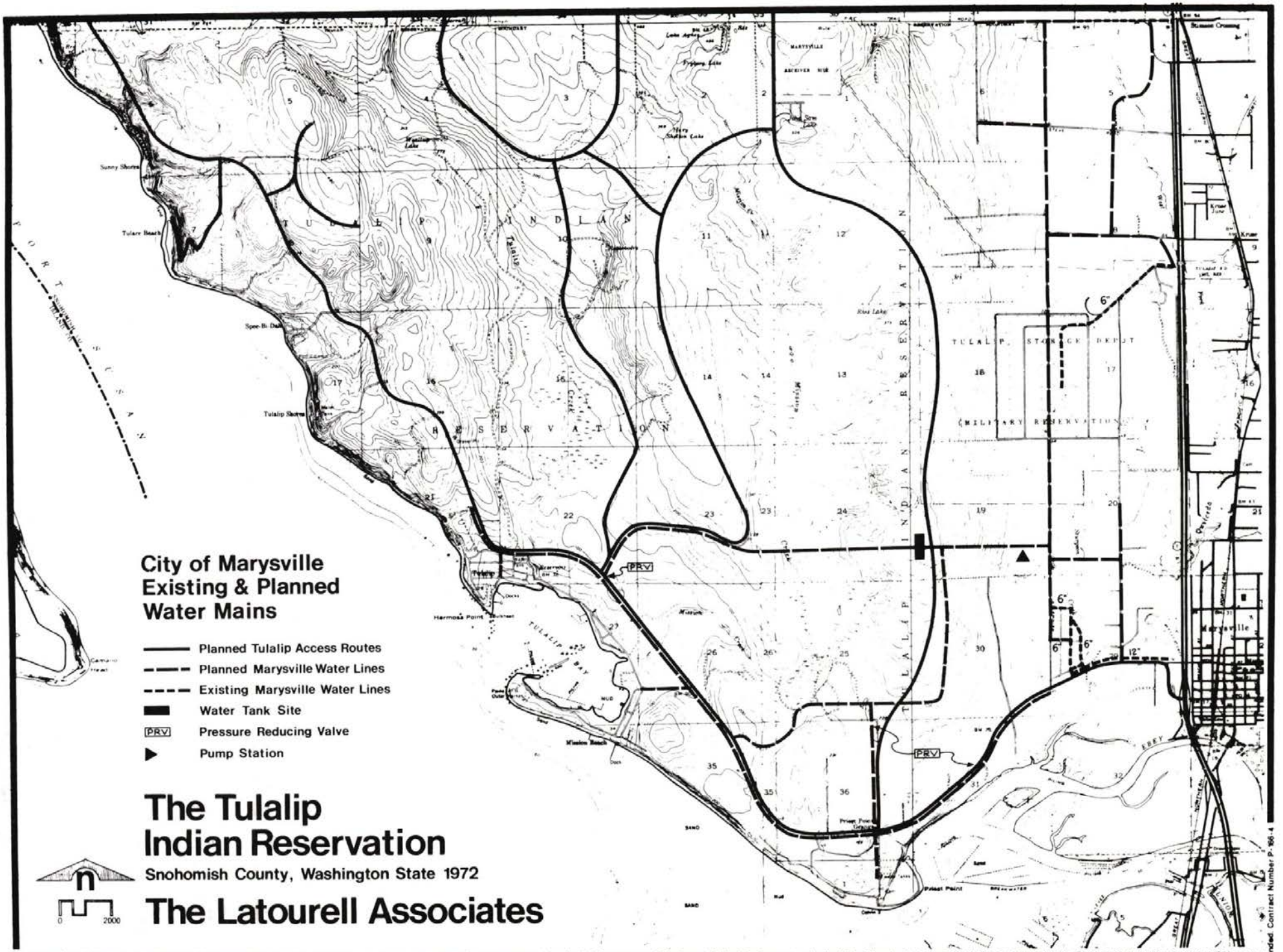
Beyond the two feeder mains, the system has ten and eight inch mains to provide adequate flows for the year 2000 population and beyond.

A tabulation of the approximate capacity of the mains with minor head losses follows:

Pipe Diameter	Capacity
4"	70 gpm
6"	200 gpm
8"	400 gpm
10"	800 gpm
12"	1500 gpm

ESTIMATED CONSTRUCTION COSTS

Currently the construction cost index is rising 3 to 5 percent per year. Our estimate prices are based on prices anticipated in 1972. For the later improvements, these costs will have to be adjusted according to the cost index fluctuations. The next two pages show estimated project costs.



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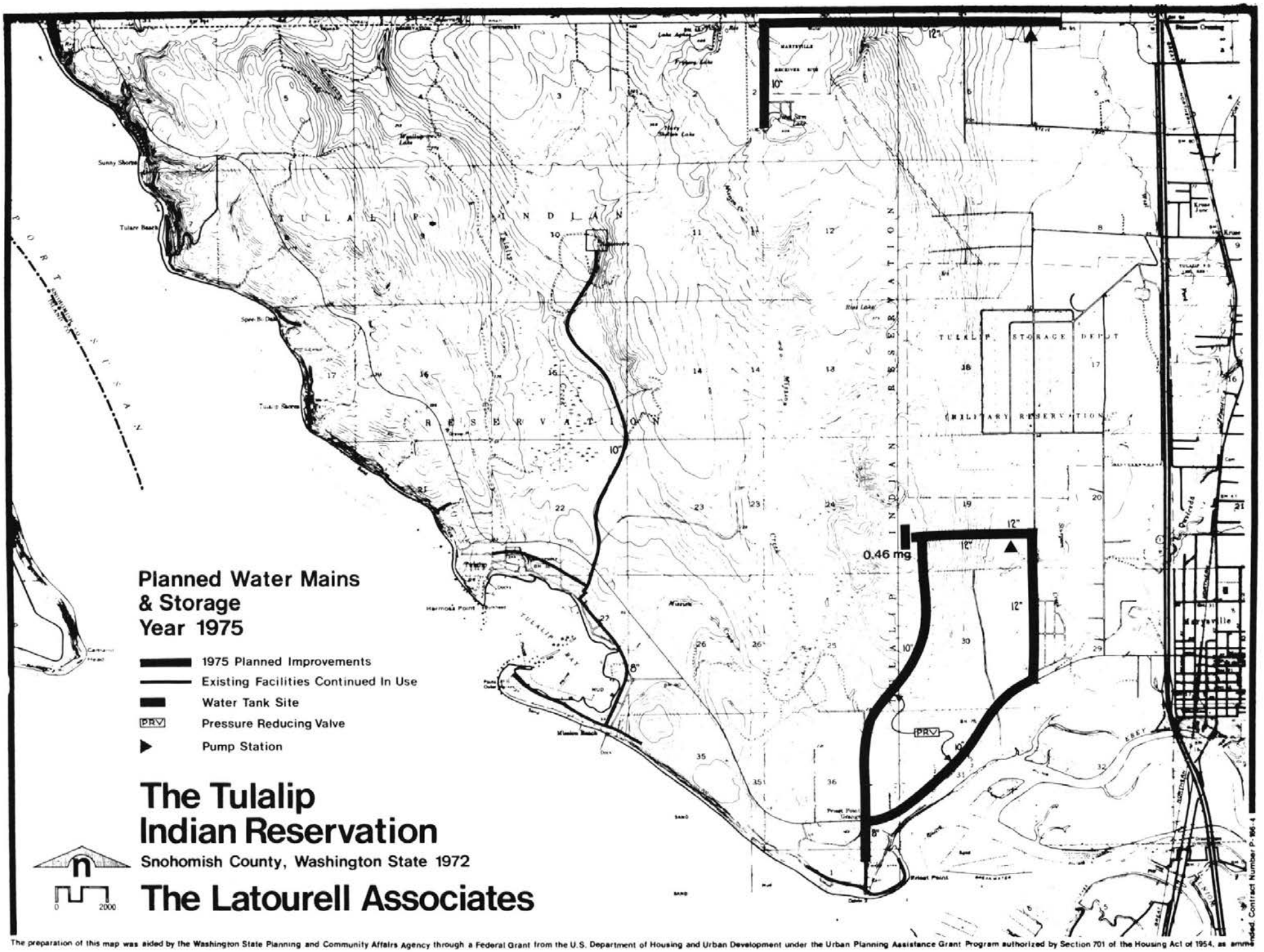

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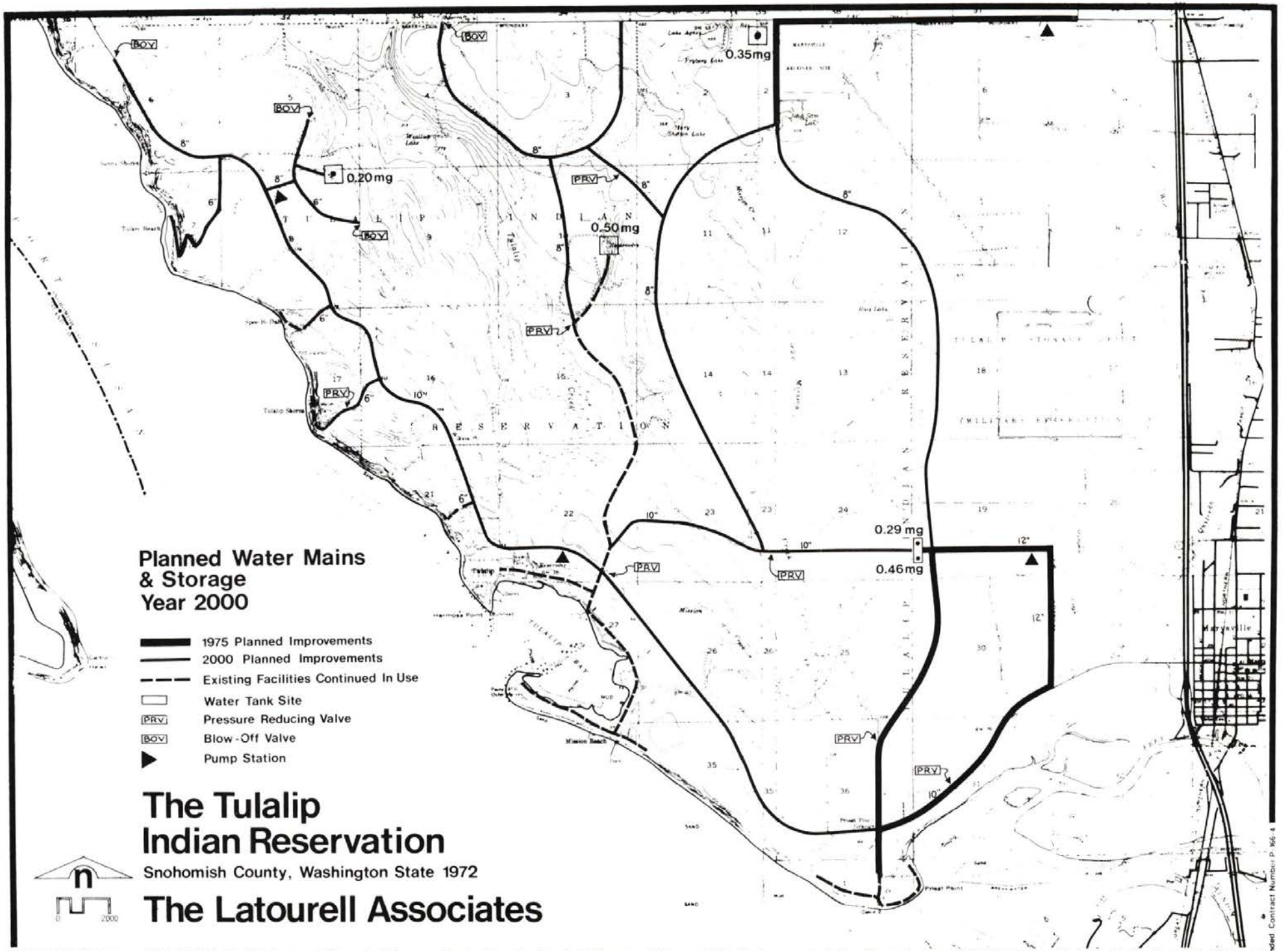

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1975 IMPROVEMENTS

Item No.	Description	Estimated Quantity	Unit	Unit Price	Amount
1	8" A.C. Water Main	1,800	L.F.	$ 4.10	$ 7,400
2	10" A.C. Water Main	23,900	L.F.	5.30	126,500
3	12" A.C. Water Main	22,100	L.F.	6.20	137,000
4	Fire Hydrants	92	Each	360.00	33,100
5	8" Gate Valve and Box	1	Each	160.00	160
6	10" Gate Valve and Box	5	Each	180.00	900
7	12" Gate Valve and Box	6	Each	220.00	1,320
8	Blow Off Valve	1	Each	150.00	150
9	Air Release Valves	2	Each	130.00	260
10	Services (with meter)	292	Each	160.00	46,700
11	PRV Stations	2	Job	2,500.00	5,000
12	Booster Pump (1500 gpm)	2	Job	14,000.00	28,000
13	460,000 Gallon Storage Tank	1	Job	140,000.00	140,000
14	Gravel Backfill	800	C.Y.	4.60	3,680
15	Bedding Sand	4,500	C.Y.	4.80	1,600
16	Shoulder Top Course	1,200	C.Y.	7.50	9,000
17	Electrical Controls	2	Job	8,000.00	16,000
				Sub Total	578,560
				Contingencies (approx. 5%)	28,900
				Sub Total	607,460
				Sales Tax @ 5%	30,300
				Engineering & Administration @ 12%	72,800
				TOTAL PROJECT COST	$710,560

YEAR 2000 IMPROVEMENTS

Item No.	Description	Estimated Quantity	Unit	Unit Price	Amount
1	6" A.C. Water Main	16,000	L.F.	$ 2.90	$ 46,300
2	8" A.C. Water Main	70,600	L.F.	4.10	290,000
3	10" A.C. Water Main	55,000	L.F.	5.30	291,000
4.	Fire Hydrants	283	Each	360.00	102,000
5	6" Gate Valve and Box	5	Each	140.00	700
6	8" Gate Valve and Box	15	Each	160.00	2,400
7	10" Gate Valve and Box	8	Each	180.00	1,440
8	Blow Off Valve	4	Each	150.00	600
9	Air Rel ase Valves	8	Each	130.00	1,040
10	Services (with meter)	3,570	Each	160.00	570,000
11	PRV Stations	6	Job	2,500 00	15,000
12	Booster Pump	2	Job	14,000.00	28,000
13	290,000 Gallon Storage Tank	1	Job	87,000.00	87,000
14	200,000 Gallon Storage Tank	1	Job	68,000.00	68,000
15	350,000 Gallon Storage Tank	1	Job	100,000.00	100,000
16	Gravel Backfill	2,500	C.Y.	4.60	11,500
17	Bedding Sand	14,000	C.Y.	4.80	67,200
18	Shoulder Top Course	4,000	C.Y.	7.50	30,000
19	Electrical Controls	2	Job	8,000.00	16,000
			Sub Total		1,728,180
			Contingencies (Approx. 5%)		86,500
			Sub Total		1,814,680
			Sales Tax @ 5%		90,700
			Engineering & Administration @ 12%		218,000
			TOTAL PROJECT COST		$2,123,380

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TULALIP BAY SEWERAGE

The area surrounding Tulalip Bay is expected to be developed before other parts of the Reservation. Thus, it will be the first area to require sewerage facilities. A preliminary design of these facilities was made to develop a preliminary cost estimate.

Design Criteria

The design criteria used for the overall system were applied to the Tulalip Bay system as well. Based on planning predictions, a population of 2500 was used to size the treatment facilities. Secondary treatment was deemed necessary to provide proper protection of the receiving waters.

A prime consideration in the design of the Tulalip Bay system was to minimize initial costs since it is likely considerable time will elapse before the Basin plans are implemented. With this in mind, it was determined that an interim sewage treatment plant at Mission Beach would provide the most economical solution.

The collection system will require five pumping stations to serve the entire area. It should be noted that all five stations will be required even if the initial plant is not constructed and the ultimate plant is built first.

When the capacity of the interim plant is reached, it should be abandoned, and the first stage of the ultimate plant should be built. This would of course, require rerouting of the sewage. In order to accomplish this, minimal additions to the collection system would be required. At pumping station No. 3, on the east side of the bay, a new force main would have to be installed, lifting the sewage to the northeast where it can flow by gravity to the ultimate treatment plant site. Similarly, modifications would be required at pumping station No. 4, adjacent to the interim sewage treatment plant. A new force main should be installed to discharge to the trunk sewer near the planned vocational school.

While it is acknowledged that purchase and abandonment of high capitol cost items such as waste water treatment plants is normally not recommended, in this case it is considered economically feasible. Also, a used plant may be available through the General Services Administration. However, in the event it is not, that agency (GSA) could still assist in the resale of the initial plant when it was no longer needed.

A summary of the costs for the initial system shown on the Tulalip Bay plan follows:

Cost Summary

Sewers

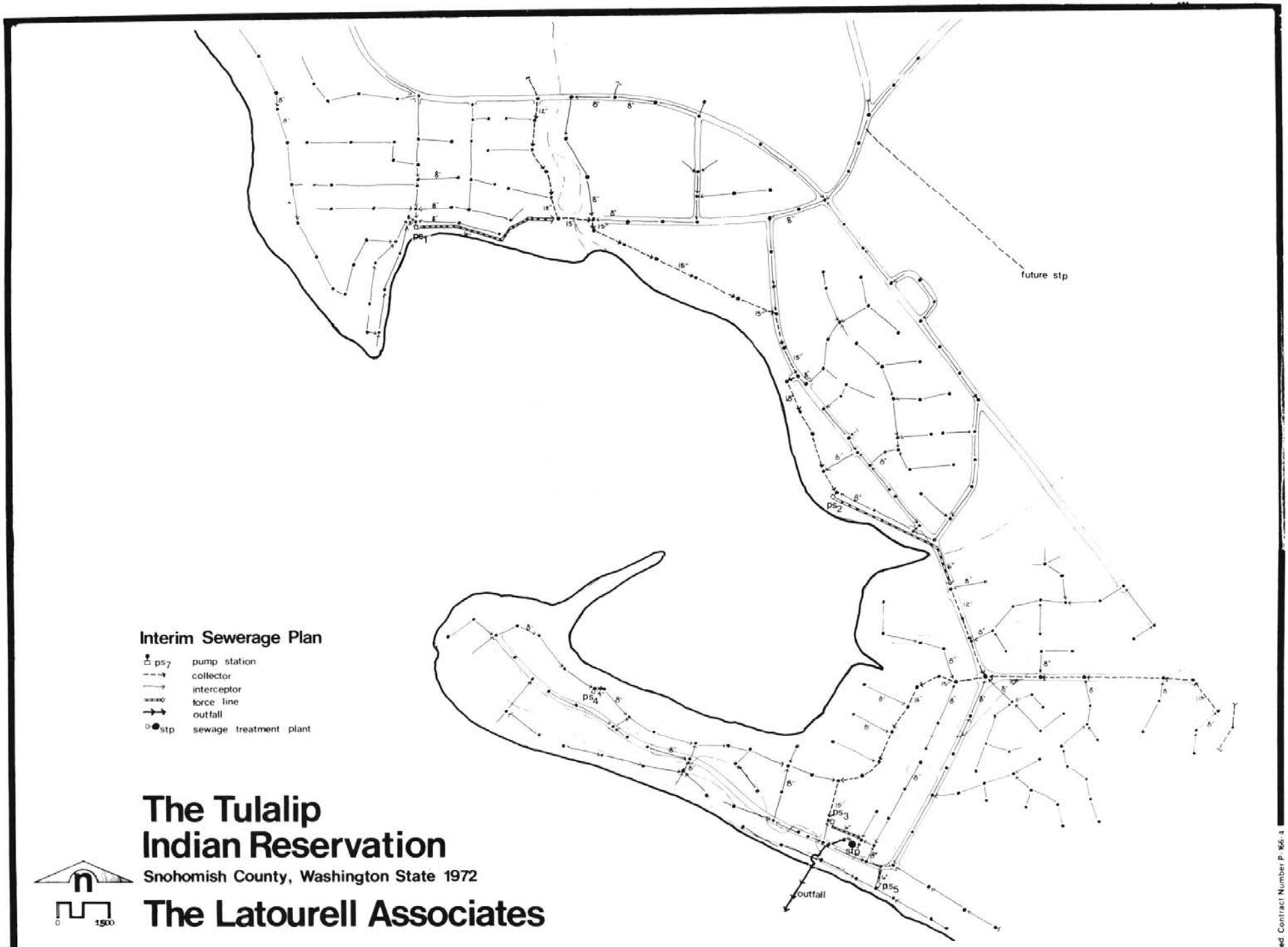
8" -	74,600 lf	@	$12.00	$ 895,200
10" -	2,400 lf	@	$13.50	32,400
12" -	2,100 lf	@	$14.50	30,450
15" -	5,400 lf	@	$16.50	89,100
18" -	1,200 lf	@	$21.00	26,250
			Sub Total	$1,073,400

Pumping Stations

#1	$ 15,000	
Force Main, 4" - 200 lf @ $6.00	1,200	
#2	25,000	
Force Main, 6" - 1400 lf @ $7.00	9,800	
#3	40,000	
Force Main, 6" - 1500 lf @ $7.00	10,500	
#4	40,000	
Force Main, 6" - 300 lf @ $7.00	2,100	
#5	15,000	
Force Main, 4" - 50 lf @ $6.50	300	
#6	15,000	
Sub Total		$173,900

Sewerage Treatment Plant

Package Plant, 0.25 MGD Cap.	$275,000	
Outfall, 12" - 1800 lf @ $60.00	108,000	
Sub Total		$383,000
Total		$1,630,300
Sales Tax @ 5%		81,515
TOTAL CONSTRUCTION COST		$1,711,815
Contingencies, Engineering, Legal & Administrative @30%		513,544
TOTAL PROJECT COST		$2,225,359



The Tulalip Indian Reservation

Snohomish County, Washington State 1972

The Latourell Associates

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WASTE WATER COLLECTION AND TREATMENT PLAN THE TULALIP RESERVATION

The sewerage study for the Tulalip Indian Reservation was divided into three main tasks:

1. Preliminary sizing of trunk and interceptor sewers in the Tulalip Basin.

2. Preliminary design of a collection system and treatment facilities to serve the Tulalip Bay area.

3. Evaluation of waste disposal methods in the Tulare Beach area.

The study was made in accordance with generally accepted sanitary engineering design standards.

THE TULALIP BASIN PLAN

The Tulalip Basin is defined largely by the natural drainage basins of Tulalip Creek and Mission Creek, extending to the north boundary of the reservation. The scope of the study was limited to approximate location and preliminary sizing of trunk sewers and interceptors.

Design Criteria

Sewage flows were determined on the basis of dwelling unit densities planned for the area, using 3.5 persons per dwelling unit and an average per capita sewage flow from 80 gallons per day. A peaking factor of 2.5 was applied to all sewage flows, and an allowance of 1100 gallons per day per acre was made for gound water infiltration and storm water inflow. All sewers were sized to accept the ultimate peak flow at a minimum velocity of 2 feet per second.

Sewage from the area along the east and south boundary of the Mission Creek drainage basin may be routed to the east or to the west. After discussions with the firm of Hammond, Collier & Wade, & Associates, engineers for the City of Marysville, it was concluded that sewage from these areas should be routed to the east, into the Quilceda Creek Basin. This basin is to be served by the Marysville system, which has already been extended to within 2 miles of the Priest Point Grange.

As shown on the system layout, parallel trunk sewers have been proposed in both the Tulalip Creek Basin and the Mission Creek Basin in lieu of one common trunk along the creeks. By building parallel lines, the pipes can be located in roads and streets to a large extent, thus minimizing the environmental impact of the construction of the sewage collection system. Furthermore, the installation of trunk lines along the creeks may present serious construction problems due to the marshy areas in the lower reaches of the crreks and the extreme relief in the upper reaches. A reduction in construction costs, as compared with parallel trunks, may therefore not be realized. Finally, parallel trunks are desirable for operational reasons, since the system will be oversized to a lesser degree during the early stages of development.

Initially, sewerage facilities will be installed to serve the area surrounding Tulalip Bay. In order to avoid large pipe sizes in the initial system, the trunks were located to bypass the Tulalip Bay area where possible.

The sewerage treatment facilities would be designed to provide secondary treatment. It is proposed that the facilities be of the conventional activated sludge type. Ultimately, the plant must provide treatment capacity for approximately 100,000 people, or an average daily flow of about 10 million gallons per day. Land requirements for a treatment plant of this size are such that the plant can not reasonably be located near the beach. One suitable location appears to be on the north side of Mission Creek, approximately three quarters of a mile upstream from Tulalip Bay. The final effluent should be discharged through a multi-port diffuser, submarine outfall at a depth of approximately 40 feet, as shown on the overall plan.

THE TULARE BEACH SYSTEM

The area which lies westerly of the Tulalip Creek Basin and northerly of the industrial site in Sections 9, 16, and 21, has been called the Tulare Beach System. Densities planned for the area are 1 D.U. per acre with large additional zones set aside as open space because of the steep topography.

Since overall environmental impact is generally quite severe in low density, single family residential developments due to access road requirements, it is probable that the region will be improved around a planned unit concept. This will substantially reduce both the areas which must be modified and improved, as well as the overall improvement costs.

Sewage disposal alternates for the planned unit development are:

1. Area wide collection with central treatment.
2. Treatment with disposal at each population center.

The area wide collection concept is not considered particularly desirable due to its extreme cost in low density areas. Sewer line construction in the steep, wooded arezs will undoubtedly cause severe erosion problems and an adverse impact on the environment will be unavoidable. Furthermore, avoidance of discharge into Port Susan with its minimum tidal exchange is desirable due to the sensitive nature of the waterway.

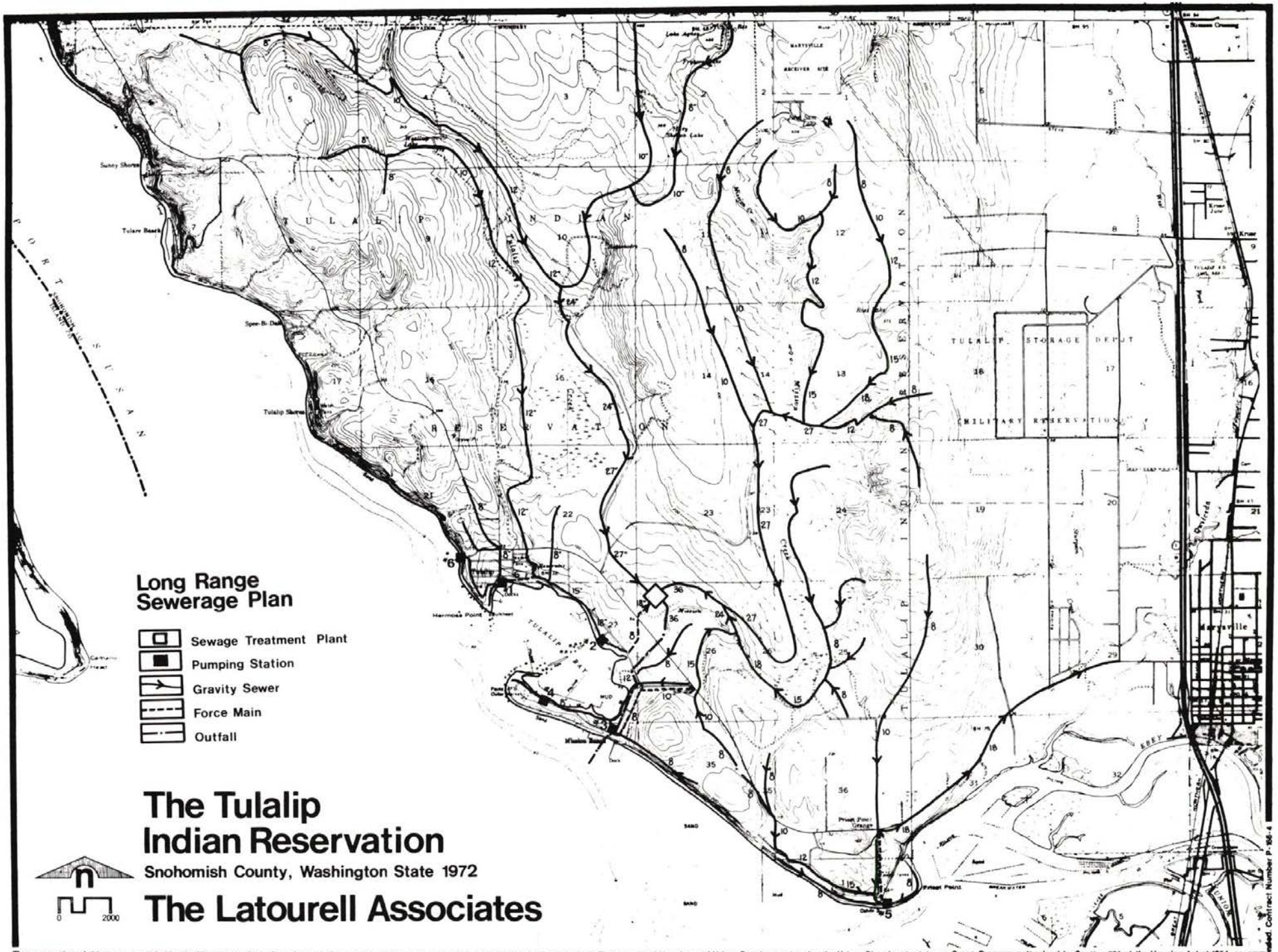
Treatment with disposal at single or multiple population centers may have certain advantages. Two disposal alternates should be evaluated; septic tanks with subsurface disposal and mechanical secondary treatment with spray irrigation of the treated and disinfected effluent.

Septic tanks require little maintenance when cleaned occasionally and the associated drainfields are properly designed and constructed. Such systems do have a finite life since the soil around the drainfield eventually becomes filled with minute particles and refuses to absorb additional moisture. When this occurs, the drainfields must be reconstructed.

Mechanical secondary treatment plants are highly efficient; however, they do require considerable operational time and skill. Spray disposal of the effluent on the ground can be very effective if the disposal field is not overloaded. Application rates must be strictly controlled and multiple fields for cycling the spray are an absolute necessity. In addition, good planning calls for a reserve field of at least the same area as the primary one.

Operation and maintenance costs for the mechanical treatment system may not be excessive providing a single population center could contract, on a part time basis, with another community's operator. As multiple centers are established, the region could undoubtedly afford a full time person.

Specific recommendations for the ultimate type of system to be used the the Tulare Beach area cannot be made at this time due to flexibility of development schemes possible within the frame of the present planning effort. It is recommended that a detailed evaluation of the alternates discussed herein be made, once the development patterns have been more firmly established. The evaluation should consider, but not necessarily be limited to, such items as reliability, environmental impact including both short and long term effects, and economics.



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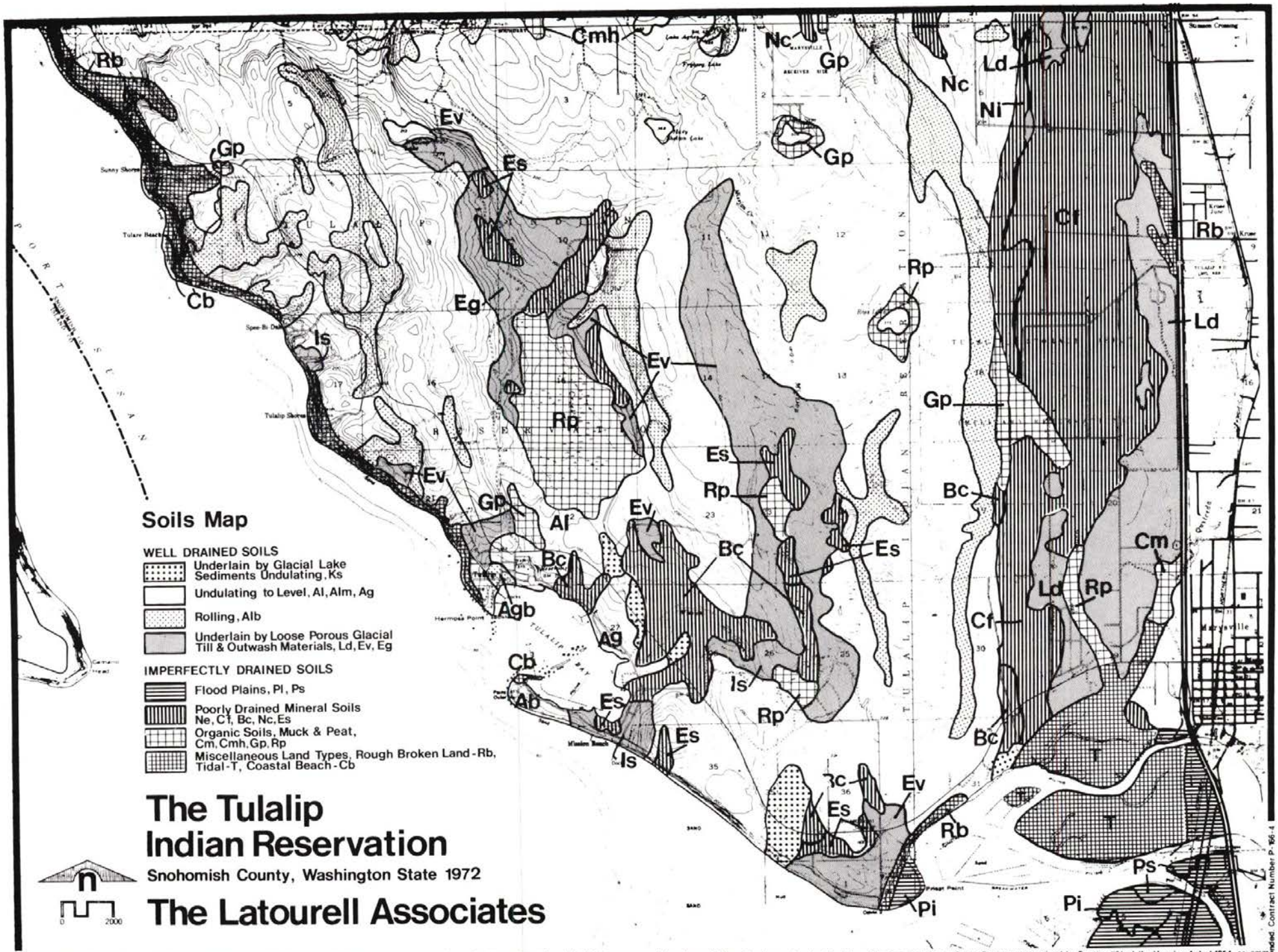

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TABLE I - PROPERTIES OF SOILS IN THE TULALIP RESERVATION

Soil Series or Land Types	Typographic Position	Surface Soils		Subsoils				Substrata				Depth of Root Penetration (inches)	Water Holding Capacity (inches)
		Textures	Water Intake Rates (in/hr)	Textures	Consistence	Permeability (in/hr)	Reaction pH	Textures and/or Parent Material	Consistence	Permeability (in/hr)	Reaction pH		
TYPE I - WELL DRAINED SOILS UNDERLAIN BY COMPACT GLACIAL TILL													
Alderwood	Upland Terrace Undulating to level	Ag gravelly loam Al gravelly sandy loam Alm gravelly sandy loam level phase	0.2-0.75	gravelly sandy loam	very friable	0.8-2.5	5.6-6.0	sandy and gravelly, glacial based till	firm hard, when dry cemented	0.05-0.2	5.6-6.5	20.0-36.0	3.3-6.0
	Rolling	Alb gravelly sandy loam hilly phase											

Soil Series or Land Types	Typographic Position	Surface Soils		Subsoils				Substrata					
		Textures	Water Intake Rates (in/hr)	Textures	Consistence	Permeability (in/hr)	Reaction pH	Textures and/or Parent Material	Consistence	Permeability (in/hr)	Reaction pH	Depth of Root Penetration (inches)	Water Holding Capacity (inches)
WELL DRAINED SOILS UNDERLAIN BY GLACIAL LAKE SEDIMENTS													
Kitsap	Upland Terrace Undulating to level	Ks silt loam	0.2-1.0	loamy sand	loose	2.5-5.0	5.1-5.5	loamy sands ablation till	loose	5.0-10.0	5.6-6.0	36.0-60.0	5.7-10.0
WELL DRAINED SOILS UNDERLAIN BY LOOSE POROUS GLACIAL TILL & OUTWASH MATERIALS													
Everett	Upland Terrace Undulating to level	Eg gravelly loamy sand Ev gravelly sandy loam	0.4-1.1	gravelly and very gravelly loamy sands	loose	5.0-10.0	5.6-6.0	gravel and sand ablation till	loose	5.0-10.0	5.6-6.0	20.0-48.0	4.0-6.0

Soil Series or Land Types	Typographic Position	Surface Soils		Subsoils				Substrata				Depth of Root Penetration (inches)	Water holding Capacity (inches)
		Textures	Water Intake Rates (in/hr)	Textures	Consistence	Permeability (in/hr)	Reaction pH	Textures and/or Parent Material	Consistence	Permeability (in/hr)	Reaction pH		
WELL DRAINED SOILS UNDERLAIN BY LOOSE POROUS GLACIAL TILL & OUTWASH MATERIALS													
Lynden	Upland Terrace Undulating to level	Ld loamy sand	0.2-1.0	loamy sand	loose	2.5-5.0	5.1-5.5	loamy sands ablation till	loose	5.0-10.0	5.6-6.0	36.0-60.0	5.7-10.0
TYPE II - IMPERFECTLY DRAINED SOILS - FLOOD PLAINS													
Puget	Alluvial flood plains	Pl clay loam Pt loam	0.1-0.75	silt loam silty clay loam or clay	firm hard sticky plastic to very plastic	0.2-0.8	5.1-5.5	silty clay loam or clay	firm hard very sticky very plastic	0.05-0.2	5.1-5.5	40.0-60.0	8.5-

Soil Series or Land Types	Typographic Position	Surface Soils		Subsoils				Substrata				Depth of Root Penetration (inches)	Water Holding Capacity (inches)
		Textures	Water Intake Rates (in/hr)	Textures	Consistence	Permeability (in/hr)	Reaction pH	Textures and/or Parent Material	Consistence	Permeability	Reaction pH		
TYPE III - POORLY DRAINED MINERAL SOILS													
Bellingham	Terrace Basins	Bc clay loam	0.1-0.3	silty clay loam, silty clay or clay	firm, sticky and plastic	0.05-0.2	5.6-7.3	clay and sandy clay	firm sticky and plastic	less than 0.05	6.6-7.3	12.0-30.0	5.5-6.5
Custer	Upland Terrace	Cf fine sandy loam	0.4-	fine sandy loam, iron cemented	firm, plastic	0.05-0.2	5.1-5.5	loamy sand, glacial outwash	firm	0.05-0.2	5.1-5.5	20.0-30.0	3.5-5.0
Edmonds	Upland Basins	Es sandy loam	0.2-0.75	loamy sand, iron cemented	firm to hard	vari-able 0.05-5.0	5.1-6.0	sand over glacial based till	loose to hard cemented	0.05-0.2	5.1-6.0	12.0-20.0	3.2-6.0

Soil Series or Land Types	Typographic Position	Surface Soils		Subsoils				Substrata				Depth of Root Penetration (inches)	Water Holding Capacity (inches)
		Textures	Water Intake Rates (in/hr)	Textures	Consistence	Permeability (in/hr)	Reaction pH	Textures and/or Parent Material	Consistence	Permeability (in/hr)	Reaction pH		
. POORLY DRAINED MINERAL SOILS													
Norma	Terrace Basin	Nc clay loam Nl loam	0.2-0.5	silty clay, sandy clay loam loamy sand or sandy loam	firm to weakly iron cemented	0.05-0.2	5.6-6.0	Stratified fine sandy loam, sandy loam, loam or gravelly sandy loam	firm to weakly cemented	variable 0.05-2.5	6.1-6.5	20.0-48.0	4.3-6.5
TYPE IV - ORGANIC SOILS													
Carbondale	Terrace and Bottom Land Basins	Cm muck Cmh Muck, shallow phase	0.2-0.4	Peat, woody	fibrous	0.05-2.5	5.1-5.5	sedimentary peat, sand, silt or clay	hard when dry	less than 0.05	5.1-5.5	12.0-36.0	4.4-12.0
Greenwood	Closed Basins	Gp peat sphagnum	over 0.55	sphagnum peat	fibrous	0.8-2.5	4.5-5.0	Sedimentary peat, silty	very soft	0.8-2.5	4.5-5.0	12.- or less	12.0+

Soil Series or Land Types	Typographic Position	Surface Soils		Subsoils				Substrata				Depth of Root Penetration (inches)	Water Holding Capacity (inches)
		Textures	Water Intake Rate (in/hr)	Textures	Consistence	Permeability (in/hr)	Reaction pH	Textures and/or Parent Material	Consistence	Permeability (in/hr)	Reaction pH		
ORGANIC SOILS													
(Rifle)	Upland and Terrace Basins	Rp peat	0.3-0.5	peat, woody peat, sedge	fibrous	0.8-2.5	5.1-7.0	peat woody sedge or sedimentary basil till sand, gravel or clay	---	0:05-0.2	5.1-7.0	12.0-60.0	5.0-12.0
TYPE V - MISCELLANEOUS LAND TYPES													
Coastal Cb Beach	Beach Areas	sands and gravelly, stony or cobbly sands	0.5-1.1	Sands and gravelly stony or cobbly sands	loose	5.0-10.0	5.6-6.0	sands and gravelly stony or cobbly sands	loose	5.0-10.0	5.6-6.0	12.0-20.0	3.0-4.0

Soil Series or Land Types	Typographic Position	Surface Soils		Subsoils				Substrata				Depth of Root Penetration (inches)	Water Holding Capacity (inches)
		Textures	Water Intake Rate (in/hr)	Textures	Consistence	Permeability (in/hr)	Reaction pH	Textures and/or Parent Material	Consistence	Permeability (in/hr)	Reaction pH		
MISCELLANEOUS LAND TYPES													
T Tidal Marsh	Tidal Basins	T variable sands, silts clays and organic materials	0.2-0.5	sands silts and clays	very soft and spongy	0.05-0.2	7.3-7.6	sands silts clay and organic material	very soft and spongy	0.05-0.2	7.3-7.6	less than 12"	4.2-6.6
Rough Rb Broken Land	Upland	sandy loams, gravelly sandy loams, loams and gravelly loams	0.2-0.75	gravelly loams, loams, sandy loams, gravelly sandy loams, stony loams and sandy stony loams	friable hard to loose	0.2-0.8	5.6-6.0	variable gravelly or stony loams or sandy loams or sands on bedrock or glacial ablation or basil till	vari-able very hard to loose	0.2-0.8	5.6-6.5	vari-able 10.0-48.0	2.5-8.0

Table I was compiled by extrapolating the data applicable to the Tulalip Reservation from Table 15, "Soil Features Affecting Engineering Practices on Highways, Puget Sound Area," Comprehensive Water Resource Study of Puget Sound and Adjacent Waters, Appendix XIV, (op. cit.), pp. 207 - 233.

TABLE II - COMPARATIVE SUITABILITY OF SOILS FOR SUBURBAN USES, TULALIP RESERVATION

Suitability for specified uses are indicated:

A: slight limitations
B: moderate limitations
C: severe limitations
D: very severe limitations

Soil Series and Type	Suitability of Soils for Uses Cited										Corrosive Effect of Soil on	
	Homesite			Community					Other			
	Buildings	Landscaping	Septic Tanks	Parks	Golf Courses	Sanitary Land Fill	Cemeteries	Sewage Lagoons	Industrial	Small Farms and Gardens	Uncoated Steel	Concrete
TYPE I - WELL DRAINED SOILS												
Alderwood 1) gravelly sandy loam 0 - 15%	B: soil	A	D: permeability 0.05-0.2 in/hr	A	A	D: cemented glacial till	C: cemented glacial till & wet	B: piping	A	A	Moderate	Moderate
15 - 30%	C: slope	A	---	A	B	---	D: slope	D: slope over 3%	B: slope	C: slope	---	---
over 30%	D: slope	D: slope	---	D: slope	D: slope	---	---	---	---	---	---	---

Soil Series and Type	Suitability of Soils for Uses Cited										Corrosive Effect of Soil on	
	Homesite			Community				Other				
	Buildings	Landscaping	Septic Tanks	Parks	Golf Courses	Sanitary Land Fills	Cemetaries	Sewage Lagoons	Industrial	Small Farms and Gardens	Uncoated Steel	Concrete
WELL DRAINED SOILS												
2) gravelly loam											Moderate	Moderate
0 - 15%	B: soil	A	D: permeability	A	A:0-15%	D: cemented	C: cemented glacil till & wet	B: piping hazard	A	A		
15 - 30%	C: slope	A	0.05-0.2 in/hr.	---	B: 15 - 25%	D: glacial till	---	---	---	C: slope		
over 30%	D: slope	D: slope	---	D: slope	D: over 25%	---	D: slope	D: slopes over 3%	D: slope	D: slope		
Everett 1) gravelly loamy sand											Very Low	Moderate
0 - 3%	C: soil	C: soil moisture	A	B: SM	B: SM	A	A	D: soil permeability 5.0-10.0	A	C: SM		
3 - 8%	C: soil	C: SM	A	B: SM	B: SM	A	A	---	A	C: SM		

Soil Series and Type	Suitability of Soils for Uses Cited										Corrosive Effect of Soil on	
	Homesite			community					Other			
	Buildings	Landscaping	Septic Tanks	Parks	Golf Courses	Sanitary Land Fills	Cemeteries	Sewage Lagoons	Industrial	Small Farms and Gardens	Uncoated Steel	Concrete
WELL DRAINED SOILS												
8 - 15%	C: slope & soil	C: SM	B: slope	C: slope & SM	C: slope & SM	C: slope	C: slope	---	B: slope	C: SM		
15 - 30%	D: slope & soil	C: SM	C: slope	C: SM	D: slope	D: slope	D: slope	---	D: slope	D: slope & SM		
over 30%	D: slope & soil	D: slope & SM	D: slope	D: SM	D: slope	D: slope	D: slope	---	D: slope	D: slope & SM		
2) gravelly sandy loam											Very Low	Moderate
0 - 3%	A	A	A	A	A	A	A	D: perme-ability 5.0 - 10.0 in/hr	A	B: soil		
3 - 8%	A	A	A	A	A	A	A	D: slope	A	B: soil		
8 - 15%	B: slope	A	B: slope	B: slope	B: slope	C: slope	C: slope	D: slope	B: slope	B: slope & soil		
15 - 30%	C: slope	B: slope	C: slope	C: slope	C: slope	D: slope	D: slope	D: slope	C: slope	D: slope & soil		

Soil Series and Type	Suitability of Soils for Uses Cited										Corrosive Effect of Soil on	
	Homesite			Community					Other			
	Buildings	Landscaping	Septic Tanks	Parks	Golf Courses	Sanitary Land Fill	Cemeteries	Sewage Lagoons	Industrial	Small Farms and Gardens	Uncoated Steel	Concrete
WELL DRAINED SOILS												
over 30%	D: slope	D: slope	D: slope	D: slope	D: slope	D: slope	D: slope	D: slope	D: slope	D: slope & soil		
Kitsap silt loam											Moderate	High
0 - 3%	B: Wetness & soil expansion	A	D: permeability 0.05-0.2 in/hr	A	B: seasonal wetness	D: seasonal water table	D: water table	D: high piping hazard & slope	C: soil moisture control, very low shear strength	B:		
3 - 8%	B: dangerous	A	---	A	B: seasonal wetness	---	---	---	C	C: slope & wetness		
8 - 15%	D: soil expansion dangerours, very low shearing strength	A	---	A	B: slope & wetness	---	---	---	D: very low shear strength & slide hazard	C: slope & wetness		

Soil Series and Type	Suitability of Soils for Uses Cited										Corrosive Effect of Soil on	
	Homesite			Community					Other			
	Buildings	Landscaping	Septic Tanks	Parks	Golf Courses	Sanitary Land Fill	Cemeteries	Sewage Lagoons	Industrial	Small Farms and Gardens	Uncoated Steel	Concrete
WELL DRAINED SOILS												
15 - 30%	D	B: slope	---	B: slope	D: slope	---	---	---	D	D: slope		
over 30%	D: danger-ous slide hazard	D: slope	---	C: slope	D: slope	---	---	---	D	D; slope		
Lynden loamy sand											Low	Low
0 - 3%	B: soil	B: soil drough-ty	A	A	A	A	A	D: perme-ability 5.0-10.0 in/hr	A	B: soil drough-ty		
3 - 8%	B: soil	B: soil drough-ty	A	A	A	A	A	---	A	B: soil drough-ty		
8 - 15%	C: slope & soil	B: soil drough-ty	B: slope	B: slope	B: slope	B: slope	B: slope	---	B: slope	C: soil & slope		

Soil Series and Type	Suitability of Soils for Uses Cited										Corrosive Effect of Soil on	
	Homesite			Community					Other			
	Buildings	Landscaping	Septic Tanks	Parks	Golf Courses	Sanitary Land Fill	Cemeteries	Sewage Lagoons	Industrial	Small Farms and Gardens	Uncoated Steel	Concrete
WELL DRAINED SOILS												
15 - 30%	D: slope & soil	C: slope & soil	D: slope	C: slope	D: slope	D: slope	D: slope	---	B: slope	D: slope		
TYPE II - IMPERFECTLY DRAINED SOILS												
Puget loam clay loam	D: flood hazard & shrink-swell mod. to high	B: flood hazard	D: flood hazard & water table	D: flood hazard & wetness	C to D: flood water control	D: flood hazard	D: Flood hazard & water table	D: flood hazard	D: flood control, high shrink - swell & very low shearing strength	B: flood hazard	High to Very High	High
TYPE III - POORLY DRAINED MINERAL SOILS												
Bellingham Clay	D: unstable high shrink-swell	D: wet	D: water table soil perme-ability less than 0.05 in/hr	D: wet	D: wet	D: water table	D: water table	D: water table & unstable soil	C: unstable soil; high shrink-swell, SM control	C: wet	Very High	Moderate

Soil Series and Type	Suitability of Soils for Uses Cited										Corrosive Effect of Soil on	
	Homesite			Community					Other			
	Buildings	Landscaping	Septic Tanks	Parks	Golf Courses	Sanitary Land Fill	Cemeteries	Sewage Lagoons	Industrial	Small Farms and Gardens	Uncoated Steel	Concrete
	POORLY DRAINED MINERAL SOILS											
Custer Five sandy loam	C: water table may be "quick"	A	D: water table	B: season-al wetness	B: seasonal wetness	D: water table	D: water table	D: water table	B: seasonal water table may be "quick" & settle. water control	A	Moderate	High
Edmonds sandy loam	B: wet, may be "quick"	B: wet	D: water table	B: wet	C: wet	D: water table	D: water table	D: water table	B: wet SM control	B: water table & soil	High	Moderate

Soil Series and Type	Suitability of Soils for Uses Cited										Corrosive Effect of Soil on	
	Homesite			Community					Other			
	Buildings	Landscaping	Septic Tanks	Parks	Golf Courses	Sanitary Land Fill	Cemeteries	Sewage Lagoons	Industrial	Small Farms and Gardens	Uncoated Steel	Concrete
POORLY DRAINED MINERAL SOILS												
Norma loam clay loam	D: wet; shrink-swell hazard	C: wet; shallow soil	D: water table	D: slow drainage	B: wet; slow drainage	D: water table	D: water table	D: water table & soil drainage	C: water control; low shearing strength when wet, & dangerous shrink-swell hazard	B: wetness & soil depth	Very Low	Low
TYPE IV - ORGANIC SOILS												
Greenwood peat	D: low bearing capacity	D: very wet	D: water table	D: very wet	D: very wet	D: water table	D: water table	D: water table; unstable material	D: low bearing capacity	D: very low fertility	Very High	Very High

Soil Series and Type	Suitability of Soils for Uses Cited										Corrosive Effect of Soil on	
	Homesite			Community					Other			
	Buildings	Landscaping	Septic Tanks	Parks	Golf Courses	Sanitary Land Fill	Cemeteries	Sewage Lagoons	Industrial	Small Farms and Gardens	Uncoated Steel	Concrete
ORGANIC SOILS												
Rifle peat Carbondale muck	D: low bearing strength, wet	D: wet	D: water table	D: wet	D: wet	D: water table	D: water table	D: water table	C: waste control and/or remove peat. low bearing strength	B: wet, water table	Very High	High
TYPE V - MISCELLANEOUS LAND TYPES												
Coastal Beach	D	D: unstable	D: wet	A	D: unstable	D: unstable	D: unstable	D: wet	C: unstable	C: soil unstable	Moderate	Low to Moderate
Rough Broken Land	D: steep & variable	D: soil	D: shallow soils & slope	D: soil & slope	D: soil & slope	D: soil & slope	D: shallow soils & slope	D: slope	D: slope & soils	D: soils & slope	Variable	Variable

Soil Series and Type	Suitability of Soils for Uses Cited										Corrosive Effect of Soil on	
	Homesite			Community					Other			
	Buildings	Landscaping	Septic Tanks	Parks	Golf Courses	Sanitary Land Fill	Cemeteries	Sewage Lagoons	Industrial	Small Farms and Gardens	Uncoated Steel	Concrete
MISCELLANEOUS LAND TYPES												
Tidal Marsh	D: very low bearing strength	D: very wet	D: water table & flooding	D: very wet	D: very wet	D: water table	D: water table	D: water table	D: very low bearing strength & very wet	D: very wet & flooding	Very High	Low

Table II was compiled by extrapolating the data applicable to the Tulalip Reservation from Table 14, "Comparative Suitability of Soils for Suburban Uses, Puget Sound Area," Comprehensive Water Resource Study of Puget Sound and Adjacent Waters, Appendix LIV, (op. cit.), pp. 149-204.

E

SURVEY OF EXISTING DATA SOURCES

Because of the size and complexity of the Tulalip Reservation, many federal, state and local agencies have some activities that influence development of the Reservation. Often these activities overlap, resulting in duplication of data. Consequently, many agencies hold the same information as the others. During the early stages of the study these resource agencies were identified and the general nature of their data is described below.

Local Agencies

I. The Tulalip Tribes:
The tribal office and OEO staff have extensive information on the following:
   A. Tribal Population and Employment
   B. Tribal Government and its functions
   C. Land Ownership, Indian and non-Indian

II. Snohomish County Planning Department:
The Planning Department is a repository of data touching on virtually every aspect of physical planning on the Reservation. In particular, land uses, development trends, utilities and public facilities, population and economic development. The department is preparing a bibliography of the available data in its files.

III. The Snohomish County Engineer:
Information on roads, storm drainage and utilities is available from this office.

IV. Snohomish County Assessor:
Land Ownership records are automated for retrieval by a number of different categories.

V. The Snohomish County Prosecuting Attorney:
The prosecuting attorney has information regarding the legal and jurisdictional problems on the Reservation.

VI. Snohomish County Park Department:
The Park Department has explored the Reservation for recreational sites and has requested several potential park areas on the Reservation.

VII. Intermediate School District IV:
School facility and enrollment data is readily available from this source.

VIII. The City of Marysville:
Marysville water and sewer service extends into the Reservation and information can be acquired from the Engineer's Office.

IX. Puget Sound Governmental Conference:
Information on regional population, employment and transportation is available from this source.

State Agencies

I. Department of Fisheries:
The Department of Fisheries has studied the fishing resources of the Reservation waters.

II. Department of Game:
This department has studied the sport fishing potential of Reservation waters.

III. Department of Health:
In conjunction with the Snohomish County Planning Department, sanitary waste problems on the Reservation have been studied.

IV. Department of Highways:
The Department of Highways has information regarding the future development of Interstate 5 on the Reservation.

Federal Agencies

1. Bureau of Indian Affairs:
The BIA has information on Indian ownership of land, leases negotiated, treaties, decisions, and legal status of reservations.

II. U.S. Public Health Service:
U.S.P.H.S., Division of Indian Health maintains records of Indian health on the Reservation.

III. U.S. Corps of Engineers:
The Corps. of Engineers has made numerous studies of Reservation shorelands, including the Puget Sound and Adjacent Waters Study.

IV. U.S. Department of Agriculture:
The Soil Conservation Service has mapped soil types and geological forms of the Reservation.

While these are the major resources of data, about the Tulalip Reservation, there are numerous individuals and documents that provide additional information.

In addition to the major sources of data listed above, there are many specific programs and areas of involvement that are currently underway or contemplated in the near future. Although these programs and services may not generate information directly applicable to this and succeeding planning efforts, a listing is useful in gauging the broad range of activities and involvement of public agencies on the Tulalip Reservation. These agencies and programs are described below:

Local Agencies

I. Local law enforcement agencies, police protection and coordination.

II. YMCA recreational facilities

III. Marysville School District: Johnson - O'Mally Title 1 (ESEA) and Teacher Corps Intern Program

IV. Everett Community College: Coordination of educational programs, and counselling

V. CAMPS (Cooperative Area Manpower Planning System)

State Agencies

I. Division of Public Assistance: Coordination of Services

II. Division of Employment Security: Involvement in manpower and employment programs. M.D.T.A., E.S.P., S.T.E.P., and O.U.T.

III. Western Washington State College: Teacher Corps Intern Program, Upward Bound

IV. Washington State University: Extension Services.

V. University of Washington: Student Volunteer Planning and Design Services.

Federal Agencies

I. Indian Health Service: Contract Services of Community Health Representative.

II. Bureau of Indian Affairs: Wide range of programs.

III. Farmers Home Administration: Housing assistance.

IV. U.S. Department of Agriculture: Rural Development Committee.

V. Department of Housing and Urban Development: Housing and public facilities programs.