Warm Springs Specific Plan

A Part of the Warm Springs Area Plan, Washoe County Comprehensive Plan

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WASHOE COUNTY
COMMUNITYSERVICES DEPARTMENT
PLANNING & BUILDING

1001 East Ninth Street
RENO, NEVADA 89512
(775) 328-3600

Warm Springs Specific Plan

A Part of the Warm Springs Area Plan, Washoe County Comprehensive Plan

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This document, as adopted, is a part of the Warm Springs Area Plan, one of a series which constitutes a part of the Master Plan for Washoe County, Nevada.

If you have a copy of the Comprehensive Plan notebook, please place this behind the Warm Springs Area Plan tab.

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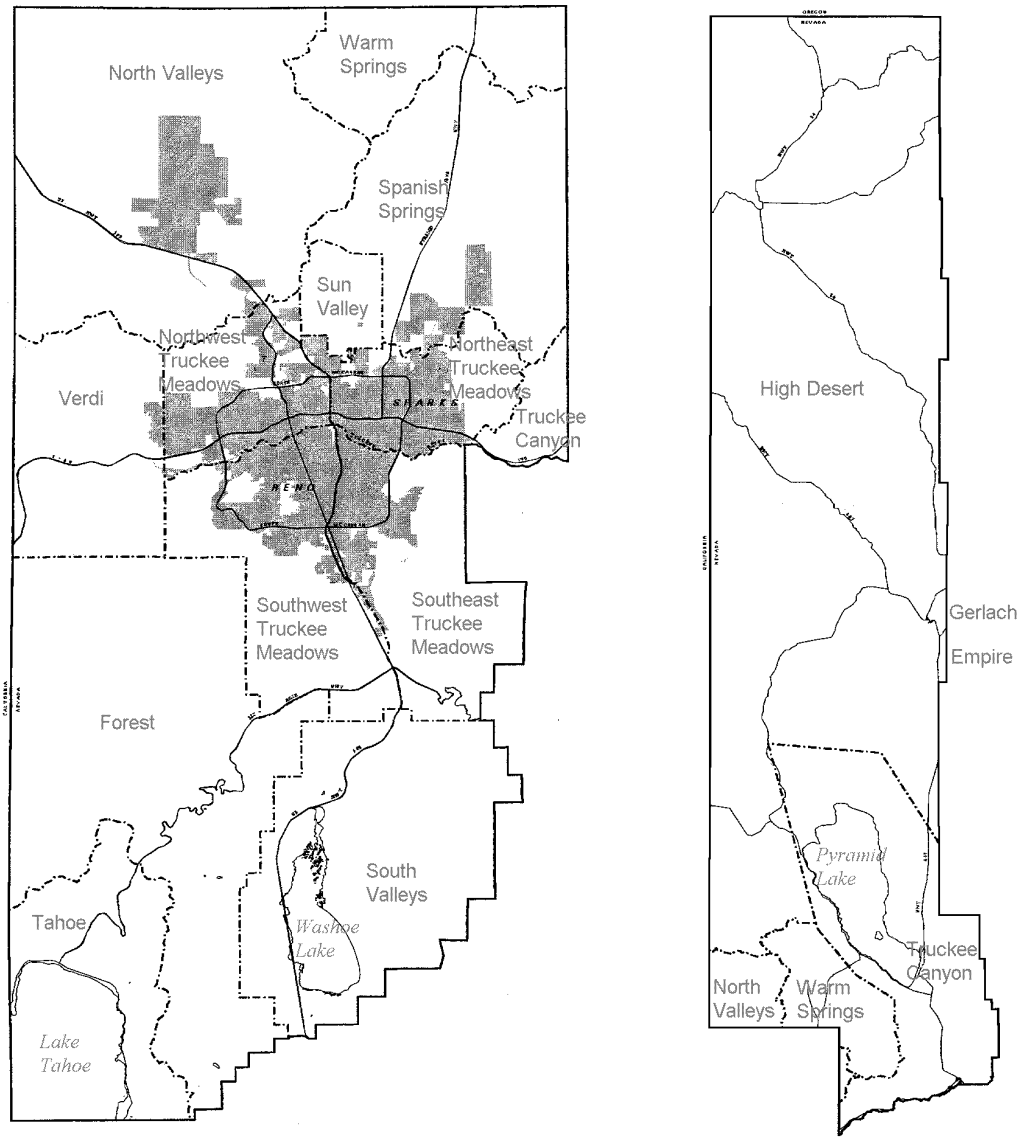

WASHOE COUNTY

PLANNING AREAS

PLANNING AREA BOUNDARIES

COUNTY BOUNDARIES

ROADS AND WATERBODIES

INCORPORATED CITIES

NOTE: PLANNING AREAS EXCLUDE INCORPORATED CITIES

SOURCE: WASHOE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT

DATE: JANUARY 1997

NO SCALE

Department of Community Development

WASHOE COUNTY

Post Office Box 11130
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WASHOE COUNTY COMMISSION

1001 E. 9th Street
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RESOLUTION
ADOPTING THE AMENDED WARM SPRINGS SPECIFIC PLAN,
A PART OF THE WARM SPRINGS AREA PLAN,
WASHOE COUNTY COMPREHENSIVE PLAN (CPA94-WS-1)

WHEREAS, Section 278.150 and 278.210, Nevada Revised Statutes, specifies that the Washoe County Planning Commission may prepare, adopt and amend a master (comprehensive) plan for all or any part of the County;

WHEREAS, The Washoe County Planning Commission has found that the amended WARM SPRINGS SPECIFIC PLAN, A Part of the Warm Springs Area Plan, Washoe County Comprehensive Plan, provides a long-term general plan for the development of the County including the subject matter currently deemed appropriate for inclusion in the Comprehensive Plan;

WHEREAS, Section 278.220, Nevada Revised Statutes, specifies that the Board of County Commissioners of Washoe County, Nevada, may adopt and endorse plans for Washoe County as reported by the Planning Commission, in order to conserve and promote the public health, safety and general welfare;

WHEREAS, A public hearing on the adoption of the Washoe County Comprehensive Plan, including the WARM SPRINGS AREA PLAN, was held on May 21, 1991, by the Board of County Commissioners of Washoe County, Nevada;

WHEREAS, Section 278.028, Nevada Revised Statutes, specifies that the Board of County Commissioners must submit the Washoe County Comprehensive Plan, including the WARM SPRINGS AREA PLAN, to the Truckee Meadows Regional Planning Commission for review of conformance with the Truckee Meadows Regional Plan;

WHEREAS, A public hearing for the review of conformance of the Washoe County Comprehensive Plan, including the WARM SPRINGS AREA PLAN, was held on October 23, 1991, by the Truckee Meadows Regional Planning Commission, at which time the plan was deemed in conformance with the Truckee Meadows Regional Plan;

WHEREAS, The Washoe County Planning Commission has submitted an amendment to the WARM SPRINGS SPECIFIC PLAN, A Part of the Warm Springs Area Plan, Washoe County Comprehensive Plan, which is in conformance with the Truckee Meadows Regional Plan, to the Board of County Commissioners of Washoe County, Nevada, for approval and adoption; and

WHEREAS, A public hearing on the adoption of the WARM SPRINGS SPECIFIC PLAN, A Part of the Warm Springs Area Plan, Washoe County Comprehensive Plan, was held on September 22, 1992, and a public hearing on the adoption of the amended WARM SPRINGS SPECIFIC PLAN, A Part of the Warm Springs Area Plan, Washoe County Comprehensive Plan, was held on April 18, 1995, by the Board of County Commissioners of Washoe County, Nevada; now, therefore, it is hereby

RESOLVED, BY THE BOARD OF COUNTY COMMISSIONERS OF WASHOE COUNTY, NEVADA, That the Board does hereby adopt and endorse the amended WARM SPRINGS SPECIFIC PLAN, A Part of the Warm Springs Area Plan, Washoe County Comprehensive Plan, to serve as a guide for the orderly growth and development of Washoe County, Nevada.

ADOPTED This 18th day of April, 1995.

/s/
CHAIRMAN

ATTEST:

/s/
COUNTY CLERK

RESOLUTION NO. 95-2
ADOPTING AN AMENDMENT TO THE WARM SPRINGS SPECIFIC PLAN,
A PART OF THE WARM SPRINGS AREA PLAN,
WASHOE COUNTY COMPREHENSIVE PLAN (CPA94-WS-1),
AND RECOMMENDING ITS ADOPTION TO THE BOARD OF COUNTY COMMISSIONERS

WHEREAS, Section 278.170, Nevada Revised Statutes, provides that the Washoe County Planning Commission may prepare and adopt a master (comprehensive) plan for all or any part of the County;

WHEREAS, Section 278.160, Nevada Revised Statutes, specifies that the master (comprehensive) plan shall include the following subject matter or portions thereof as deemed appropriate: community design, conservation plan, economic plan, housing, land use plan, population plan, public buildings, public services and facilities, recreation plan, seismic safety plan, solid waste disposal plan, streets and highways plan, transit plan, and transportation plan, and such other plans as judged necessary; and

WHEREAS, public hearings on the adoption of the proposed amendments to the WARM SPRINGS SPECIFIC PLAN, A Part of the Warm Springs Area Plan, Washoe County Comprehensive Plan, were held on November 15, 1994 and March 7, 1995, by said Commission;

NOW, THEREFORE, BE IT RESOLVED that the Washoe County Planning Commission does hereby find that the amendments to the WARM SPRINGS SPECIFIC PLAN, A Part of the Warm Springs Area Plan, Washoe County Comprehensive Plan, do: provide a long-term general plan for the development of the County including the subject matter currently deemed appropriate for inclusion in the comprehensive plan; and

BE IT FURTHER RESOLVED that the amendments to the WARM SPRINGS SPECIFIC PLAN, A Part of the Warm Springs Area Plan, Washoe County Comprehensive Plan, be submitted to the Board of County Commissioners, Washoe County, with the recommendation for approval and adoption thereof.

ADOPTED this 7th day of March, 1995.

WASHOE COUNTY PLANNING COMMISSION

Lyman H. Metcalf, Chairman

ATTEST:

John B. Hester, Secretary

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ACKNOWLEDGMENTS

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SEA INCORPORATED CONSULTING ENGINEERS

Randal Walter, AICP, Project Planner
Barbara Hatch, Landscape Architect

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INTRODUCTION

VISION STATEMENT

Our vision of the Warm Springs Specific Plan area is to establish a mix of land uses including agricultural, residential, parks and recreation, public facilities, low density office commercial, limited light industrial, and small-scale general commercial. The Specific Plan area will serve as both the center of residential development and as the community service center for the Warm Springs planning area. Development within the SP should maintain and enhance the rural character of the Warm Springs planning area.

RURAL CHARACTER

1. The provision of open spaces to foster retention of natural vegetation and to provide corridors for wildlife to traverse the area.

2. Restriction of development on individual lots through building envelope designations to limit disturbance of existing native vegetation, and provide effective open space areas on all individual lots.

3. The ability to conduct agricultural related activities within the area, and the ability to keep and raise 4H/FFA animals within designated areas.

4. Use of muted, earth-tone coloration of buildings and structures, vegetative screening, low-impact on-premise signs, reduction of glare from outside lighting and roadway design to encourage pedestrian/equestrian traffic.

5. Development of equestrian facilities and trails to establish a bucolic atmosphere within the SP.

6. Development of design guidelines that require variations in building envelopes that link individual lot open spaces and create open space corridors.

7. Home businesses would be permitted based on compliance with County regulations.

8. Preservation of the air quality and of the serene aspects of the valley, such as the quiet and the clear views of the mountains and the night sky.

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CONSERVATION

This section of the plan identifies types of resources and their constraints on land use in the Warm Springs Specific Plan area. The first part deals with cultural and scenic resources. The second addresses land and water resources that pose safety and environmental problems for future development.

Cultural and scenic resources discussed in this section include archaeological sites, architectural and historic places, and scenic areas; land resources include soils, topography, vegetation, geologic and seismic hazards, wildlife and wildlife habitats, and agricultural lands; and water resources include 100-year floodplains, creeks and drainageways.

The Specific Plan area has many scenic resources and other characteristics that make it a desirable place in which to live. These resources pose constraints and influence the location and intensity of future land use.

CULTURAL AND SCENIC RESOURCES

ARCHAEOLOGICAL RESOURCES

Prehistoric artifacts, seasonal camps and residential sites give evidence of long-term human occupation of the Warm Springs planning area. Past cultures of the area include the Washo Indians and Northern Paiute Indian groups. A major portion of the Specific Plan area currently is in agricultural use. Any cultural resources that may have existed in the Specific Plan area have likely been disturbed or removed.

ARCHITECTURALLY SIGNIFICANT AND HISTORIC PLACES

If building foundations, structures, and various artifacts related to early settlements, including mining and ranching, are found in the Specific Plan area, appropriate surveys should be conducted to determine if they are architecturally significant or historic sites.

SCENIC AREAS

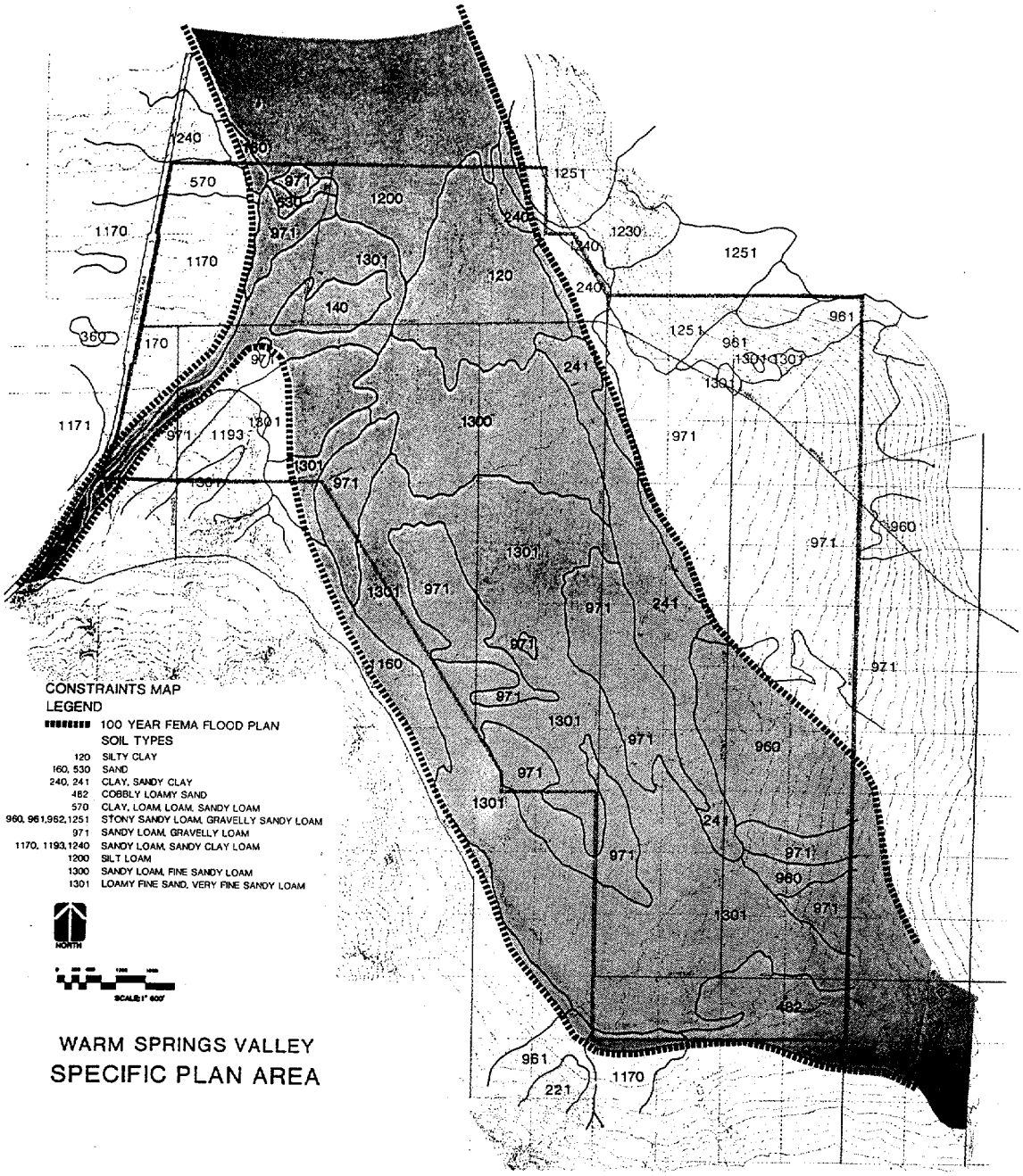
The Specific Plan area has outstanding scenic resources which add to the desirability of the area as a place in which to live. The area offers views of the valley and rugged mountain terrain, including the volcanic rock formations north of the SP. The planning area is set in the Warm Springs Valley surrounded by Hungry Ridge and the Pah Rah Range. The open space of the valley, with contrasts of color and elevation of the mountains, provide important visual resources.

LAND RESOURCES

The Specific Plan area is located in a large valley traversed by several drainageways with various soil properties, diverse vegetative coverage and wildlife habitats. Known geologic and seismic hazards exist just outside of the Specific Plan area. (Refer to Plate 1, Constraints Map.)

Plate 1

CONSTRAINTS MAP



SOILS

The characteristics of soils in an area help determine expected development constraints. In the Specific Plan area, soil-related constraints include limited problems of erosion, some limitations for septic tank absorption fields, and isolated expansive clays. Additional information about soils is available in the Washoe County Comprehensive Plan Conservation Element and in the Soil Survey of Washoe County, Nevada, prepared by the U. S. Soil Conservation Service. (Refer to Plate 1, Constraints Map.)

EROSION HAZARDS

Soil types in the Specific Plan area determine whether erosion hazards are classified as moderate or severe. Combined with problems of vegetative cover, erosion is a concern in the area and must be taken into account during any development activity.

LIMITATIONS FOR SEPTIC TANK ABSORPTION FIELDS

The U. S. Soil Conservation Service has identified many soils in the Specific Plan area as having some limitations for septic tank absorption fields. Any development proposal in the Specific Plan area must take this into consideration.

BUILDING LIMITATIONS

Soils that present constraints with regard to buildings or other structures have been identified by the U. S. Soil Conservation Service (SCS) in the Specific Plan area. Development in these areas would require design that takes these constraints into consideration.

TOPOGRAPHY

The topography of the Specific Plan area is composed of a large, gently sloping valley traversed by drainageways running south to north. Topographic maps prepared from aerial surveys were used to prepare the land use map. There are no slopes in the Specific Plan area that exceed 15 percent.

VEGETATION

The type of vegetation other than agricultural in the Specific Plan area varies from zones of sagebrush and rabbitbrush to annual grasses scattered throughout the area. The most abundant vegetative type in the non-developed areas is the northern desert shrub community. This shrub, brush and grass community provides habitat for many small species of wildlife.

FIRE HAZARDS

Certain portions of the Specific Plan area are considered to be areas of high wildfire potential. These wildfires burn very rapidly due to flammable resins in the desert shrub prevalent in the area.

GEOLOGIC HAZARDS

EARTHQUAKE HAZARDS

Two major effects of earthquakes that may occur in the Specific Plan area are surface rupture/ground displacement along a fault, and ground shaking. Each of these effects can cause major damage to structures, utilities and roads. The Nevada Bureau of Mines and Geology has only preliminary data for the Warm Springs planning area. Faults have been mapped around the borders of the valley outside of the Specific Plan area.

LANDSLIDES AND DEBRIS FLOWS

Both landslides and debris flows have occurred in recent times and may be a hazard in portions of the Specific Plan area. In general, areas at greatest risk due to earth movement are those located below the mouths of canyons. According to preliminary mapping by the Nevada Bureau of Mines and Geology, Mackay School of Mines, University of Nevada, Reno, there are alluvial fans in the planning area which are deposited in part by debris flows. These alluvial fans appear to be the most susceptible to this hazard. Some of these flat, alluvial areas may be prone to flash flooding.

WILDLIFE AND WILDLIFE HABITATS

The Specific Plan area provides important habitat to a variety of small wildlife species. The Bureau of Land Management (BLM) and the Nevada Department of Wildlife have reviewed the Specific Plan area. Based on their consultation, there are no identified unusual or important wildlife habitat in the Specific Plan area. (Refer to letter from the Wildlife Management Biologist included as Appendix E of this plan.) The natural setting, including wildlife habitat areas, is an appealing attraction for development. The importance of the area to small wildlife should not be overlooked during development and should incorporate these areas within the open space provided within each development.

BIG GAME SPECIES

Pronghorn antelope and mule deer are the major big game species found in the Warm Springs planning area, outside of the Specific Plan area. Their habitat includes much of the Virginia Mountains and the Pah Rah Range. There are no identified unusual or important wildlife habitats within the SP. (Refer to letter from Wildlife Management Biologist as Appendix E.)

Small game species found in the Specific Plan area include rabbits and coyotes. Most of these small game species' natural ranges include both the upper elevations of the surrounding mountains and the valley floor. Measures to protect or enhance game species' habitat should be implemented during any development activity.

GAME BIRDS

Habitat areas of California quail are located in the Specific Plan area. The quail in the area depend on riparian vegetation for cover and roosting areas. Migratory birds (ducks, geese, etc.) occasionally use the agricultural fields and open water sources of the valley.

NON-GAME SPECIES

A variety of non-game species occur in the planning area. These species include squirrel, mice, skunk, hawk and sparrow.

AGRICULTURAL LAND

FARMLAND

The U. S. Soil Conservation Service has determined areas which are considered prime farmland. These are lands which provide the highest crop yields with minimal inputs of energy and economic resources and can economically sustain high yields of crops when managed using acceptable farming methods. Prime farmland has not been mapped in the Specific Plan area. Land designated as receiving an active agricultural deferment by the Washoe County computer aided appraisal system (CAAS) files is shown as agricultural land use on the Existing Land Use map. (Refer to Plate 3 in the Land Use and Transportation section.)

WATER RESOURCES

Refer to Appendix D for water resource evaluation.

DRAINAGE

The Specific Plan area has an extensive area designated as "A" on the Federal Emergency Management Agency (FEMA) maps effective August 1, 1984. (Refer to Plate 1, Constraints Map.) By FEMA definition, this is an area of 100-year flooding potential, but no flood elevations or flood hazard factors are known.

The overall SP area is characterized by very flat terrain that has soils in certain areas that are susceptible to erosion. This causes flood waters to take different courses once they leave defined stream beds such as Cottonwood Creek. Based on conversations with long time local residents, these flood waters have taken a variety of courses that is typical of shallow sheet flow on these very flat slopes.

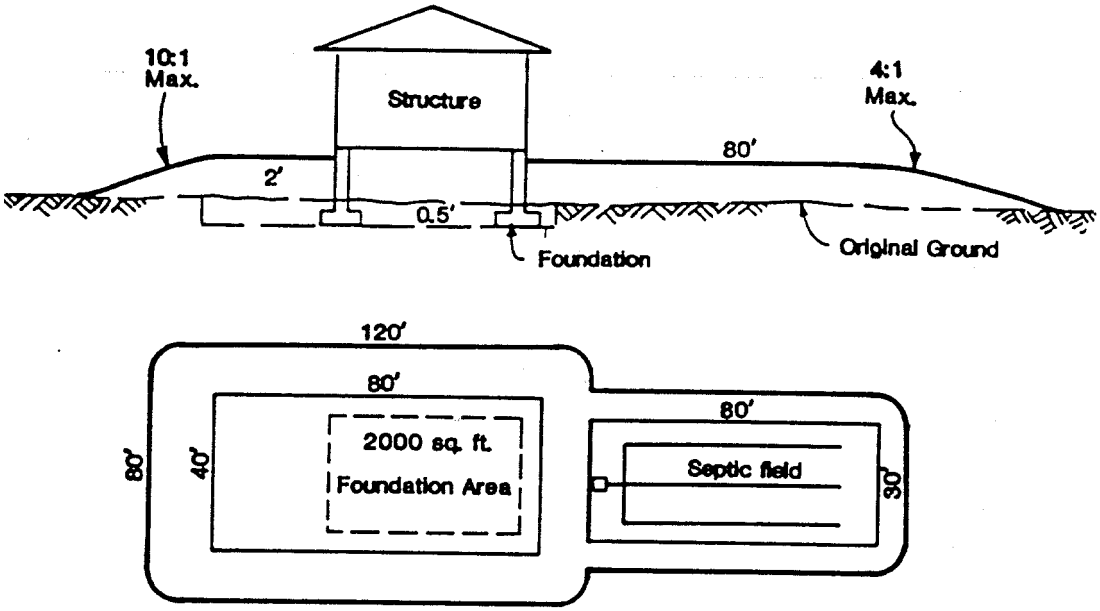
FLOOD HAZARDS/100-YEAR FLOODPLAIN

The Federal Emergency Management Agency (FEMA) has mapped the area's 100-year floodplains. (Refer to Plate 1, Constraints Map.) By FEMA definition, a large area of the SP area is designated "A", or 100-year flooding potential, but no flood hazard factors are known.

FEMA Flood Map amendments may not be necessary to permit development as proposed by this plan (refer to the above discussion). Development on parcels will be permitted within the FEMA designated "A" zone if it complies with Washoe County Flood Hazard Reduction Ordinance #738 and it does not conflict with the preliminary drainage plan for the SP. Parcels will be required to construct elevated building pads within the floodplain. (Refer to Plate 2, Large Lot Flood Protection.)

Plate 2

LARGE LOT FLOOD PROTECTION



AIR RESOURCES

AIR QUALITY

The Truckee Meadows Air Quality Basin is an area designated to be in "non-attainment" of federal standards for carbon monoxide (CO) and total suspended particulates (TSP). The plan area is located outside the Truckee Meadows Air Quality Basin. It is within an adjacent basin to the north.

The development of the plan area will increase the vehicle trips in the valley, therefore, there will be an increase in CO levels. Generally, CO levels increase as the traffic level of service decreases. To mitigate the increasing CO levels, the best method is to maintain a traffic level of service of D or better. Methods of traffic mitigation are addressed in the Land Use and Transportation section.

The sources of TSP or particulates are dust during construction and wood burning devices. The contractor will be required to mitigate construction dust during the construction activities in accordance with current Washoe County Dust Control Standards. The Washoe County standards prohibit installation of wood-burning devices which do not comply with EPA (Environmental Protection Agency) standards on emissions and prohibit all wood burning devices for developments of 4 du/acre or more. The maintenance of these standards will reduce the potential impacts of wood-burning devices on particulates.

Commercial and/or industrial uses which are large generators of more than 10 tons of air pollutants per year should be discouraged from locating in the planning area. Examples of these uses would be food processing, concrete and asphalt batch plants, metals production, plating operations, auto/truck repair, printing, manufacturing and laboratories.

CONSERVATION POLICIES AND ACTION PROGRAMS

CULTURAL AND SCENIC RESOURCES

WSSP.1.1 PROTECT THE VISUAL QUALITY OF THE PEAKS AND RIDGES SURROUNDING THE WARM SPRINGS PLANNING AREA.

WSSP.1.1.1 During review of development proposals, projects will be evaluated to determine if road cuts and grading adversely affect views from the valley floor. If they do, mitigation measures such as screening, relocation, etc. will be required.

WSSP.1.2 MAINTAIN THE RURAL CHARACTER OF THE PLANNING AREA AND PROTECT NATURAL HABITATS AND PRESERVES.

WSSP.1.2.1 Washoe County should work closely with agencies seeking to preserve and protect both the rural atmosphere and natural surroundings of the area.

WSSP.1.3 PRESERVE THE SCENIC RESOURCES AND VIEWS OF THE WARM SPRINGS PLANNING AREA AS SEEN FROM THE PYRAMID LAKE HIGHWAY. FUTURE DEVELOPMENT SHOULD BE SET BACK A MINIMUM OF 250 FEET FROM PYRAMID LAKE HIGHWAY TO ENSURE THAT THE SCENIC VIEWS OF THE WIDE VALLEY FLOOR AND SURROUNDING RIDGES AND MOUNTAINS ARE NOT DEGRADED. FUTURE DEVELOPMENT ADJACENT TO PYRAMID LAKE HIGHWAY SHOULD COMPLEMENT AND ENHANCE THE RURAL CHARACTER OF THE PLANNING AREA.

WSSP.1.3.1 A buffer should be provided between all property lines and pavement along all rural collectors and the spine road. Fences, walls or structures should not be permitted in these areas. Development designs shall be encouraged to maintain a compatible landscaping theme for these buffer areas throughout the SP area.

WSSP.1.3.2 Require the underground placement of secondary and service lines and other utilities for any new development at suburban densities in the SP area.

WSSP.1.3.3 The development design should be encouraged to provide open space linkages to establish a trail network system throughout the planning area.

WSSP.1.4 ESTABLISH A PROCESS FOR CONSULTATION WITH THE STATE ARCHAEOLOGICAL AND HISTORICAL SOCIETY PRIOR TO DEVELOPMENT.

LAND RESOURCES

WSSP.2.1 ENSURE THAT LANDSCAPING AND REVEGETATION ARE AN INTEGRAL PART OF EACH PROJECT DESIGN AND CONFORMS TO THE WATER BUDGET. LANDSCAPING SHALL PROVIDE EROSION CONTROL, ENHANCE STRUCTURES AND REDUCE WILDFIRE HAZARDS.

WSSP.2.1.1 The use of vegetation native and/or adapted to the area should be encouraged.

WSSP.2.1.2 Vegetation that requires minimum water applications should be encouraged.

WSSP.2.2 ENSURE THAT SIGNIFICANT NATURAL FEATURES (INCLUDING WASHES, NATURAL SLOPES, ROCKS AND VIEWS) ARE RETAINED AND USED TO MAXIMUM ADVANTAGE.

WSSP.2.2.1 Soils and vegetation beyond the limits of construction identified on an approved plan shall not be disturbed.

WSSP.2.2.2 Disturbed areas should be revegetated or mechanically stabilized and fill slopes should not exceed a 3:1 slope.

WSSP.2.2.3 Grading of any hillside should be required to establish an undulating naturalistic appearance by creating varying curvilinear contours.

WSSP.2.3 REQUIRE THE RETENTION OF EXISTING NATIVE VEGETATION ENHANCED WITH OTHER PLANT MATERIAL IN THE OPEN SPACE AREAS THROUGHOUT THE SP AREA.

WSSP.2.3.1 Development designs shall be encouraged to maintain a compatible landscaping theme for buffer areas throughout the master planning area.

WSSP.2.4 CONSIDER INTERIM AND LONG TERM AGRICULTURE USES AS COMPATIBLE USES WITHIN THE STUDY AREA, AND ESTABLISH ZONING/LAND USE DISTRICTS TO PERMIT AND PROTECT THEM.

WSSP.2.5 REQUIRE DETAILED SOILS AND GEOTECHNICAL STUDIES TO DETERMINE CONSTRUCTION REQUIREMENTS, LOCATIONS OF ACTIVE FAULTS AND SOIL STABILITY TO:

A. ENSURE STRUCTURAL INTEGRITY OF ROADS AND BUILDINGS.

B. PROVIDE ADEQUATE SETBACKS FROM POTENTIALLY ACTIVE FAULTS.

C. MINIMIZE EROSION POTENTIAL.

D. THE RECOMMENDATIONS OF THE DETAILED GEOTECHNICAL STUDY WILL BE FOLLOWED FOR DEVELOPMENT PROPOSALS ON AREAS WHICH HAVE IDENTIFIED GEOLOGIC HAZARDS.

WSSP.2.6 REQUIRE EROSION PROTECTION MEASURES FOR ALL CONSTRUCTION ACTIVITIES AND ANY SLOPES IDENTIFIED AS NEEDING STABILIZATION.

WATER RESOURCES

WSSP.3.1 RESTRICT DEVELOPMENT ON FLOODPLAINS THAT WOULD INCREASE THE 100-YEAR FLOODWATER LEVELS OR PEAK FLOWS.

WSSP.3.1.1 The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps shall be used as the basis for delineation of floodplains unless more recent research and surveys are presented and accepted by FEMA which establish a more accurate delineation.

WSSP.3.1.2 Development will provide detailed drainage analysis of the project. Development in FEMA mapped flood areas which do not provide for flood control alternatives (e.g. channelization or detention) must follow applicable regulations and ordinances for construction.

WSSP.3.1.3 Development will provide such on-site detention and drainage facilities as are needed to ensure that development of the site does not adversely impact downstream properties.

WSSP.3.2 ENCOURAGE THE USE OF "NATURALISTIC" STABILIZED (NON-GEOMETRIC OR CONCRETE LINED) CHANNELS TO REDUCE VELOCITIES, ENCOURAGE ON-LINE DETENTION, PROVIDE FOR GROUNDWATER RECHARGE WHERE FEASIBLE, ENCOURAGE PROVISION OF OPEN SPACE AND CREATION OF ADDITIONAL WETLANDS. UTILIZE THE DESIGN GUIDELINES ESTABLISHED IN THE DEVELOPMENT STANDARDS HANDBOOK FRAMEWORK.

WSSP.3.3 ENCOURAGE THE USE OF DETENTION IN OPEN SPACE AND RECREATION AREAS AND IN AREAS WHERE SOIL CONDITIONS WOULD PROVIDE FOR GROUNDWATER RECHARGE.

WSSP.3.3.1 Provide treatment measures for storm water runoff to prevent degradation of groundwater quality.

WSSP.3.4 REQUIRE THE MULTIPLE USE OF FLOODPLAINS NECESSARY TO CONVEY THE 100-YEAR STORM.

WSSP.3.4.1 Support FEMA map amendments that implement plan policies.

WSSP.3.4.2 Require the use of floodplain areas for open space, trails, bikeways, recreation areas, wetlands retention and enhancement, utilizing the design guidelines to review all projects.

WSSP.3.5 ENSURE THAT APPLICATIONS FOR AMENDMENTS OF COMPREHENSIVE PLAN, PROJECTS OF REGIONAL SIGNIFICANCE, TENTATIVE SUBDIVISION MAPS, PARCEL MAPS, SPECIAL USE PERMITS, AND DIVISION OF LAND MAPS SHOW THAT THE FOLLOWING WATER RESOURCE CRITERIA ARE MET:

A. EXISTING CERTIFICATED AND PERMITTED AGRICULTURAL AND STOCKWATER GROUNDWATER RIGHTS, ISSUED AS OF JULY 31, 1990, ARE UTILIZED IN A PROPORTIONAL AMOUNT TO SERVE PROPOSED RESIDENTIAL DEVELOPMENT. IN ORDER TO BALANCE THE EXISTING, ISSUED GROUNDWATER RIGHTS WITH THE PLANNING PERENNIAL YIELD OF THE BASIN, 2.5 ACRE FEET OF GROUNDWATER RIGHTS PER DWELLING UNIT WILL BE DEDICATED TO WASHOE COUNTY. A MAXIMUM OF 1,571 RESIDENTIAL DWELLING UNITS ON INDIVIDUAL WELLS MAY BE DEVELOPED IN THE WARM SPRINGS SP AREA BASED ON THE PLANNING PERENNIAL YIELD OF GROUNDWATER AND THE WARM SPRINGS AREA PLAN WATER BUDGET. ADDITIONAL WATER RIGHTS WILL BE DEDICATED TO WASHOE COUNTY FOR COMMON LANDSCAPED AREAS, COMMUNITY SWIMMING POOLS, PASTURES, ETC., WITHIN RESIDENTIAL DEVELOPMENTS.

B. PARCELS CREATED BY APPLICATIONS SUBMITTED THROUGH SEPTEMBER 4, 1990, MAY DEVELOP FOR RESIDENTIAL USES WITHOUT THE REQUIREMENT FOR DEDICATION OF WATER RIGHTS. WHEN EXISTING PARCELS ARE SUBDIVIDED, NEW PARCELS WILL REQUIRE THE DEDICATION OF WATER RIGHTS; HOWEVER, ONE PARCEL WILL BE DESIGNATED AS EXISTING AND WILL NOT HAVE TO DEDICATE WATER RIGHTS. THE WASHOE COUNTY DEPARTMENT OF DEVELOPMENT REVIEW WILL TRACK THE DATE OF PARCEL SUBDIVISIONS.

C. COMMERCIAL AND INDUSTRIAL DEVELOPMENT, TO INCLUDE PUBLIC FACILITIES, GOLF COURSES, ETC., WILL BE REQUIRED TO DOCUMENT PROJECT WATER DEMAND AND SUPPLY SUFFICIENT GROUNDWATER RIGHTS FOR THE PROJECT. IF EXISTING CERTIFICATED AND/OR PERMITTED IRRIGATION OR STOCKWATERING GROUNDWATER RIGHTS, ISSUED AS OF JULY 31, 1990, ARE USED TO SERVE THE PROPOSED PROJECT, THEN WATER RIGHTS WILL BE DEDICATED TO WASHOE COUNTY AT A RATIO OF 43 PERCENT OF EXISTING GROUNDWATER RIGHTS TO 1 ACRE FOOT OF DEMAND BASED ON THE WATER BUDGET FOR THE SP AREA. THIS RATIO IS NECESSARY TO BALANCE THE EXISTING, ISSUED GROUNDWATER RIGHTS WITH THE PLANNING PERENNIAL YIELD OF THE BASIN.

D. WATER RIGHTS FOR ALL DEVELOPMENT IN THE WARM SPRINGS SP AREA WILL BE DEDICATED TO WASHOE COUNTY AT THE TIME OF PARCEL MAP FILING OR PROJECT RECORDATION. THESE WATER RIGHTS WILL BE IRREVOCABLY TIED TO THE WARM SPRINGS SP AREA.

E. THE CREATION OF PARCELS AND LOTS IN THE WARM SPRINGS SP AREA SHALL REQUIRE DEDICATION OF WATER RIGHTS TO WASHOE COUNTY IN QUANTITIES THAT ARE CONSISTENT WITH THE WARM SPRINGS AREA PLAN WATER BUDGET, THE SPECIFIC PLAN AND THE WATER USE STANDARDS SET BY WASHOE COUNTY DEVELOPMENT CODE ARTICLE 422 - WATER AND SEWER RESOURCE REQUIREMENTS. THE WATER RESOURCES POLICIES AND ACTION PROGRAMS WILL BE RE-EXAMINED IN CONJUNCTION WITH THE WARM SPRINGS VALLEY WATER RESOURCES STUDY TO ENSURE FAIR AND EQUITABLE WATER RESOURCE UTILIZATION.

1. INITIALLY 2.5 ACRE FEET OF GROUND WATER RIGHTS PER DWELLING UNIT WILL BE DEDICATED TO WASHOE COUNTY REGARDLESS OF LOT SIZE OR WATER SUPPLY SYSTEM.

a. Upon acceptance of the perennial yield figure determined by the Warm Springs Valley water resources study, water rights dedication amounts will be re-evaluated for the Warm Springs planning area (including the Warm Springs SP area).

b. Water rights dedication amounts will be considered based upon valid water rights active in the Warm Springs Valley Hydrographic Basin and the perennial yield of the Warm Springs Valley Hydrographic Basin (as determined by the Warm Springs Valley water resources study).

2. GROUNDWATER RIGHTS DEDICATED FOR COMMUNITY WATER SYSTEMS IN EXCESS OF THE 1.12 AFY AMOUNT REQUIRED BY THE STATE ENGINEER WILL BE MAINTAINED IN GOOD STANDING THROUGH AGREEMENTS BETWEEN THE WATER RIGHTS OWNER AND WASHOE COUNTY. WHEN THE WATER RIGHTS DEDICATION AMOUNTS ARE RE-EVALUATED, FINAL DISPOSITION OF GROUNDWATER RIGHTS DEDICATED FOR COMMUNITY WATER SYSTEMS IN EXCESS OF THAT REQUIRED BY THE STATE ENGINEER WILL BE DETERMINED BY WASHOE COUNTY.

F. RESIDENTIAL DEVELOPMENT IN THE WARM SPRINGS SP AREA WILL BE INITIALLY LIMITED TO THE NUMBER OF UNITS WHICH CAN BE SUPPORTED BY 1,760 ACRE FEET OF GROUNDWATER BASED ON A PLANNED PERENNIAL YIELD OF 4,000 ACRE FEET PER YEAR AND A WATER DEMAND OF 1.12 ACRE FEET PER UNIT. A MONITORING PROGRAM FOR COMMUNITY WATER SYSTEMS WILL BE DEVELOPED, TO THE SATISFACTION OF THE STATE ENGINEER AND WASHOE COUNTY, TO QUANTIFY ACTUAL WATER RESOURCE USE IN THE SP AREA. THE WATER RESOURCES POLICIES AND ACTION PROGRAMS SHALL BE MODIFIED, BASED ON THE STATE ENGINEER'S ACCEPTANCE OF THE MONITORING PROGRAM RESULTS AND THE PERENNIAL YIELD OF THE BASIN, TO ENSURE FAIR AND EQUITABLE WATER RESOURCE UTILIZATION.

WSSP.3.6 DEVELOP A BASINWIDE GROUNDWATER WELL NETWORK TO SUPPORT A COMMUNITY WATER SYSTEM IN THE WARM SPRINGS SP AREA.

WSSP.3.6.1 The Washoe County Department of Comprehensive Planning, together with the Washoe County Utility Division, shall require plans for a basinwide groundwater well network to become part of the development review for developments requiring community water systems as specified in the Development Standards Handbook Framework.

AIR RESOURCES

WSSP.4.1 MAINTAIN OR EXCEED FEDERAL, STATE AND LOCAL CARBON MONOXIDE AMBIENT PARTICULATES (PM10) AND OZONE AIR QUALITY STANDARDS.

WSSP.4.1.1 Encourage the Washoe County District Health Department to establish meteorology and air quality sampling stations in the planning area and to annually report on air quality trends in the air basin.

WSSP.4.1.2 Prohibit wood-burning devices in residential land uses with 4 or more units per acre.

WSSP.4.1.3 Prohibit commercial and/or industrial uses which are large generators of air pollutants (i.e. greater than 10 tons of air pollutant/year).

WSSP.4.1.4 Approve only the installation of wood-burning devices that meet or exceed applicable EPA standards.

WSSP.4.1.5 To minimize traffic impacts on air quality, a minimum level of service of "C" shall be maintained on roadways in the SP area.

LAND USE AND TRANSPORTATION

LAND USE

GENERALIZED LAND USE

The Specific Plan (SP) area encompasses the central portion of the Warm Springs planning area. The SP is designated in the Warm Springs Area Plan for development of a community service center and residential development at higher densities than permitted in the remainder of Warm Springs. The area includes 3,983± acres of lands in private ownership. The existing plan area is characterized by agricultural uses, large acreage residential lots and undeveloped parcels. The BLM Palomino Valley Wild Horse and Burro Placement Center facility is an adjacent public land use. All areas currently in agricultural use will maintain the right to stay in production for the foreseeable future or until conversion to other land uses. (Refer to Plate 3, Existing Land Use.)

The Land Use Plan was developed through monitoring and guidance by a Task Force, appointed by the Washoe County Board of County Commissioners. Input from County staff, Citizens Advisory Board members and property owners within the Specific Plan area was obtained through a series of area-wide meetings. (Refer to Appendix C.)

DEVELOPMENT CONSTRAINTS

The plan was developed based on the planned perennial yield of groundwater within the Warm Springs Hydrographic Basin and water rights ownership within the SP area. (Refer to Appendix D, Water Resources.) Flood control within the Specific Plan area was also a primary consideration. A Flood Control Plan is provided for in other sections of the plan. (Refer to Drainage section.) Other constraints were also considered such as soils, existing land uses, and future surrounding land uses.

LAND USE PLAN

The Land Use Plan was developed based on analysis of the development constraints and current water rights ownership. The area is designated primarily for residential, parks and recreation, limited commercial and community facilities, and a restricted business park, which is an expansion of an existing use. The plan was also developed with adjacent compatible uses or suitable buffer zones established for uses with low compatibility. The Open Space/Drainage Ways provided natural separation or buffer zones for uses with low compatibility. (Refer to Table 1, Land Use Compatibility Matrix.)

Table 1

LAND USE COMPATIBILITY MATRIX

LDR	MDR	HDR	LDS	PR	PSP	GC	I	GR
LDR	H	H	M	H	M	L	L	H
	MDR	H	H	H	M	L	L	M
		HDR	H	H	M	L	L	M
			LDS	H	M	L	L	M
				PR	H	H	M	H
					PSP	H	M	L
						GC	M	L
							I	L
								GR

H **High Compatibility:**
Little or no screening or buffering necessary.

M **Medium Compatibility:**
Limited screening and buffering necessary.

L **Low Compatibility:**
Significant screening and buffering necessary.

LAND USE DESIGNATIONS:

Residential

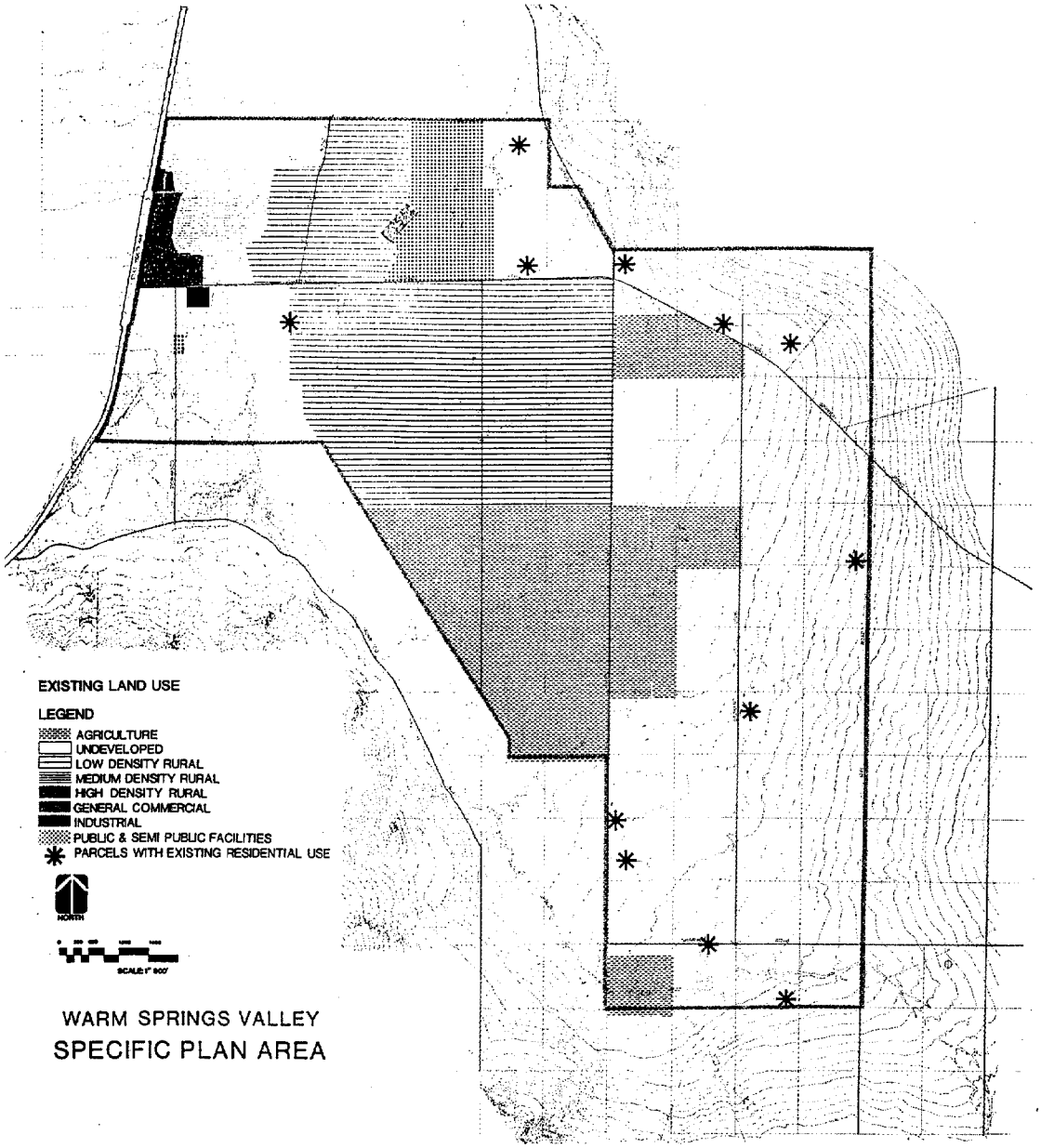
GR	General Rural
LDR	Low Density Rural
MDR	Medium Density Rural
HDR	High Density Rural
LDS	Low Density Suburban

Non-Residential

PR	Parks and Recreation
PSP	Public and Semi-Public Facilities
GC	General Commercial
I	Industrial

Plate 3

EXISTING LAND USE



PLANNED PERENNIAL YIELD BASIS

The Washoe County Department of Comprehensive Planning has established a perennial yield of 4,000 AFY for land use allocation purposes within the Warm Springs Valley. This "planning yield" can be converted to development intensities that accommodate existing and future land uses in the Warm Springs Valley. This value is approximately 1,000 acre feet above the quantity recognized by the Nevada State Engineer. (Refer to Appendix A, Water Budget.)

The Land Use Plan (Plate 4) was developed using the 4,000 AFY planned perennial yield figure. Table 2 provides a breakdown of acreage by land use designation using this figure.

Table 2 illustrates the maximum density/intensity that could be permitted in each land use category based on the 4,000 AFY planned perennial yield. Lower densities within the ranges specified could be permitted to occur in each category based on project specific plans and Development Standards Handbooks. Should lower densities be approved on a project specific basis, modifications and adjustments to the Water Budget, Public Facilities and Services, and Transportation sections of this plan and the Development Standards Handbook Framework should be made as part of the yearly update process.

The State Engineer has determined the perennial yield should be 3,000 acre feet as identified in the Water Resource Reconnaissance Series Report #43. (Refer to Appendix A, Water Budget in the Warm Springs Area Plan.)

Based on the State Engineer's position, Washoe County Comprehensive Planning staff has administratively determined that 3,000 acre feet will be used to review development proposals until the State Engineer accepts the water study that is being conducted.

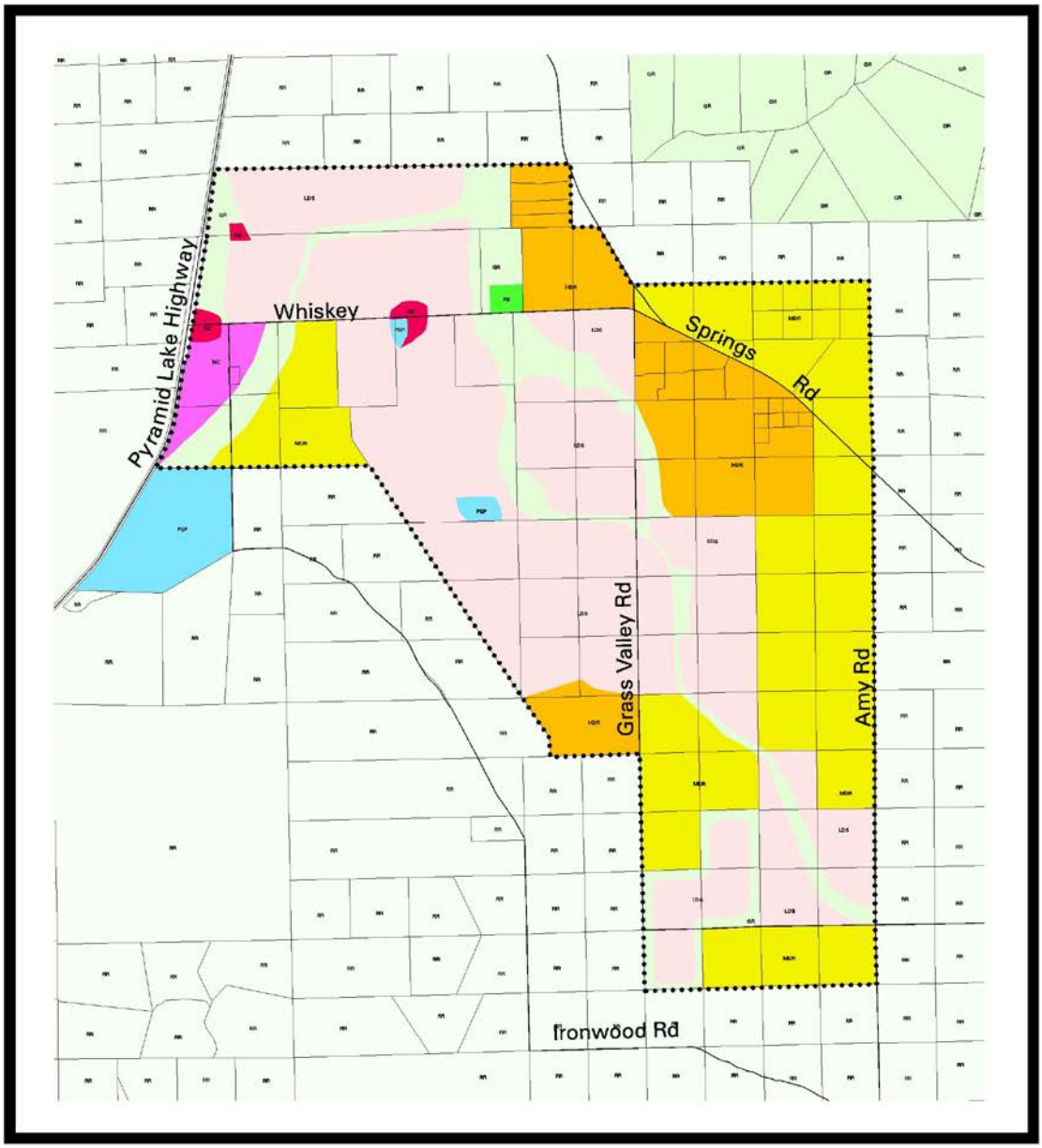
In Table 3, land use designations are discounted an equal percentage for the entire Warm Springs area to reflect the State Engineer's perennial yield of 3,000 acre feet. These figures will be used as the plan figures while the water study for Warm Springs Valley is being conducted and monitored. The perennial yield figure will be modified when the Warm Springs Valley water resources study is completed and the State Engineer concurs with the results. (Refer to Appendix A, Water Budget.) Table A-3 also illustrates maximum density/intensity. As with the 4,000 AFY perennial yield, lower densities/intensities should be permitted to occur, with appropriate plan changes occurring as a function of the yearly update process.

AGRICULTURAL USES

All existing and future agricultural uses shall be considered permitted uses in the SP area. The land use and Development Standards Handbook Framework in this plan will not apply or in any way restrict agricultural uses. All agricultural uses shall be regulated in conformance with the Washoe County Agricultural Zoning regulations.

EXISTING PARCELS

All existing parcels of record within the SP area at the time of plan adoption shall be allowed to construct one single family home on an existing parcel, without being subject to the provisions of this plan or the Development Standards Handbook Framework. Should this existing parcel be further divided in the future, the existing single family home shall be subject to all provisions of this plan and associated Development Standards Handbook Framework, including the pro-rata share of any development fees or assessments that are applicable at the time of parcel division.



WARM SPRINGS SPECIFIC PLAN

LAND USE PLAN

- LOW DENSITY RURAL
- MEDIUM DENSITY RURAL
- HIGH DENSITY RURAL
- LOW DENSITY SUBURBAN
- MEDIUM DENSITY SUBURBAN
- HIGH DENSITY SUBURBAN
- LOW DENSITY URBAN
- MEDIUM DENSITY URBAN
- HIGH DENSITY URBAN
- GENERAL COMMERCIAL
- NEIGHBORHOOD COMMERCIAL/ OFFICE
- TOURIST COMMERCIAL
- INDUSTRIAL
- PUBLIC AND SEMI-PUBLIC FACILITIES
- PARKS AND RECREATION
- OPEN SPACE
- RURAL RESIDENTIAL / GENERAL RURAL
- SPECIFIC PLAN

SOURCE: DEPARTMENT OF COMMUNITY DEVELOPMENT
g:/arcinfo/planarea/ws/spas/wsspa_plu00.gra

DATE: JULY 1995

NOTE: THE SCALE AND CONFIGURATION OF ALL INFORMATION SHOWN HEREON ARE APPROXIMATE ONLY AND ARE NOT INTENDED AS A GUIDE FOR DESIGN OR SURVEY WORK. REPRODUCTION IS NOT PERMITTED WITHOUT PRIOR WRITTEN PERMISSION FROM THE WASHOE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT. THE HORIZON YEAR FOR THIS PLAN IS 2015. ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS ON SEPTEMBER 22, 1995.

0 1000 2000

SCALE IN FEET

Department of Community Development

WASHOE COUNTY NEVADA

POST OFFICE BOX 11130
RENO, NEVADA 89520
(775) 328-3600

Warm Springs Specific Plan
LAND USE AND TRANSPORTATION

March 7, 1995
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Table 2

4,000 AFY PERENNIAL YIELD
ACREAGE BY LAND USE DESIGNATION

Land Use Designation	DU	Gross Ac.	DU/Ac.	Net/ Ac.	DU/Ac.
Medium Density Rural (1 du/5 acres)	238	1,190	.02	1,086	0.22
High Density Rural (1 du/2.5 acres)	237	668	0.35	563	0.42
Low Density Suburban (1 du/acre minimum to 1 du/2.5 acres)	1,266	1,991	0.64	1,714	0.74
General Commercial		20		20	
Business Park		47		47	
Public Facilities		12		12	
Spine Road Right-of-Way		50		50	
Open Space				360	
Parks and Recreation Facilities				131	
Total	**1,741**	**3,983**	**0.44 or 1 DU/2.3 Ac.**	**3,363**	**0.52 or 1 DU/1.9 Ac.**

Table 3

3,000 AFY PERENNIAL YIELD
ACREAGE BY LAND USE DESIGNATION

Land Use Designation	DU	Gross Ac.	DU/Ac.	Net/ Ac.	DU/Ac.
Rural Residential					
Medium Density Rural (1 du/5 acres)	179	1,190	0.15	814	0.22
High Density Rural (1 du/2.5 acres)	177	668	0.26	422	0.42
Low Density Suburban (less than 1 du/acre to 2.5 acres)	949	1,991	0.45	1,285	0.72
General Commercial		20		15	
Business Park		47		35	
Public Facilities		12		12	
Spine Road Right-of-Way		50		50	
Open Space				1,202	
Parks and Recreation Facilities				131	
Undeveloped				842	
Total	**1,306**	**3,983**	**.33 or 1 DU/3.0 Ac.**	**2,521**	**.52 or 1 DU/1.9 Ac.**

RESIDENTIAL

The Warm Springs Area Plan provides for development of the SP area at an overall density of one dwelling unit per 2.5 acres on individual domestic wells. As an alternative, the Warm Springs Area Plan permits increased residential development at higher densities if a metered community water system(s) is developed and other conservation measures are required to insure decreased average annual residential demand. The Specific Plan includes a planned community water system. (Refer to the Public Services and Facilities section.) It also specifies water conservation measures through development guidelines incorporated in the Development Standards Handbook Framework. Plans based upon water allocations specified in the Water section must be submitted for approval. (Refer to Plan Administration and Enforcement Procedures section.) The areas designated for higher density development in the plan are consistent with the properties where sufficient water rights currently exist to support the higher density.

The maximum total number of dwelling units at buildout in the Specific Plan area is 1,741, as determined by the water budget (refer to Appendix A, Water Budget, and Projected Community Growth in the Development Standards Handbook Framework). A mixture of densities is provided in the plan area to provide various housing opportunities for future residents. The higher densities (greater than acre lots) are centrally located within the SP area and reduced towards the SP area boundaries to provide a transition buffer adjacent to the existing rural residential area.

The residential development is oriented around the Open Space/Trail/Drainage Way system. A portion of individual lots maintained by the homeowner will also be designated through CC&Rs as Open Space, maintaining the rural community atmosphere that now exists. A multiple purpose trail system throughout the open space, accessible from all residential lots, provides a recreational amenity which is characteristic of rural areas. In the larger lots, equestrian facilities are a permitted use, with equestrian trails within the open space corridors providing access to BLM lands within the Warm Springs Valley. (Refer to Open Space Trail System in the Public Services and Facilities section.) The use of any motorized vehicles within the open space or trail systems other than for maintenance purposes will be prohibited.

COMMERCIAL AND COMMUNITY FACILITIES

As indicated from input from the existing community and with increases in population to the valley, limited commercial uses and community facilities are necessary to serve the needs of future residents. With the interest of the community in mind, all commercial uses which might be utilized by the general population outside of the Warm Springs planning area will be located in the highway commercial nodes to deter "outside" traffic from the SP area. Commercial uses and community facilities intended to serve the valley residents will be located within the Village Center. The following uses or uses similar in character will only be permitted in the areas designated on the Land Use Plan. (Refer to Tables 4, 5 and 6, and Plate 4.) In the future, commercial and community facility designated lands, if not developed as planned, may be amended to revert back to residential uses compatible with adjacent residential designations.

OFFICE COMMERCIAL/BUSINESS PARK

To ensure community compatibility, the property isolated by the Hungry Valley Drainage Way and Pyramid Highway, adjacent to the existing industrial zoned land has been designated for a restricted business park area. The drainage way will provide a natural buffer to the residential areas. Terminating Whiskey Springs Road in the future will further segregate this area from the rest of the community.

The business park is intended for office and business users seeking a campus-like business park setting. Business opportunities should be encouraged to come from wholesaling, light manufacturing, service and assembly types of business and corporate offices. Heavy industrial uses are discouraged in the planning area because of the site's proximity to residential development.

Examples include:

1. Wholesaling.
2. Light manufacturing.
3. Research and development uses.
4. Warehousing.
5. Corporate and regional headquarters.
6. Communication companies such as broadcasting station offices, broadcast audience research and public opinion poll companies, cable television companies and telegraph and cable gram companies.
7. Banking and other financial operations.
8. Insurance companies.
9. Computer programming, data processing and other software services.
10. Telecommunication exchanges.
11. Cafe/deli.
12. Support facilities.
13. G.I.D. equipment and maintenance facility.

PARKS AND OPEN SPACE

A community park site, equestrian center, recreational areas and open space are designated on the plan. (Refer to Plate 9.) These facilities are further addressed under the Parks, Recreation and Open Space section. (Refer to Public Services and Facilities section.)

PUBLIC AND SEMI-PUBLIC FACILITIES

Community water facilities are planned to be constructed for the development of the higher density residential, business park and commercial uses designated on the plan. As future residential population grows, an increase in public services and facilities such as police, fire protection and schools will be required to meet their needs. These services and facilities are addressed in the Public Services and Facilities section of this plan.

Table 4

HIGHWAY COMMERCIAL

Northern Highway Commercial	
Gas Station	Market
Commercial/Office	Cafe or Restaurant/Cocktail Lounge
Southern Highway Commercial	
Bed and Breakfast/Motel	

Table 5

VILLAGE CENTER

Veterinary Clinic	Office
Beauty/Barber Shop	Hardware/Garden Center
Medical Office	Health Clinic
Feed Store	Launderette
Bank-ATM Machine	Coin-Op Car Wash
Amusement Recreation Center	Video Rental
Athletic Club	Ice Cream Parlor
Florist	Licensed Day Care Center
Bed and Breakfast	Nursery
Pharmacy	

Table 6

PUBLIC FACILITIES

Fire Station	Sheriff Substation
General Improvement District - Equipment and Maintenance	Community Hall - Meeting Rooms, Kitchen, etc.
Library Branch	Utility Offices
Elementary School	Parks
Church	Post Office
Licensed Day Care Center	

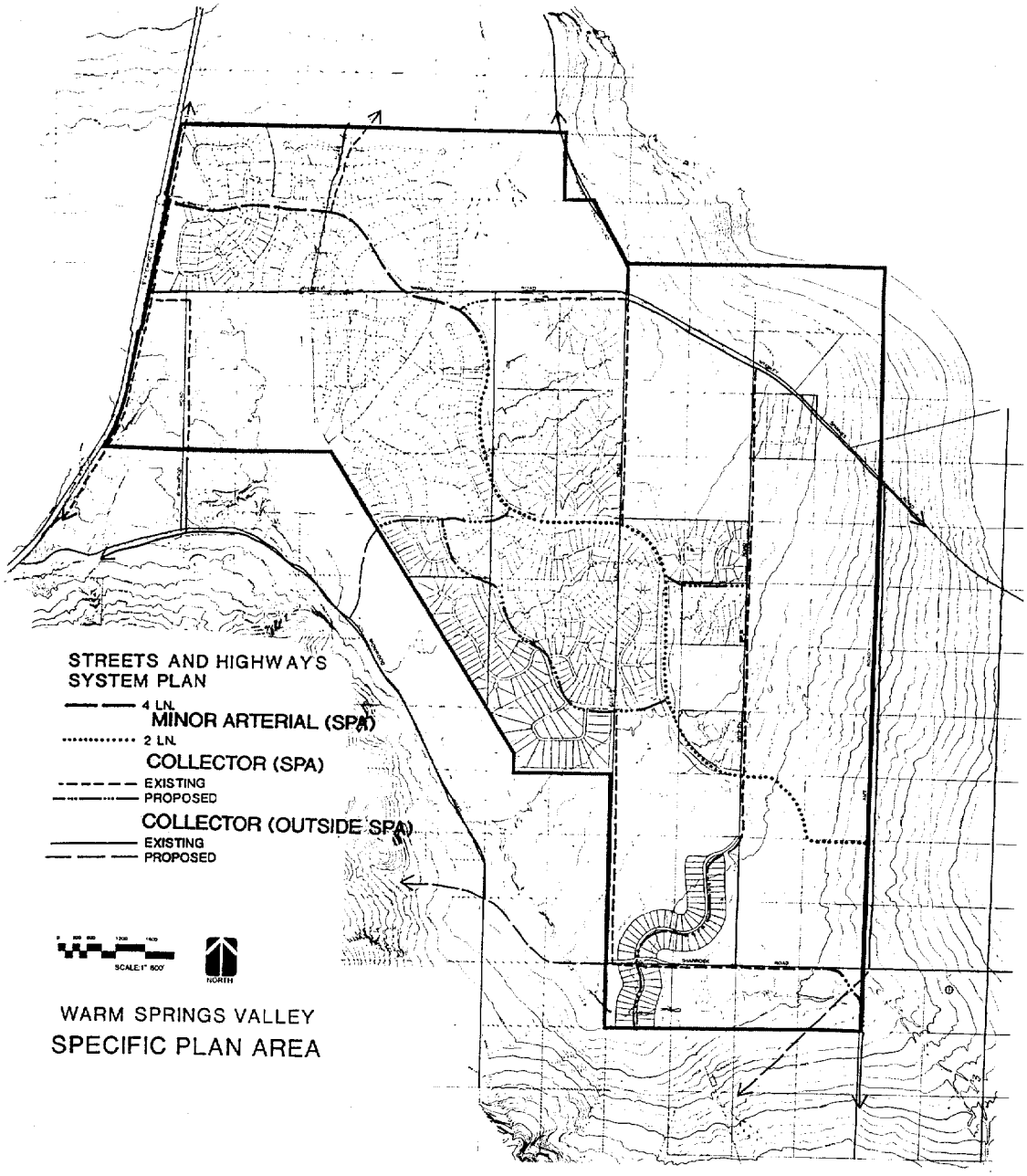
TRANSPORTATION

The Specific Plan area is currently served by the Pyramid Lake Highway, State Route 445. A proposed roadway pattern identifying the major arterials and collectors to serve the land use plan is included in the plan as Plate 5 (Streets and Highways System Plan). Land use locations, designs and policies to encourage the use of pedestrian and bicycle travel have also been considered in the planning process (refer to Parks, Recreation and Open Space in the Development Standards Handbook Framework).

The Nevada Department of Transportation lists the widening of Pyramid Lake Highway from Sky Ranch north to Sutcliffe as a long-term project with construction expected in four to ten years. This SP supports the State's plan to widen Pyramid Lake Highway. The plan also encourages maintaining the Pyramid Highway corridor by limiting lot frontage along the highway only, set back a minimum of 250 feet along Pyramid Lake Highway. The plan also provides a frontage road, with an associated equestrian trail, between Pyramid Lake Highway and residential lots in the northwest portion of the SP area as a method to ensure lots are not facing on Pyramid Lake Highway. The County also encourages the state to minimize new accesses to the highway and utilize existing accesses by designating them as collector roads. As Washoe County grows, the Washoe County Department of Comprehensive Planning, together with the Regional Transportation Commission and the Washoe County Roads Division, should investigate the necessity and feasibility of developing new routes to connect Pyramid Lake Highway with both U.S. Highway 395 through the North Valleys and Interstate Highway 80 through the Pah Rah Range.

Plate 5

STREETS AND HIGHWAYS SYSTEM PLAN



The anticipated additions and improvements to the existing street network within or adjacent to the SP are: construct a collector to connect Sharrock Road to Pyramid Lake Highway; construct a collector to connect Amy Road to Pyramid Lake Highway; and, based on projected deficiencies, upgrade Whiskey Springs Road (outside of the Specific Plan area), Ironwood Road and Amy Road to collector road standards.

The Regional Transportation Commission has provided Washoe County with a transportation analysis of the Regional area based on a partial buildout of the SP area by the year 2007. The projected community growth section contained in the Development Standards Handbook Framework was used to project average daily traffic (ADT) for the year 2007 and at buildout. A preliminary traffic study has determined the level of improvements that will be required to serve the SP area by 2007 and at buildout. (Refer to the Development Standards Handbook Framework.)

An important element in the transportation analysis relates to the Level of Service standards. All new roads, to be dedicated to the County in the SP area, shall be constructed to provide a Level of Service of "C" standard or better through the year 2007 and at buildout.

LAND USE AND TRANSPORTATION POLICIES AND ACTION PROGRAMS

LAND USE

WSSP.5.1 LIMIT FUTURE INDUSTRIAL USES TO LIGHT MANUFACTURING AND END PART ASSEMBLY OPERATIONS AND ONLY IN AREAS CURRENTLY UNDER BUSINESS PARK LAND USE AS SPECIFIED IN THE SP LAND USE PLAN.

WSSP.5.1.1 Office commercial land uses are incompatible with the rural-residential character of the planning area. Future industrial land uses will be kept inside of structures (as much as possible). All industrial land uses are to be screened and buffered.

WSSP.5.2 ENSURE THAT NEW DEVELOPMENT DESIGNS, BUILDING MATERIALS, COLORS, FINISHES AND TOTAL SITE DEVELOPMENT BLEND WITH THE SURROUNDING RURAL CHARACTER OF THE WARM SPRINGS SP.

WSSP.5.2.1 The Washoe County Department of Comprehensive Planning shall encourage future development to maintain and enhance the rural lifestyle of the planning area. Measures to enhance the rural lifestyle include muted, earth-tone coloration of buildings and structures, use of vegetative screening, low-impact on-premise signs, reduction of glare from outside lighting, and design of roadways to permit pedestrian/equestrian traffic.

WSSP.5.2.2 The Washoe County Department of Comprehensive Planning shall discourage any off-premise signs in the planning area as this will negatively impact the rural atmosphere of the area.

WSSP.5.2.3 The Washoe County Department of Comprehensive Planning shall develop design guidelines for the Warm Springs planning area.

WSSP.5.3 DEVELOP THE WARM SPRINGS SPECIFIC PLAN AREA WITH NO MORE THAN 1,571 RESIDENTIAL UNITS ON INDIVIDUAL DOMESTIC WELLS. THIS LEVEL OF RESIDENTIAL DEVELOPMENT WILL PROTECT THE

GROUNDWATER AVAILABLE FOR EXISTING AND FUTURE RESIDENTIAL DEVELOPMENT OUTSIDE THE SPECIFIC PLAN AREA.

WSSP.5.3.1 Residential density in the Specific Plan area may be increased by mandatory utilization of a community water system(s), by mandatory installation of water meters, and by ensuring decreased average annual residential water demand. The decreased residential water demand will utilize accepted water conservation measures and will be proven to the satisfaction of the Washoe County Board of County Commissioners. Water resource policies contained in the Specific Plan, to include determination of the amount of water rights to be dedicated to Washoe County, will be followed. This method of increasing residential development density will not exceed the total water rights which would have been dedicated for the development of 1,571 residential dwelling units on individual domestic wells in the Specific Plan area.

WSSP.5.4 SUPPORT MASTER PLANNED DEVELOPMENTS AND MASTER DEVELOPMENT AGREEMENTS.

WSSP.5.4.1 Require developers to prepare development standards handbooks for all residential, commercial and restricted industrial/business park projects which outline architectural guidelines and performance standards in accordance with the policies in this plan and contain the minimum contents/standards required in the Development Standards Handbook Framework.

WSSP.5.4.2 Encourage the creation of a separate community identity for the area.

WSSP.5.5 ENCOURAGE A MIX OF LAND USES AND DENSITIES TO PROMOTE A BALANCED COMMUNITY WITH RESIDENTIAL AND COMMERCIAL, THROUGH ARCHITECTURAL GUIDELINES, SIGNAGE AND DEVELOPMENT STANDARDS RESTRICTED INDUSTRIAL, BUSINESS AND RECREATIONAL AREAS.

WSSP.5.5.1 Prohibit heavy industrial uses in the planning area.

WSSP.5.5.2 Prohibit strip commercial development. Support nodes of commercial development as illustrated in the Specific Plan.

WSSP.5.5.3 If business park or commercial land use designations are converted to residential uses, the conversion shall be to a residential planned community designation.

WSSP.5.6 MAINTAIN AN OVERALL MAXIMUM GROSS DENSITY OF 0.44 UNITS PER ACRE IN THE SP AREA BASED ON THE SP WATER BUDGET.

WSSP.5.6.1 Require feathering of densities and/or a buffer at the northerly and westerly boundaries of the Specific Plan area to transition the community into existing development in the Warm Springs planning area.

WSSP.5.6.2 Insure that all lots created are larger than one acre.

WSSP.5.6.3 Support the concept of clustering throughout the planning area, provided the minimum lot size is greater than one acre.

WSSP.5.6.4 Require buffer areas between residential and non-residential uses.

WSSP.5.7 REQUIRE WALLS OR FENCES BACKING STREETS TO BE OFFSET WITH LANDSCAPING AND/OR MEANDERING PATHWAYS TO PROVIDE VISUAL RELIEF.

WSSP.5.8 ENCOURAGE VARIATIONS IN BUILDING SETBACK LINES TO PROMOTE VISUAL RELIEF.

WSSP.5.9 ESTABLISH CRITERIA FOR SIGNAGE.

WSSP.5.10 PROHIBIT OFF PREMISE SIGNS.

WSSP.5.11 REQUIRE BUILDING HEIGHTS TO BE REVIEWED AND APPROVED THROUGH THE COUNTY DEVELOPMENT REVIEW PROCESS. THE GENERAL INTENT IS FOR STRUCTURES TO BE TWO STORIES IN HEIGHT EXCLUDING BASEMENTS.

WSSP.5.12 ENCOURAGE THE COUNTY TO MONITOR DEVELOPMENT IN THE SP AREA TO ENSURE POPULATION AND EMPLOYMENT GUIDELINES ARE MET.

WSSP.5.13 REQUIRE LAND USE TRANSITION WITH THE SURROUNDING RURAL RESIDENTIAL LAND USE ALONG THE SP AREA BOUNDARY, THROUGH THE DEVELOPMENT REVIEW PROCESS OF SPECIFIC PROJECTS.

WSSP.5.13.1 Areas designated as Low Density Suburban on the SP Land Use Plan map (Plate 4) shall provide transition through clustering and by placing lots no smaller than 2.5 acres adjacent to designated rural residential land uses.

TRANSPORTATION

WSSP.6.1 ENCOURAGE THE WIDENING OF PYRAMID LAKE HIGHWAY.

WSSP.6.1.1 As abutting lands are developed, dedication of the necessary right-of-way should be required.

WSSP.6.1.2 Construction funds should be accumulated to address future traffic demand by instituting a traffic impact fee to be paid by new development. The fee will be in addition to normal site-related improvements needed to mitigate the direct impacts of new development.

WSSP.6.2 RESTRICT ACCESS TO PYRAMID LAKE HIGHWAY.

WSSP.6.2.1 The Washoe County Department of Comprehensive Planning shall work together with the Washoe County Public Works Department and the Nevada Department of Transportation to restrict access to Pyramid Lake Highway to existing roads and those roads as shown on the Streets and Highways System Plan map (Plate 5).

WSSP.6.3 CONSTRUCT A ROAD TO SERVE AS A COLLECTOR TO CONNECT SHARROCK ROAD TO PYRAMID LAKE HIGHWAY THROUGH RATTLESNAKE CANYON AND ALONG BACON RIND ROAD TO AXE HANDLE ROAD.

WSSP.6.4 CONSTRUCT A ROAD TO SERVE AS A COLLECTOR TO CONNECT AMY ROAD TO PYRAMID LAKE HIGHWAY THROUGH CURNOW CANYON AND ALONG CURNOW CANYON ROAD TO AXE HANDLE ROAD.

WSSP.6.5 ESTABLISH A COLLECTOR SPINE ROAD AS DEFINED IN THE SPECIFIC PLAN.

WSSP.6.6 UPGRADE WILCOX RANCH ROAD, WHISKEY SPRINGS ROAD, IRONWOOD ROAD AND AMY ROAD TO COLLECTORS.

WSSP.6.7 INVESTIGATE THE NECESSITY AND FEASIBILITY OF ROUTES TO CONNECT THE SOUTHEAST PORTION OF WARM SPRINGS VALLEY THROUGH THE PAH RAH RANGE TO THE TRACY INTERCHANGE ON INTERSTATE 80.

WSSP.6.8 INVESTIGATE THE NECESSITY AND FEASIBILITY OF ROUTES TO CONNECT PYRAMID LAKE HIGHWAY IN THE PLANNING AREA WITH THE NORTHERN PORTION OF U.S. HIGHWAY 395.

WSSP.6.9 REQUIRE PROPERTY OWNERS/DEVELOPERS TO DEDICATE RIGHT-OF-WAY FOR THE ULTIMATE WIDTHS OF STREETS WITHIN THE SP AREA, AT PROPOSED AREA PLAN BUILDOUT, AS REQUIRED IN THE SPECIFIC PLAN.

WSSP.6.9.1 Support the use of alternative street sections with medians, bike lanes and pathways as outlined in the Development Standards Handbook Framework.

WSSP.6.10 PROHIBIT DIRECT ACCESS ONTO MAJOR ARTERIALS, LIMIT TURNING MOVEMENTS THROUGH THE USE OF RAISED MEDIANS, ACCELERATION AND DECELERATION LANES, SIGNALS, ETC. PROHIBIT CURB PARKING ON ARTERIALS AND COLLECTORS.

WSSP.6.10.1 Require the use of joint driveways for commercial and other non-residential developments where feasible. Maintain adequate driveway separation spacing from other driveways and intersections.

WSSP.6.10.2 Limit the number of signals allowed on arterial streets and encourage intersection spacing to be 1/4 mile or greater as illustrated in the Specific Plan.

WSSP.6.11 ENCOURAGE CURVILINEAR STREET DESIGNS TO FIT WITH TOPOGRAPHIC CONSTRAINTS.

WSSP.6.12 ESTABLISH A FRONTAGE ROAD WITH A 250 FOOT SETBACK ALONG PYRAMID LAKE HIGHWAY. NO REAR YARDS WILL BE ALLOWED ALONG THE FRONTAGE ROAD.

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PUBLIC SERVICES AND FACILITIES

WATER SERVICE

COMMUNITY WATER SUPPLY SYSTEM

The proposed community water supply system will serve approximately 1,500 residential units along with limited commercial, business and community facilities. Total water consumption for the project at full buildout is estimated to be 1,050 acre feet per year (AF/yr.) based on an annual consumption rate of 0.70 AF/yr. per residential unit (detailed previously). The quantity of water necessary to meet project demands is equivalent to approximately 1,000 gallons per minute (gpm) pumped on a continuous basis. Plate 6 shows the location of existing water wells in the Specific Plan area. Plate 7 shows the proposed community water system service area. All other portions of the SP area will be served by individual domestic wells. Refer to Development Standards Handbook Framework for specific design criteria and phasing and implementation guidelines.

SANITARY SEWER

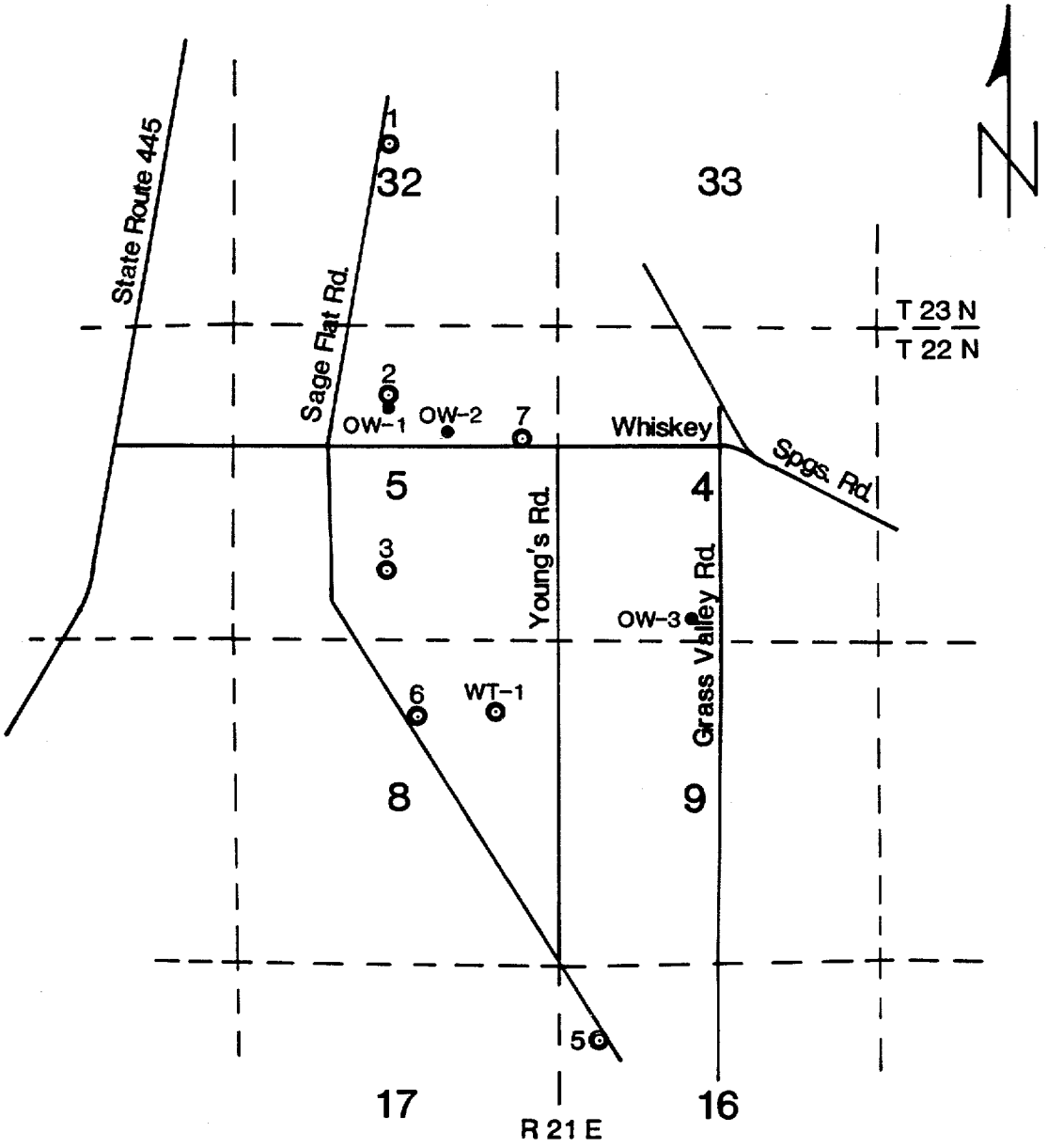
All development will be served by individual septic tanks and leach fields. These individual systems will require review and approval by NDEP and Washoe County District Health Department on a project by project basis. As an alternative, package treatment plants serving limited areas such as the golf course community should be reviewed on a project by project basis.

FIRE PROTECTION

The Truckee Meadows Fire Protection District provides fire protection services for the Warm Springs planning area with one volunteer station on Ironwood Road which provides a 15-minute response time for the Warm Springs planning area. Mutual aid agreements between the U.S. Bureau of Land Management and the Truckee Meadows Fire Protection District augment the fire protection services available to the Warm Springs planning area. The minimum service standard in the Washoe County Comprehensive Plan for suburban areas requires a response time of ten minutes or less (refer to Plate 8, Emergency Response Time). As development increases in the area, additional fire fighters, a larger station, and equipment will be needed. A community service center has been designated on the plan for location of these facilities. Extension of these services will be coordinated with the growth of the community, following the general guidelines in the Public Safety section of the Washoe County Public Services and Facilities Element and in accordance with the Truckee Meadows Fire Protection District's designated requirements. Development standards will be in conformance with Washoe County Policies and Action Programs for fire protection (PSF.4).

Plate 6

EXISTING WATER WELLS



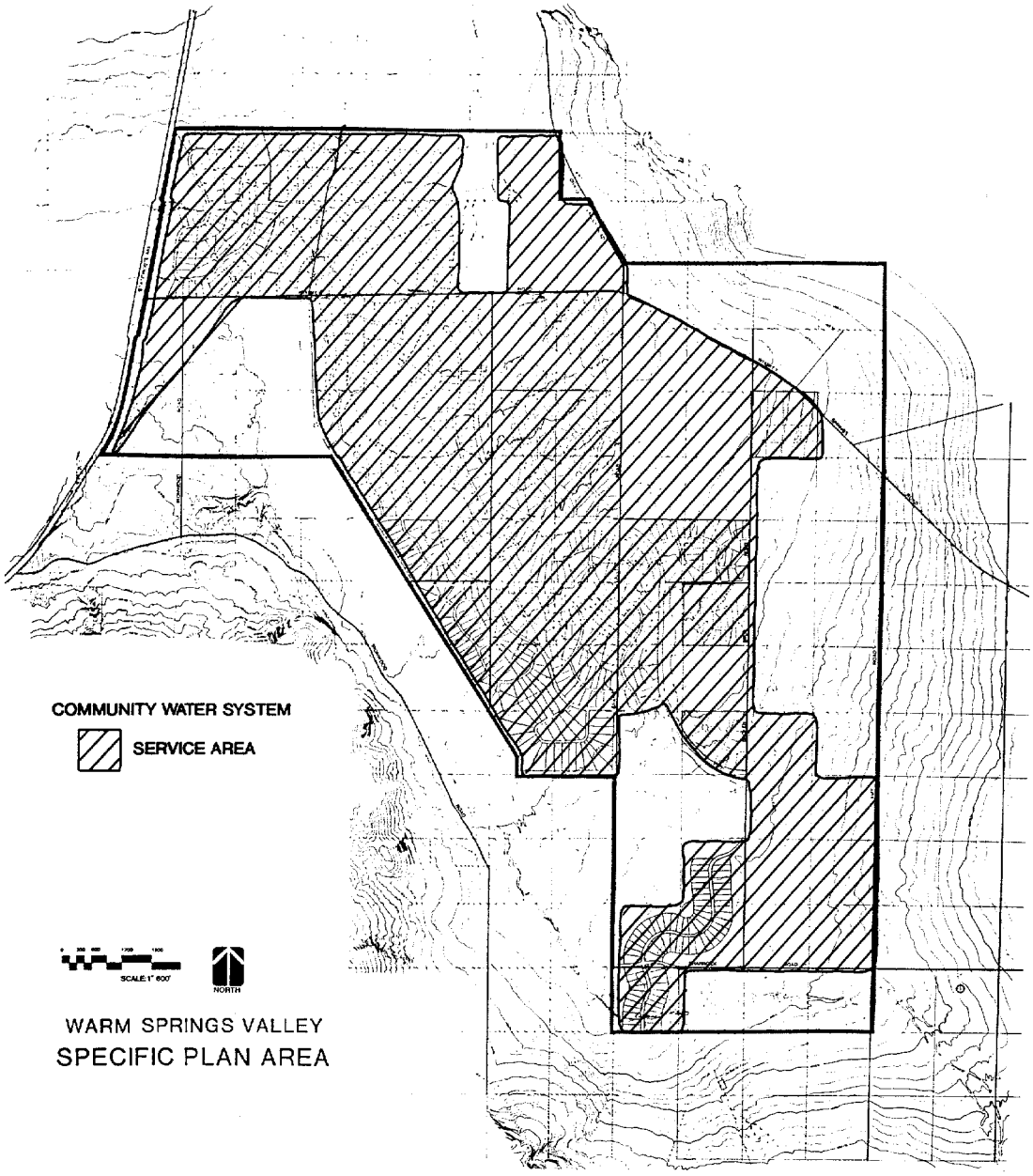
LEGEND:

- ⊙ Existing Production Well
- ● Existing Monitoring Well

TD=Total well depth
SWL=Static water level (June, 1991)
Q=Production rate (June, 1991)

Plate 7

COMMUNITY WATER SYSTEM



POLICE PROTECTION

Police protection in the Warm Springs planning area is provided by the Washoe County Sheriff's Office. There is currently one patrol unit regularly assigned to the area, with an average response time of 23 minutes. This response time may vary depending upon distance and patrol availability. The minimum service standards in the Washoe County Comprehensive Plan for suburban areas requires a response time of 10-15 minutes. (Refer to Plate 8, Emergency Response Time.) Extension of these services will be coordinated with the growth of the community, following the general guidelines in the Public Safety section of the Washoe County Public Services and Facilities Element and in accordance with the Washoe County Sheriff's Office's designated requirements. A community service center has been designated on the plan for location of these facilities.

LIBRARIES

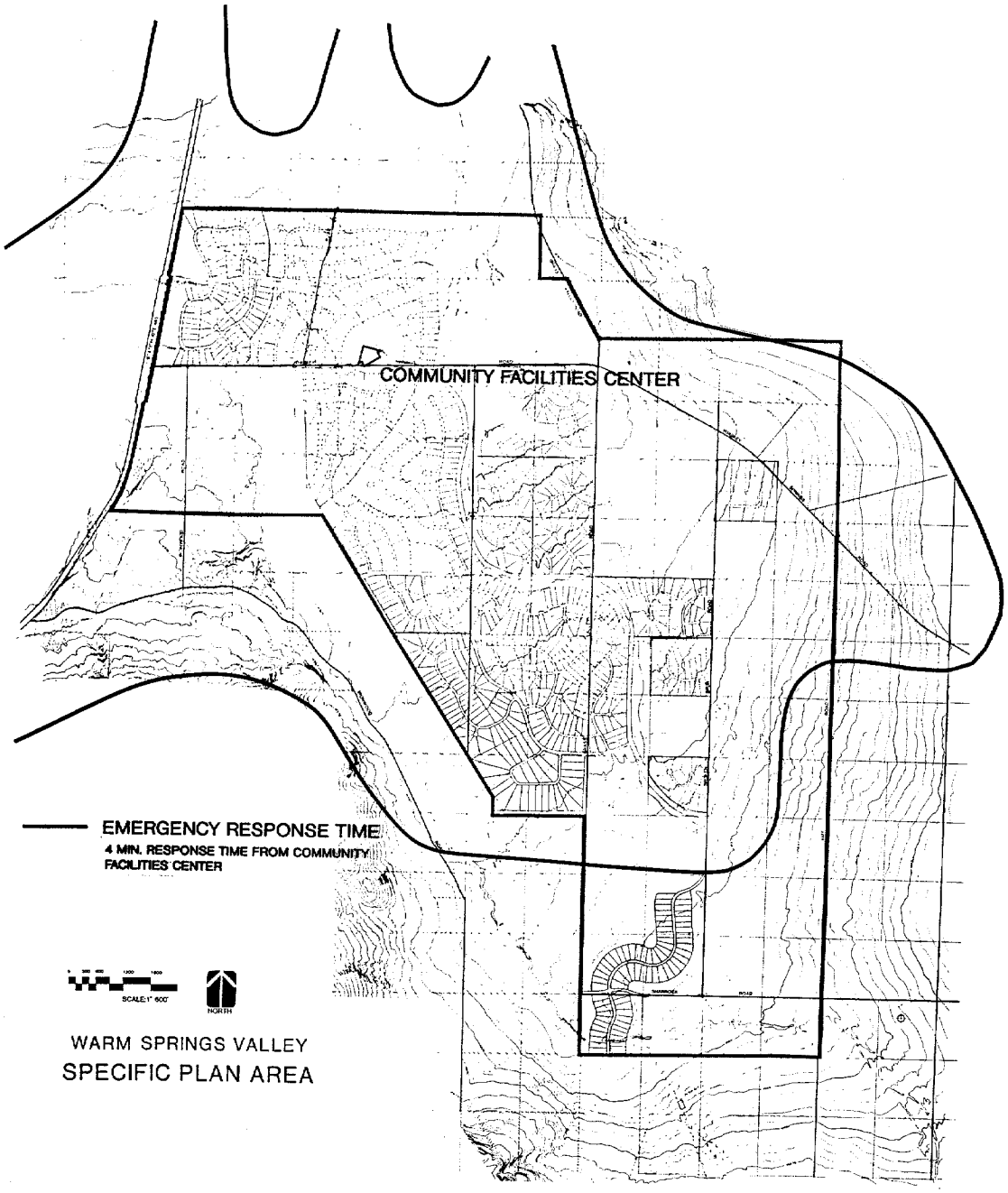
There are no libraries or branch libraries located within the Warm Springs planning area. The area is served by the Washoe County Main Library in downtown Reno and its branch library in Sparks. The current service standards in the Washoe County Comprehensive Plan for library service to rural areas is 40 minutes one way. The minimum service standard for suburban areas requires library facilities within five miles or less. As development occurs in the planning area, the library system may either contract with the Washoe County School District to provide a school/community library from schools built in the area or construct a branch library in the community facilities center. The facility would have a small collection of approximately 6,000 volumes, on-line circulation, on-line catalog, reference materials, and children's programming. The number of staff required would be two to three persons. (Refer to Appendix E, letter from Washoe County Libraries.)

SCHOOLS

There are no schools currently in the Warm Springs planning area. The area is served by schools in the City of Sparks. Elementary school children in the area attend the Alyce Savage Taylor Elementary School in Spanish Springs Valley. The County service standard for schools in suburban areas recommends the school be located with a 15-minute one-way travel time for students of elementary schools, 25 minutes one-way for middle schools, and 35 minutes one-way for high schools. Based upon the Land Use Plan and the potential SP area population of 4,352, plus the 4,010 projected population within the Warm Springs area outside the SP area, the projected number of elementary school age students is 819. The Spanish Springs Area Plan designates sites for a high school, middle school and three elementary schools, which could serve the Warm Springs area. The Specific Plan area may require one elementary school site. The Washoe County School District uses ten acres as a planning guide for an elementary school site. A 12-acre school site is designated on the plan, per Washoe County School District. (Refer to Appendix E, letter from Washoe County School District.)

Plate 8

EMERGENCY RESPONSE TIME



PARKS, RECREATION AND OPEN SPACE

COMMUNITY PARK

The County standard of seven acres per 1,000 population has been used to project future park needs. A 30-acre SP community park site has been designated within the plan area. This community park is based on projected SP area population. An additional 28 acres of potential park lands will be set aside in open space for County parks acquisition. The park will accommodate baseball/softball and multi-purpose fields in addition to equestrian facilities, picnicking, hiking and other non-structured activities.

OPEN SPACE TRAIL SYSTEM

A major portion of the Specific Plan area lies within the 100-year floodplain. Regional drainage control through channelization offers an opportunity for open space corridors throughout the plan area. As designated in the Development Standards Handbook Framework, a major portion of individual lots will also be designated as Open Space, further expanding these corridors. The Open Space will preserve the rural open character which now exists within the valley, a quality which has drawn residents to the area. (Refer to Plate 9.)

TRAIL COMPONENTS

Two types of trail systems are comtemplated in the open space plan. The pedestrian and bicycle trail system will exist throughout the SP area, linking all activity areas to residential neighborhoods. Motorized vehicles will be prohibited. The trails will be signed and the usage enforced by the County Sheriff.

Equestrian trails will also be provided, but limited to defined areas. They will be developed to link to BLM land surrounding the valley, the equestrian center and the open space/pasture along Pyramid Lake Highway, with access provided along roadway easements only.

GOLF COURSE

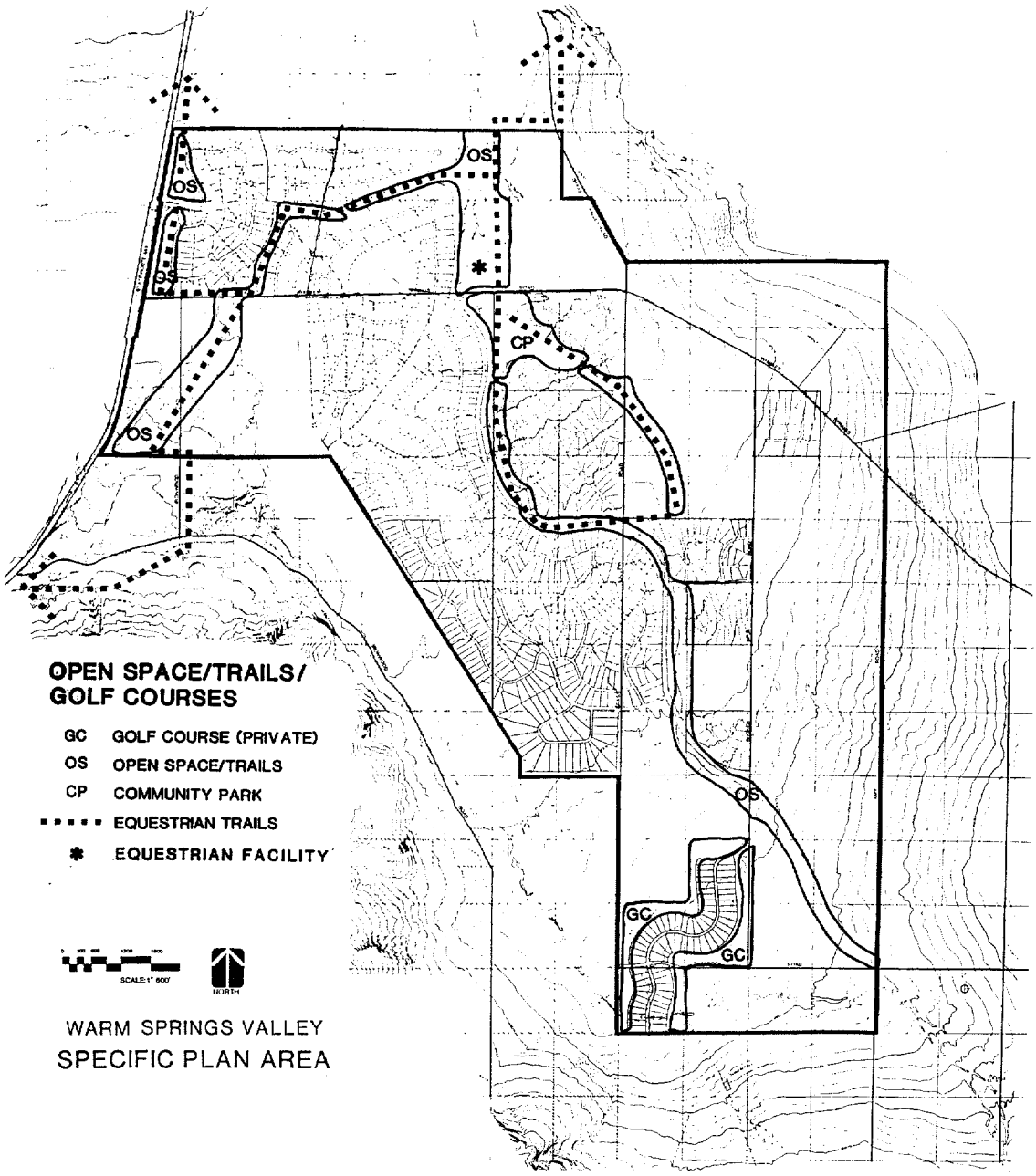
A golf course site has been designated on the plan. The site has been identified within the open space/regional drainage control channelization area which would be incorporated into the course design. This site may be developed as a private course.

EQUESTRIAN CENTER

The equestrian center will comprise a riding arena, 40 boarding stalls, and a turn out at the entrance to the facility. It will be sited on an area of about 10 acres, with possibility for future expansion as demand dictates.

Plate 9

OPEN SPACE/TRAILS/GOLF COURSES



PUBLIC SERVICES AND FACILITIES POLICIES AND ACTION PROGRAMS

WSSP.7.1 REQUIRE ALL DEVELOPMENT ON INDIVIDUAL SEPTIC SYSTEMS OR SMALL SCALE PACKAGE TREATMENT PLANTS TO BE REVIEWED AND APPROVED BY NDEP AND WASHOE COUNTY DISTRICT HEALTH DEPARTMENT.

WSSP.7.1.1 Small scale package treatment plants shall be reviewed on a project by project basis.

WSSP.7.2 ENSURE COORDINATION WITH AND BETWEEN POLICE, FIRE, PARKS, PUBLIC WORKS/ROAD DEPARTMENT, LIBRARY, SCHOOLS AND UTILITY PROVIDERS TO ENSURE THAT FACILITIES CAN BE PHASED IN, AS NEEDED, AND THAT ECONOMIES OF JOINT/MULTIPLE USE ARE REALIZED, WHENEVER POSSIBLE.

WSSP.7.3 PROVIDE LINKED OPEN SPACE CORRIDORS THROUGHOUT THE SP AREA TO ACCOMMODATE PEDESTRIAN, EQUESTRIAN AND BICYCLE MOVEMENT BETWEEN RESIDENTIAL AND MAJOR RECREATION NODES.

WSSP.7.3.1 Support the use of natural drainageways as open space corridors.

WSSP.7.4 ENCOURAGE WATER CONSERVATION WITHIN NEW DEVELOPMENT THROUGH DESIGN GUIDELINES WHICH MANDATE WATER CONSERVATIVE LANDSCAPE PRACTICES AND WATER SAVING PLUMBING FIXTURES.

WSSP.7.4.1 New development in the planning area will use water conserving landscape principles.

WSSP.7.5 DESIGNATE FUTURE PARK SITES IN THE SPECIFIC PLAN AREA.

WSSP.7.5.1 The Washoe County Parks and Recreation Department, together with the Washoe County Department of Comprehensive Planning, shall work with residents of the planning area to designate potential park sites. These park sites should be approved by the Washoe County Board of County Commissioners and added to the area plan.

WSSP.7.6 INTEGRATE THE STREETS AND HIGHWAYS SYSTEM OF THE WARM SPRINGS PLANNING AREA WITH AN EQUESTRIAN TRAIL SYSTEM.

WSSP.7.6.1 The Washoe County Parks and Recreation Department shall develop an equestrian trail system for the Warm Springs planning area. This trail system should be integrated with roads which are constructed or improved in the planning area.

PLAN ADMINISTRATION AND ENFORCEMENT PROCEDURES

The basis for administration and enforcement will be Washoe County and its departments, boards and executives. It is assumed from on-going discussion that the General Improvement District, acting as an arm of the County, may be given responsibility for administering or managing some of the capital improvements that will be constructed privately and dedicated to the County.

SPECIFIC PLAN AREA - PLAN

The plan will be adopted by the Washoe County Board of Commissioners after review and recommendation by the Planning Commission and staff. Once adopted, it will be the document used to review and determine conformance for all proposals for all forms of development and use in the Specific Plan area. In addition to this plan, a Development Standards Handbook Framework will also be adopted, and every project submitted will be required to submit a project specific Development Standards Handbook that conforms to the Development Standards Handbook Framework.

ANNUAL REVIEW

The yearly review process will be part of the County's annual report review process, with a recommendation for revisions presented to the Planning Commission prior to the anniversary date of original adoption by the Washoe County Board of Commissioners. All proposed changes will be subject to public hearing.

The review process will start with a review and recommendation by the Citizens Advisory Board. After staff input and recommendations, any recommended changes will be presented to the Planning Commission for their review and recommendation. The Washoe County Board of Commissioners will then act on any changes they find appropriate. All proposed changes will be subject to public hearing.

FIVE YEAR UPDATE

Every five years, a major review should be conducted to bring all elements into conformance with changes that may have occurred, and insure consistence from one section to another. It may be necessary to start this review process a year earlier to accommodate any extensive changes in the document, such as the water budget.

PLAN AMENDMENTS

Any proposed development that is administratively determined to be not in conformance with the plan shall require a plan amendment. The plan amendment process would involve the same public hearing process required for adoption of the original plan. A plan amendment can be requested at any time during the first two years of the plan, and quarterly thereafter, based on Washoe County requirements. For regional plan conformance review, this type of amendment will be considered as being similar to a zone change, special use permit or tentative map, and will

only require Regional Plan Conformance Review if it meets the thresholds for a project of regional significance as defined by State law.

No plan amendments that exceed the equivalent dwelling units, as defined in Table A-3 and Table A-4 of the SP area water budget, shall be permitted until after the water study is completed and accepted.

REGULATORY ZONING ALLOWED USES

All parcels in existence as of September 22, 1992 in the Warm Springs Specific Plan area can be developed according to the "allowed uses" as enumerated in the Washoe County Development Code for the General Rural Residential (GRR) regulatory zone. Any development of a parcel utilizing the regulatory zones on the Warm Springs Specific Plan - Land Use Plan are subject to the "Plan Administration and Enforcement Procedures" and the regulations as enumerated in the Washoe County Development Code for the applicable regulatory zone.

PROPOSED SUBDIVISIONS, PARCEL MAPS OR BOUNDARY LINE ADJUSTMENTS FOR RESIDENTIAL USES

All proposed divisions of land, in any form, will require review for conformance with the plan in addition to all other regulations that may apply. Assuming that all requirements of NRS can be met, the following procedure shall apply:

SUBDIVISION

All tentative subdivision maps, parcel maps and required Development Standards Handbook should be referred to the Citizens Advisory Board (CAB) for their review and recommendation. All tentative subdivision maps and parcel maps shall comply with the provisions of the Washoe County Development Code.

BOUNDARY LINE ADJUSTMENTS AND DIVISION OF LAND INTO LARGE PARCELS

All boundary line adjustments and division of land into large parcels shall comply with the provisions of the Washoe County Development Code.

PROPOSALS FOR NON-RESIDENTIAL USES

Any proposal that involves non-residential uses will also be reviewed for conformance with the plan. The following procedures shall apply:

COMMERCIAL AND PUBLIC FACILITY USES IN THE DESIGNATED VILLAGE CENTER OR HIGHWAY COMMERCIAL USES

Uses Specified in Plan

If the use can clearly be determined administratively by the County Development Review staff to be a use permitted by the plan, then a site plan review process can be followed. The site plan would be referred to the WSCAB. for their review and recommendations, and then forwarded to the Design Review Committee for their action.

Uses Not Specified in the Plan

If a proposed non-residential use cannot clearly be determined to be a conforming use, then the applicant must apply for a plan amendment. (Refer to plan amendment process.)

BUSINESS PARK USES

Any use proposed to be located in the Business Park shall be considered a major project, and will require a special use permit. It will be referred to the WSCAB. for their review and recommendation, and then the Planning Commission shall hold a public hearing. After the Planning Commission has made its determination, it will be forwarded to the Washoe County Board of Commissioners for their action.

TECHNICAL DESIGN REVIEW

PURPOSE

The intent of requiring a technical review is to provide the community through the WSCAB, and the County with a technical review of all applications. The concept is to provide a mechanism for an applicant to have his plans reviewed by a technical group that would review for plan conformance and also provide alternatives, suggestions and technical advice.

The goal is to insure, as much as is practical, that the intended quality and livability envisioned in the plan can become an actuality.

PROCESS

All applications for building permits, tentative subdivision and final maps, parcel maps, or site plan reviews in conjunction with non-residential developments or special use permit applications shall be reviewed and endorsed by the Washoe County Design Review Committee.

The Washoe County Design Review Committee shall review all applications for conformance with the Specific Plan and Development Standards Handbook Framework.

WATER BUDGET

The water budget will also require updating every year to reflect purchases/sales of water rights within the Specific Plan area and between the Specific Plan area and other areas of the basin.

A major update will be required at the end of the water study and acceptance by the State Engineer. Amendments should occur at the same time annual reviews take place.

WATER USE

Each application for tentative subdivision and final maps, parcel maps, or site plan reviews in conjunction with non-residential developments or special use permit applications and Development Standards Handbook submitted must provide water use calculations that conform to the water budget in the plan and the design and use guidelines established in the Development Standards Handbook Framework.

The basis of the water allocation is establishment of a metered community water system. The water purveyor should establish a rate structure that:

1. Sets a minimum rate for on-going maintenance and management of the system. This rate would apply to consumptive use that matches the AFY allocation for residential based on lot size, and commercial as allocated in the plan.

2. Rewards for conservation of water with below minimum rates during the high use periods of the summer.

3. Penalize use above that allocated in the plan by charging escalated fees with escalated use.

ENTERPRISE/USER FUNDS

The plan recommends that the County be the recipient of and administer the water funds.

This enterprise fund is intended to provide the County with maintenance and administration funding for these capital facilities.

MINIMUM SUBMITTAL REQUIREMENTS

All applications for tentative subdivision and final maps, parcel maps, or site plan reviews in conjunction with non-residential developments or special use permit applications will require a land use plan in conformance with the adopted Specific Plan, a Development Standards Handbook Framework amendment, and CC&Rs following guidelines included in the Development Standards Handbook Framework Appendix.

MINIMUM PLAN REQUIREMENTS

A land use/site development plan shall be submitted that conforms to the requirements as specified by Washoe County. These requirements include, but are not limited to, topographic information at 2-foot contour intervals, preliminary grading, soils and geotechnical evaluations and reports, preliminary drainage analysis and design, preliminary community water system design, lot and public roadway layout and preliminary design including building envelope, transition zone, and open space designations on each lot, as specified in the Development Standards Handbook Framework.

An open space plan shall also be required that illustrates the type, location and preliminary design of all trails within and adjacent to the proposed development.

MINIMUM DEVELOPMENT STANDARDS HANDBOOK REQUIREMENTS

A handbook shall be submitted that specifically documents how the particular project conforms to the Development Standards Handbook Framework. The handbook shall include, at a minimum, the following:

- ❑ Specific designs, materials, colors and construction techniques for all structures to be built within the project, including fences, signs and out-buildings or accessory buildings. Elevations and sections will be required to illustrate the architectural style to conform with the Framework design guidelines.

- ❑ Specific designs and plant materials are to be used for all required and optional landscaping, as specified by the Framework design guidelines. Irrigation plans will be required along with calculations of water use, as specified in the Basis for Water Allocation and the Water Budget.

- ❑ Typical site plans for each type of residential unit or commercial building showing driveways, parking areas, walkways, fencing, screening, etc.

MINIMUM COVENANTS, CONDITIONS AND RESTRICTIONS (CC&Rs) REQUIREMENTS

The sample CC&Rs contained in the appendix of the Development Standards Handbook Framework, represent the minimum elements required for all projects requiring the submittal of CC&Rs.

PLAN ADMINISTRATION POLICIES AND ACTION PROGRAMS

WSSP.8.1 REQUIRE A DEVELOPMENT AGREEMENT BETWEEN ANY PROPERTY OWNER AND THE COUNTY AS A CONDITION OF PROJECT APPROVAL IN ORDER TO UTILIZE THE LAND USE DESIGNATION(S) SPECIFIED ON THE WARM SPRINGS SPECIFIC PLAN - LAND USE PLAN

WSSP.8.1.1 The Washoe County Department of Development Review shall verify that a development agreement has been recorded for all projects requiring discretionary approvals prior to the issuance of any building permits. The development agreement shall be the legal instrument necessary to effectuate the increased land use development potential identified on the Warm Springs Specific Plan - Land Use Plan.

WSSP.8.1.2 The development agreement shall include, but is not limited to the following items:

a. Provision for the collection of any fees necessary to pay for the construction of community infrastructure that benefits the Specific Plan area, provision for the construction of community infrastructure, and options for the crediting of any fees paid for infrastructure which is ultimately not constructed;

b. Covenant, Conditions and Restrictions (CC&Rs) that implement the standards identified in the Warm Springs Specific Plan - Development Standards Handbook Framework and/or specific development standards adopted with the project approval;

c. Provision for the participation of any future property owner in any assessment district that provides services, facilities and/or maintenance for the mutual benefit of the Specific Plan area residents and property owners; and

APPENDIX A

WATER BUDGET

INTRODUCTION

The Specific Plan Area (SPA) is within the Warm Springs Valley Hydrologic Basin No. 84. The average annual precipitation in the basin is estimated to be 9.76 inches. There are no perennial streams in the SPA, but intermittent external drainage to Pyramid Lake does exist. The Nevada State Engineer has designated the Warm Springs Valley Basin as an area requiring additional water resource supervision. Various reconnaissance level studies have been conducted to estimate the potential amount of groundwater resources in the basin. A summary of these reports is included in the Water Resources Evaluation section of the plan.

The purpose of this budget is to summarize the existing information on water resources in the Warm Springs Valley in order to establish a preliminary water budget for land use planning purposes in the SPA. This report is not intended to resolve any of the questions raised in the previous studies or to be used as the basis to establish or eliminate any valid groundwater rights granted by the State of Nevada.

In general, an estimate of the available water resource and the current consumption patterns will be used to identify the total number of residential dwelling units and commercial or quasi-public uses that can be served from the available supply. Land areas have been identified based on the maximum number of residential dwelling units and desired development densities achievable based on the water available to the SPA and the location of existing water rights. (Refer to Land Use Plan.) The total number of acres assigned to each land use category, with appropriate allowance factors, will provide an adequate base to develop the projected number of residential units at buildout.

It is important to recognize that new techniques are being developed to improve in the prediction of safe groundwater yields. The estimates used in this plan will probably be superseded with new information resulting in the need for refined land use allocations. This water budget, therefore, is a useful tool for generating a plan for the Warm Springs SPA, but it should not be considered as the final water budget for the basin.

EXISTING WATER USE

Warm Springs Valley is a rural area with predominant land uses consisting of potato, alfalfa and turf grass farms, and large lot single family residences. (Refer to Existing Land Use Plan.) The Nevada State Engineer estimated that there are approximately 257 existing residences using private domestic wells in 1989, and a number of permitted and certificated wells for agricultural, stockwatering, recreation, quasi-municipal, and industrial uses in the basin. There are no public or private M & I water delivery systems currently serving the residences in the basin. The Washoe County Department of Comprehensive Planning has identified 1,128 existing residential lots as of July 31, 1990, inclusive of the 257 dwellings, that are zoned for single family residential uses, which may be allowed to install a domestic well with a maximum capacity of 1,800 gallons per day (2.02 acre feet/year) based on the statutory exemption (NRS 534.180) for obtaining a certificated or permitted water right. In addition, 24 new parcels were created with the approval of five (division of large parcel maps) submitted through September 4, 1990, to the Washoe County Department of Development Review. This would result in a total of 1,152 residential lots.

The Nevada State Engineer Office estimated the following groundwater quantities being withdrawn from the basin in 1989.

Table A-1

1989 EXISTING GROUNDWATER PUMPAGE
(Acre Feet/Year)

Existing Use	Quantity
Irrigation	4,905
Domestic Usage	230
Stockwatering	10
Recreation	10
Total	**5,155**

Source: Nevada Department of Conservation and Natural Resources, Division of Water Resources and Water Planning.

The domestic water usage is based on an estimated 205 occupied residences using approximately 1,000 gallons per day (1.12 acre feet/year) in 1989. The demand value of 1.12 acre feet/year is similar to the value estimated for residences in the Lemmon Valley Basin.

POTENTIAL WATER USAGE

The existing pumping totals do not equal the certificated and permitted groundwater rights issued by the Nevada State Engineer. As of July 31, 1990, the State Engineer has approved the following groundwater rights in the Warm Springs Valley Basin.

Table A-2

APPROVED WARM SPRINGS GROUNDWATER RIGHTS - 1990
(Acre Feet/Year)

Use	Certificated	Permitted	Total
Irrigation	3,480	1,970	5,450
Stockwatering	76	30	106
Industrial	117	(1,089)	117
Domestic	---	2	2
Recreation	8	20	28
Quasi-municipal	---	198	198
Total	**3,681**	**2,220**	**5,901**

Note: Industrial use for permitted water is non-consumptive.

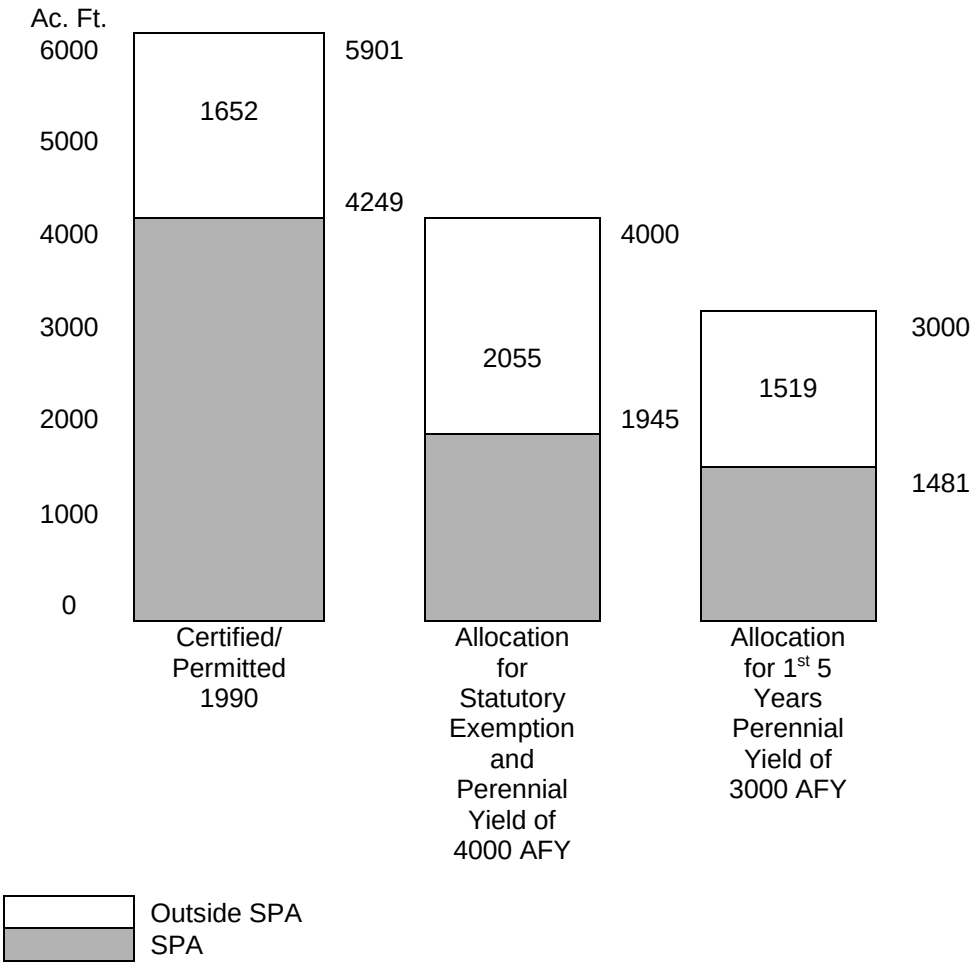
Source: Nevada Department of Conservation and Natural Resources, Division of Water Resources and Water Planning.

SPA PLAN BUDGET

The adopted Warm Springs Area Plan Water Budget (Appendix A of the Plan), allocates water differently from that accepted by the State Engineer. The Warm Springs Plan allocates a 4,000

AFY perennial yield for planning purposes. The State Engineer recognizes only the Water Resources Reconnaissance Series Report No. 43 to establish the perennial yield for the basin. This report specifies 3,000 AFY as the perennial yield. This was done to account for the 1,152 residential lots that are exempted from the requirements in NRS 534.180 to obtain certificated or permitted water rights. It was also done to account for the fact that the basin is over-allocated given a Planned Perennial Yield of 4,000 acre feet. To account for these exemptions and over-allocation, the existing Certificated and Permitted Irrigation and Stockwatering Rights are "discounted" if converted to other uses, 43% of face value is utilized. The following chart illustrates the effect of this discounting on the SPA.

WARM SPRINGS WATER RIGHTS



SPA AT 4,000 ACRE FEET PERENNIAL YIELD

The following tables establish the water allocation for the SPA if 4,000 acre feet is used as the planned perennial yield. The tables summarize the Warm Springs Area Plan Water Budget, and details the allocation remaining for the SPA.

The tables are broken down into two sections. The first section documents the allocation for the entire plan area divided between the SPA and outside the SPA. This section summarizes the budget for the SPA, highlighting the water set-asides for Residential, Commercial, Community Facilities, Business Park and Open Space uses designated on the Land Use Plan. The calculations used to determine these amounts is detailed in the Basis for Allocation section. The third section allocates water for each individual parcel in the SPA.

ALLOCATION FOR GENERAL RURAL AND RURAL RESIDENTIAL AND SPA

Utilizing the water budget contained in the Area Plan, the following modifications would need to be made to reflect the actual water budget for the SPA based on the SPA plan.

(Page 54, Warm Springs Area Plan dated December 3, 1991.)

Table 7

FUTURE WARM SPRINGS GROUNWATER PUMPAGE
(Acre Feet/Year)

Future Potential Development Use	*Quantity (Acre Feet/Year)*
Yield	*4,000*
Domestic Usage[1]	[2]*1,292*
Industrial	[3]*117*
Recreation	*28*
Quasi-Municipal	*198*
Subtotal	*1,635*
Net Difference	*2,365*

Notes: [1]*Domestic usage is computed by multiplying 1,152 dwelling units by 1.12 acre feet/year plus 2 as previously approved by the State Engineer. Quasi-municipal includes Reno/Sparks Indian Colony.*

[2]The 1,292 AFY allocated to Domestic usage includes 1.12 AFY for each of the existing 78 lots in the SPA, or 87 AFY. This 87 AFY will be added back in to the SPA water budget as equivalent units.

[3]52 AFY of the 117 AFY is owned by a major property owner in the SPA and is "ready for action" for conversion to Quasi-municipal at the State Engineering office (refer to appendix). This 52 AFY will be added back in to the SPA water budget.

Source: *Washoe County Department of Comprehensive Planning*/SPA proposed water budget (page 54, Warm Springs Area Plan dated December 3, 1991).

Table 8

WARM SPRINGS GROUNWATER DEVELOPMENT POTENTIAL

New Development Potential	*Water Demand (Acre Feet/Year)*	*New Dwelling Units*
Available/uncommitted	*2,365*	
Commercial (10 percent of available)	*236*	
Quasi-M&I (5 percent of available)	*118*	
Residential (85 percent of available)	*2,011*	*1,796*

Source: *Washoe County Department of Comprehensive Planning.*

Page 54 of the Warm Springs Area Plan dated December 3, 1991 states the following:

> *"The water demand allocations between commercial and quasi-M&I are intended to be flexible to accommodate the desired land uses in the Warm Springs Area Plan. For planning purposes, it is not advisable to convert the commercial and quasi-M&I allocation to residential uses since some community facilities will eventually be developed in the area."*

Based on this policy, Table 2, Potential Residential Land Use, page 24 in the Warm Springs Area Plan dated December 3, 1991, would be modified. Table 8 in the area plan would be modified to reflect the SPA plan as follows:

Table 8

WARM SPRINGS GROUNWATER DEVELOPMENT POTENTIAL BASED ON SPA PLAN

New Development Potential	Water Demand (Acre Feet/Year)	New Dwelling Units
Available/Uncommitted	2,365	
Commercial/Business Park	40	
Community Facilities	35	
1 Elementary School and Playground		
1 County Service Center		
Community Park/Open Space	112	
Subtotal	187	
Remainder for new residential units	2,178	1,945 @ 1.12 AFY per residential unit

Source: Washoe County Department of Comprehensive Planning.

The following will summarize the revision necessary to page 55 of the Warm Springs Area Plan dated December 3, 1991 to determine total equivalent dwelling units inside and outside the SPA:

> *The following values are relevant for developing the Warm Springs Area Plan:*
>
> *Total private ownership acreage equals 95,503 acres.*
>
> *Potential Specific Plan Area acreage equals 3,876 acres.*
>
> *Potential 40 acre parcel "general rural" (GR) acreage (less SPA) equals 91,627 acres.*
>
> *Maximum number of residential units based on planning perennial yield equals 3,097[1] dwellings.*
>
> *The potential number of residential dwelling units is based on the 1.12 acre feet/dwelling unit conversion value. The total number of residential units in Warm Springs Valley would be the total of the existing parcels plus the new units, or (1,152 + 1,945) = 3,097 residential units.*

Using these, the following land use intensities can be proposed for the area plan:

1. Potential number of total GR - 40 acre parcels (excludes "Specific Plan Area" and BLM lands):

91,627	acres (privately owned) "GR" designated in draft Warm Springs Area Plan
x 70	percent (30% of the total area for roads, slopes, parcels that cannot divide to 40 acres, etc.)
64,139	acres

   64,139 acre/40 acre/lot = 1,604 possible GR - 40 acre lots (privately owned)

2. Potential number of new GR - 40-acre parcels:

   a. Existing parcels in the SPA area = 78 lots.
   b. Existing GR parcels (as of September 4, 1990) that can be split into 40-acre parcels = 1,152 - 78 = 1,074 lots[1].
      [1] Note that the 78 SPA parcels have been subtracted from the existing parcel total.
   c. New potential GR parcels = 1,604 - 1,074 = 530 parcels.

3. Potential number of SPA residential dwellings:

3,097	Equivalent dwelling units
-1,074	Existing GR parcels
- 530	Potential GR parcels
1,493	Remaining new SPA equivalent dwelling units
+ 78	Existing equivalent dwelling units
1,571	Equivalent dwelling units

For planning purposes, it is appropriate to anticipate up to 1,571 residential units on individual domestic wells for development potential in the Specific Plan Area for the Warm Springs Area Plan. This would represent a gross development density of one (1) residential lot on individual domestic wells per 2.5 acres in the proposed 3,777 acres of residential use in the Specific Plan Area.

SPA PARCEL BY PARCEL BUDGET

General

The commercial allocation was subtracted from the total water rights owned by Terra West because the major commercial uses are designated to occur on their property. The water use for community facilities were allocated to all properties within the SPA with existing water rights, and is included in the residual column (RESID.).

Community System (COMM. SYSTEM)

The Community System column designates which properties are planned to be served by the community water system. This is based on the parcels being adjacent to the Amy Road side of the SPA, establishing a transition area of 1 dwelling unit/5 acres, which is not economically feasible to serve with a community water system. These parcels are then allocated 1.12 acre feet of water for each future 5 acre parcel.

Water Rights (WATER RIGHTS)

Known certificated or permitted water rights as of August 13, 1991.

57% Set Aside or Discount (57% SET.)

The Warm Springs water budget establishes a 43% "face value" of irrigation and stock watering groundwater rights when converted for developed land uses. This in actuality is a 57% discount or set aside amount. The figure shown is 43% of the water rights or the 57% discounted figure remaining to be used to support future development.

Residual (RESID.)

This is the amount of water retained by the current water rights owners that could be purchased by other owners within the SPA that currently do not have sufficient water rights to develop their property to the level of use established in the plan. This residual will be allocated to all parcels within the SPA that do not have sufficient water rights to develop as planned. It is allocated based on the density and use planned for these parcels, and whether or not they are included in the community water service area. (Refer to Dwelling Unit Actual -- DU ACT.) In addition, this residual amount includes the allocation for Community Facilities and Business Park uses. This total residual is then proportionately subtracted from the "set aside" water rights to leave this development option open to all property owners if they choose to exercise this option.

Dwelling Unit Potential (DU POT.)

This is the potential number of dwelling units that could be constructed on each property that currently holds water rights, based on the amount of water rights owned, divided by the 0.70 ac. ft. per dwelling unit allocated (refer to residential allocation). This is the resultant potential after all set-asides, discounts, and residuals have been subtracted proportionately.

Dwelling Unit Actual (DU ACT.)

This will be the actual "planned" number of dwelling units specified in the Land Use Plan.

Table A-3

WARM SPRINGS SPA AT 4,000 AFY PERENNIAL YIELD

Residential Development Potential	Number of Units	Quantity/AFY
Equivalent Dwelling Units		
Existing Parcels @ 1.12 AFY	78	87
New Units @ 1.12 AFY	1,493	1,672
Total Equivalent	1,571	1,759
New SPA Parcels		1,672
Parcels @ 1.12 AFY	238	267
Parcels @ 0.70 AFY	2,007	1,405
Total Parcels	2,245	

Based on the 4,000 afy perennial yield, approximately 450 afy set aside for residential land use is not allocated by the land use plan. The plan specifies 1,741 dwelling units while the water budget indicates the potential for 2,245 dwelling units. The additional water could be made available for other uses not allocated in the water budget.

SPA 3,000 ACRE FEET PERENNIAL YIELD

The State Engineer's position is that only the Water Resources Reconnaissance Series Report No. 43 can be used to establish the perennial yield for the basin. This report specifies 3,000 acre feet as the perennial yield of the basin. A water study is currently being conducted in the Warm Springs Area to further analyze this assumption and use more current scientific analysis to determine the relative accuracy of this figure.

Until such time as the State Engineer accepts the water study, the 3,000 acre foot perennial yield number will be used to review development applications. This number represents approximately 75% of the planned perennial yield of 4,000 acre feet. Therefore, all planned development will be subject to a 25% reduction in total potential during this interim period.

The following table establishes the water allocation for the SPA if 3,000 acre feet is used as the planning perennial yield. The table summarizes the Warm Springs Area Plan Water Budget, and details the allocation remaining for the SPA. The various sections and columns are the same as the 4,000 acre feet table except the proportional reduction required to accommodate the 3,000 acre foot interim number.

Table A-4

WARM SPRINGS SPA AT 3,000 AFY PERENNIAL YIELD

Residential Development Potential	Number of Units	Quantity/AFY
Equivalent Dwelling Units		
Existing Parcels @ 1.12 AFY	78	87
New Units @ 1.12 AFY at 75%	1,120	1,254
Total Equivalent	1,198	1,341
New SPA Parcels		1,254
Parcels @ 1.12 AFY at 75%	179	200
Parcels @ 0.70 AFY at 75%	1,505	1,053
Total Potential Parcels	1,684	

BASIS FOR ALLOCATION

The key element to managing the water resources in the Specific Plan Area is a metered community water system. The following allocation is based on a rate structure established by the County or G.I.D. that provides lower rates for conservation and higher penalizing rates for over use. (Refer to Plan Administration and Enforcement.) The water allocation is based upon the continuous implementation of the County's Stage Two Drought Restrictions.

Table A-5

WARM SPRINGS MP 4000 AF

Specific Plan Properties	Comm. System	Acreage	Water Rights	57% Set.	Resid.	DU Pot.	DU Act.
Equestrian Facility	Yes		170	73			
Commercial	Yes		40	17			
1A Terra West	Yes	923	1,612	693	194	713	632
1B Terra West	Yes	291	317	136	38	140	137
2A Cochrane	Yes	358	300	129	36	133	101
2B Newell	Yes	120	220	95	26	97	66
3 Nevada Potato	Yes	359	544	234	65	241	236
4 Western Turf	Yes	224	732	315	88	324	151
5 Chapman	Yes	140	10	4	1	4	23
6 Lewis	No	80	0	0	0	0	16
7 Pratt	Yes	97	121	52	15	54	38
8 Douglas	Yes	80	160	69	19	71	30
9 Cross	Yes	81	8	3	1	4	28
10 Johnson	Yes	40	0	0	0	0	9
11 Boleman	No	50	0	0	0	0	10
12 Higgins	Yes	45	10	4	1	4	6
13 Anderson	Yes	44	0	0	0	0	0
14 Mergen	No	40	0	0	0	0	10
15 Raffinelli	No	40	0	0	0	0	8
16 Hess	No	40	40	17	5	18	8
17 Hess	No	40	0	0	0	0	8
18 Tabor	No	40	0	0	0	0	8
19 Ardnell	Yes	41	0	0	0	0	16
20 Turner	Yes	40	0	0	0	0	16
21 Connell	No	40	0	0	0	0	8
22 Leong/Lee	No	40	8	3	1	4	8
23 Tiong	No	40	0	0	0	0	8
24 Lewis	Yes	40	0	0	0	0	16
25 Sun	No	40	0	0	0	0	8
26 Miller	No	40	9	4	1	4	8
27 Li	No	40	0	0	0	0	8
28 Stinson	No	40	8	3	1	4	8
29 Villatoro	No	40	0	0	0	0	8
30 Rice	No	40	0	0	0	0	8
31 Corbett	No	40	0	0	0	0	8
32 Cieri	No	40	8	3	1	4	8
33 Palomino Valley Estates, Inc.	Yes	40	0	0	0	0	8
34 Wendland	Yes	40	100	43	12	44	22
35 Cross, Hallbauer	No	40	8	3	1	4	8
36 Harding	No	39	0	0	0	0	8
37 Meyers	No	39	0	0	0	0	8
38 Pruitt	No	45	0	0	0	0	18
39 Palomino Valley Fire Dept.	Yes	2	0	0	0	0	0
40 Cogan	No	40	0	0	0	0	8
		3,978	4,425	1,902	507	1,865	1,741
Residual @ 5 AC/DU		1,190	267	14.03%		238	
Residual @ 2.5 AC/DU		668	135	7.10%		237	
Community Facilities			35	1.84%			
Business Park			23	1.21%			
Parks and Open Space			112				
Subtotal Residual			572				
Less Existing Rights Available on Individual Parcels			40	2.10%			
Total Residual			532	27.96%			
Total Units						2,340	1,741

Table A-6

WARM SPRINGS MP 3000 AF

Specific Plan Properties	Comm. System	Acreage	Water Rights	57% Set.	Resid.	DU Pot.	DU Act.
Equestrian Facility	Yes		170	73			
Commercial	Yes		40	13			
1A Terra West	Yes	923	1,612	709	146	604	474
1B Terra West	Yes	291	317	139	29	119	103
2A Cochrane	Yes	358	300	132	27	112	75
2B Newell	Yes	120	220	97	20	82	49
3 Nevada Potato	Yes	359	544	239	49	204	177
4 Western Turf	Yes	224	732	322	66	274	113
5 Chapman	Yes	140	10	4	1	4	17
6 Lewis	No	80	0	0	0	0	12
7 Pratt	Yes	97	121	53	11	45	28
8 Douglas	Yes	80	160	70	14	60	22
9 Cross	Yes	81	8	4	1	3	21
10 Johnson	Yes	40	0	0	0	0	7
11 Boleman	No	50	0	0	0	0	8
12 Higgins	Yes	45	10	4	1	4	4
13 Anderson	Yes	44	0	0	0	0	0
14 Mergen	No	40	0	0	0	0	8
15 Raffinelli	No	40	0	0	0	0	6
16 Hess	No	40	40	18	4	15	6
17 Hess	No	40	0	0	0	0	6
18 Tabor	No	40	0	0	0	0	6
19 Ardnell	Yes	41	0	0	0	0	14
20 Turner	Yes	40	0	0	0	0	14
21 Connell	No	40	0	0	0	0	6
22 Leong/Lee	No	40	8	4	1	3	6
23 Tiong	No	40	0	0	0	0	6
24 Lewis	Yes	40	0	0	0	0	14
25 Sun	No	40	0	0	0	0	6
26 Miller	No	40	9	4	1	3	6
27 Li	No	40	0	0	0	0	6
28 Stinson	No	40	8	4	1	3	6
29 Villatoro	No	40	0	0	0	0	6
30 Rice	No	40	0	0	0	0	6
31 Corbett	No	40	0	0	0	0	6
32 Cieri	No	40	8	4	1	3	6
33 Palomino Valley Estates, Inc.	Yes	40	0	0	0	0	6
34 Wendland	Yes	40	100	44	9	37	16
35 Cross, Hallbauer	No	40	8	4	1	3	6
36 Harding	No	39	0	0	0	0	6
37 Meyers	No	39	0	0	0	0	6
38 Pruitt	No	45	0	0	0	0	14
39 Palomino Valley Fire Dept.	Yes	2	0	0	0	0	0
40 Cogan	No	40	0	0	0	0	6
		3,978	4,425	1,940	381	1,578	1,310
Residual @ 5 AC/DU		1,190	200	10.32%		134	
Residual @ 2.5 AC/DU		668	101	5.22%		133	
Community Facilities			26	1.35%			
Business Park			17	0.89%			
Parks and Open Space			84				
Subtotal Residual			429				
Less Existing Rights Available on Individual Parcels			30	1.55%			
Total Residual			399	20.56%			
Total Units						1,846	1,310

Residential

According to the current Warm Springs Area Plan, subdivision of parcels creating new residential lots on individual domestic wells require dedication of 2.5 acre feet/year (AFY) of water rights to the County. This water budget accounts for this dedication in the 57% set aside element of the budget chart. The residential section of the budget is based on allocating water available per residential lot at 0.70 acre feet/year overall on a community water system. This number is based on the State Engineers permitted 0.57 AFY per residential lot allocation for an existing water system (Reno Park Water Company) and is also per the amount cited as an alternative to the Warm Springs water budget based on a mandatory water conservation program with low water demand vegetation landscaping and low demand water fixtures in the "Warm Springs Area Plan" of the Washoe County Comprehensive Plan dated December 3, 1991, page 58, paragraph 2 and Action Program WS.4.6.1. The 0.57 AFY is modified to 0.70 AFY based on larger residential lots proposed in the Plan (refer to Table A-7 for allocation). The recommended distribution of water per lot size on a community system is as follows:

Table A-7

Lot Size	No. of Lots	Water Allocation Per Lot	Estimated Yearly Water Usage
1 - 1-1/2 acre lot	1,266	.62 AFY	785.0 AFY
2 - 2-1/2 acre lot	237	1.12 AFY	265.4 AFY
Total	1,503	**Total**	1,050.4 AFY
		Average	**.70 AFY/Lot**

The average water allocation per residential lot equals 0.70 AFY.

The water use calculation is based on the following water consumption elements:

1. Domestic Use

    a. The average per capita domestic water use (not including irrigation) is 77 gallons/person/day. This is based on a non-conserving household. A conserving household using water conservation fixtures will reduce the domestic per capita water use to 60 gpd. Using current technology, ultra low flow fixtures could reduce domestic per capita water consumption to 52 gpd. (Source: "Residential Water Conservation Project, Summary Report" by Brown and Caldwell, June 1984.)

    b. The average household size is projected to be 2.5 persons.

        77 gallons/day x 365 days x 2.5 people =
        70,262.5 gallons/house/year =
        0.216 AF/house/year

    c. A monitoring system will be required to determine actual use and mandate design and allocation changes based on actual use. The monitoring system should include tensiometers on trees/shrubs at sample facility.

2. Landscape Irrigation Use

a. Lawn Watering

The watering requirements for the Warm Springs area are determined as follows:

Water 0.5" twice per week for 16 weeks, water 0.75" twice per week for 12 weeks during the summer months. For a 100 square foot lawn area, we used the following calculation:

(.5 x 2 x 16 x .62* = 9.92 x 100) =	992 gallons
(.75 x 2 x 12 x .62* = 11.16 x 100) =	1,116 gallons
	2,108 gallons

(*1" of water applied to one square foot surface area = .62 gallons)

b. Trees and Shrubs

The shrub and tree water consumption budget figures were determined using the following method:

The bermed saucer watering area of a mature tree was determined to be 4' diameter (3' for mature shrubs). The area of a 4' diameter saucer equals 12.5 square feet (7 sq. ft. for shrubs). The square foot area was multiplied by two feet which represents the preferred depth per watering to promote deep rooting and resistance to adverse conditions. This number represents cubic foot volume of soil to be watered which is multiplied by the water holding capacity of the soil (1.33 gallons per cubic foot of clay loam soil, Source: "Effectively Irrigating Landscape Trees" by Janet Hartin -- see appendix). The resulting gallonage figure represents the amount of water to be applied per watering:

mature tree (12.5 s.f. x 2 x 1.33 gallons = 33.25 gallons)
mature shrub (7.0 s.f. x 2 x 1.33 gallons = 18.60 gallons)

The watering frequency was determined as follows:

For an evergreen tree or shrub, water twice per week for the 12 week summer season, once per week for the remaining 16 weeks of the growth season and twice per month for the additional five months of the year.

evergreen trees and shrubs (2 x 12) + (1 x 16) + (2 x 5) = 50 waterings

For a deciduous tree or shrub, water twice per week for the 12 week hot summer season and once per week for the remaining 16 weeks of the growth season. No additional water is required for the winter months.

deciduous trees and shrubs (2 x 12) + (1 x 16) = 40 waterings)

The per tree water consumption budget figures are then derived by multiplying the amount of water per application times the watering frequency =

evergreen tree	33.25 gallons x 50 waterings =	1,662 gallons
evergreen shrub	18.60 gallons x 50 waterings =	930 gallons
deciduous tree	33.25 gallons x 40 waterings =	1,330 gallons
deciduous shrub	18.60 gallons x 40 waterings =	744 gallons

We have averaged the yearly water consumption of mature deciduous and evergreen trees to determine the budget amount per tree in our figures (1,496 gallons). The average yearly water consumption of mature deciduous and evergreen shrubs equals 837 gallons.

c. The intent of the plan is to mandate compliance with the per lot water allocation while at the same time providing alternatives to permit variety in individual landscape designs. The following chart provides a list of optional water use estimates that can be used in any combination on any lot provided the water allocation per lot is not exceeded.

Table A-8

OPTIONAL LANDSCAPE USES - WATER CONSUMPTION

Item	Quantity	Yearly Water Use
Turf	100 sq. ft.	2,108 gallons
Vegetable / Flower Garden	100 sq. ft.	1,612 gallons (based on 16 wk. watering season)
Deciduous Shrub	1 each	744 gallons
Evergreen Shrub	1 each	930 gallons
Deciduous Tree	1 each	1,330 gallons
Evergreen Tree	1 each	1,662 gallons

3. Animal Use

Livestock uses an average of 20 gallons of water per day:

20 x 365 = 7,300 gallons/animal/year

Per Policy WS.3.1.A, uses such as pastures, require dedication of water rights in addition to domestic rights.

4. Residential Water Use

Residential water usage figures by average lot size are listed utilizing the following water demand figures.

Lawn: The water requirement for lawn areas is as follows:

Water 0.5" twice per week for 16 weeks and water .75" twice per week for 12 weeks during summer months

(.50 x 2 x 16 x .62* = 9.92 x sq. ft.) = gallons per 16 weeks
(.75 x 2 x 12 x .62* = 11.16 x sq. ft.) = gallons per 12 weeks
gallons total per season

(* 1" of water applied to one square foot surface area = .62 gallons)

Tree: Number trees X 1,496 = gallons per season

1,496 = an average of deciduous and evergreen trees from Table A-8

Domestic Use: Average household gallons per day based on 2.5 persons per household.

a. 1 - 1-1/2 acre lot - 0.62 acre feet/year = 202,015 gallons
The recommended limit of lawn area for the 1 - 1-1/2 acre lot is 4,000 square feet.

9.92 x 4000 =	39,680 gallons
11.16 x 4000 =	44,640 gallons
	84,320 gallons

The plan requires ten trees per lot:

10 x 1,496 =	14,960 gallons

Domestic use =	70,260 gallons
	169,540 gallons
	202,015 gallons
	-169,540 gallons
	32,475 gallons

Optional uses: This leaves 32,475 gallons for selection of optional landscape elements (see Table A-8).

b. 2 - 2-1/2 acre lot and larger - 1.12 acre feet/year = 364,930 gallons
The recommended limit of lawn area for the 2 - 2-1/2 acre or larger lots is 4,000 square feet.

9.92 x 4,000 =	39,680 gallons
11.16 x 4,000 =	44,640 gallons
	84,320 gallons

The plan requires five trees per lot:

5 x 1,496 =	7,480 gallons

Domestic use =	70,260 gallons
	162,060 gallons
	364,930 gallons
	-162,060 gallons
	202,870 gallons

Optional uses: This leaves 202,870 gallons for selection of optional landscape elements (see Table A-8).

Table A-9

RESIDENTIAL WATER USAGE - GALLONS

Lot Size	Water Allocation	Domestic Use	Required Trees	Required Turf	Total	Residual/ Optional Usage
1-1-1/2 AC	.62 AFY 202,015 Gals.	70,260	14,960	84,320	169,540	32,475
2-2/12 AC	1.12 AFY 364,930 Gals.	70,260	7,480	84,320	162,060	202,870

5. Irrigation Requirements

Each residential lot will be required to install an irrigation system with automatic controller and backflow prevention device to meet County/State health codes. The irrigation system shall include an overhead spray system for any turf areas, with uniform head to head coverage and matched sprinkler head precipitation rates. The system shall also include a drain down method for winterization.

All trees, shrubs, and groundcovers shall be watered with a drip system with a separate control clock or a dual program controller. Each tree, shrub, or groundcover shall be watered with individual drip emitters or collectively in groups with micro sprayers.

6. Landscape and Irrigation Plan Submittal Requirement

Each future homeowner or builder will be required to submit landscape and irrigation plans for approval as a part of the building permit application process. The plans shall be prepared by a qualified landscape industry professional, landscape contractor, or a landscape architect. The County's landscape ordinance, which is in draft form now, will be incorporated in the Plan once the ordinance is adopted. It will be used as a guideline when reviewing plans.

The landscape plan shall include a site base map prepared to a 1"=20' minimum scale with the house and driveway footprint, property lines, utility locations, etc. This base map must clearly show proposed landscape areas with square footage area calculations to meet the water usage requirements specified in this plan. In addition to the above, the landscape plan must include:

- a plant species list keyed to plant locations on the plan. The plant list must include plant sizes and quantities;
- an indication of surface material(s) in non-landscaped areas; and,
- agricultural soils test results and proposed soils improvement/amendment methods.

The irrigation plan shall be prepared to scale on the same base map as the landscape plan. The irrigation plan must include the following:

- point of connection to water source;
- location, type and installation detail of backflow prevention device;
- remote control valve location, manufacturer's name, product number, size and gallons per minute for each lateral zone;
- irrigation main and lateral line type, size and depth of bury;
- sprinkler head locations, manufacturer's name, product number, nozzle size and number, radius, gallons per minute and psi operation rate;
- drip system - valve location and size; lateral line type and location; emitter type; product number and amount per plant; and
- control clock manufacturer's name, product number and installation location.

Commercial

There are 10 acres of Village Center Commercial and 10 acres of Highway Commercial designated on the plan. To determine the water allocation, the following factors were considered:

Building Usage/Allocation

1. Total square footage of buildings per parcel was based on a floor area ratio (F.A.R.) of 0.15, or 15% building coverage at one story. This is the maximum permitted in the plan (refer to Land Use). This translates to a potential for 130,680 square feet of building area at full commercial buildout.

    a. Utilizing the occupant load factor for retail sales of one per 30 square feet for 60% of the commercial square footage and 40% for office at one per 100 square feet establishes the following occupancy load:

	Maximum Permitted Area	Total Occupants
Retail	78,403 sq. ft. @ 30 =	2,600
Office	52,272 sq. ft. @ 100 =	522
	130,680 sq. ft. area	3,122

Source: U.B.C. 1988 pg. 665.

    b. Utilizing the minimum plumbing facilities of one water closet per 25 people, one lavatory per 15 people, and one drinking fountain per 75 people, the following fixture units are estimated:

Type	Number of Fixtures	Number of Fixture Units
Water Closets	3,122 ÷ 25 = 125	@ 3 FU/Fix 375
Lavatories	3,122 ÷ 15 = 208	@ 1 FU/Fix 208
Drinking Fountains	3,122 ÷ 75 = 42	@ 1 FU/Fix 42
		625

Source: U.P.C. 1988, pg. 153.

Utilizing Westpac's ratio of 15 g.p.d. (gallons per day) supply per fixture unit creates a water usage estimate of 9,375 gallons per day at buildout. This translates to 10.6 acre feet per year.

Landscape Usage/Allocation

The plan design guidelines require 20% landscape coverage of the commercial sites, or 4 acres of the 20 acres planned for. Utilizing the same .354 acre feet/acre basis (.57 AFY minus domestic use) as the residential uses would equal a total of 7.08 acre feet or 2,306,868 gallons of water for landscape irrigation. The following chart develops the total water use per acre of landscape area:

10,890 sq. ft. of turf (25% coverage) at 21 gallons/sq. ft.	228,690 gallons
58 trees (1 tree per 750 sq. ft.) at 1,496 gallons/mature tree	86,768 gallons
290 shrubs (5 shrubs per tree) at 837 gallons/mature shrub	242,730 gallons
= total water use per acre of landscape	558,188 gallons

558,188 gallons equals the water use per acre of landscape coverage. Multiply this number times four acres for the total landscape water consumption for the commercial area at buildout.

Total commercial landscape consumption would equal 2,232,752 gallons or 6.8 acre feet.

As with residential, options for variations in material mixes should also be considered.

The controlling factor is 0.354 acre feet per acre, and all proposed commercial developments will be required to submit water use calculations for the proposed landscape plan to demonstrate compliance with the design guidelines.

Total commercial usage allocated 10.6 AFY building usage plus 6.8 AFY landscape usage equals 17.4 acre feet.

Table A-10

OPTIONAL LANDSCAPE USES - WATER CONSUMPTION

Item	Quantity	Yearly Water Use
Turf	100 sq. ft.	2,108 gallons
Deciduous Shrub	1 each	744 gallons
Evergreen Shrub	1 each	930 gallons
Deciduous Tree	1 each	1,330 gallons
Evergreen Tree	1 each	1,662 gallons

1. Irrigation Requirements

   Each commercial development will be required to install an irrigation system with automatic controller and backflow prevention device to meet County/State health codes. The irrigation system shall include an overhead spray system for any turf areas with uniform head to head coverage and matched sprinkler head precipitation rates. The system shall also include a drain down method for winterization.

   All trees and shrubs shall be watered with a drip system with a separate control clock or a dual program controller. Each tree, shrub, or groundcover shall be watered with individual drip emitters or collectively in groups with micro sprayers.

2. Landscape and Irrigation Plan Submittal Requirement

   Each commercial project will be required to submit landscape and irrigation plans for approval as a part of the building permit application process. The plans shall be prepared by a qualified landscape industry professional, landscape contractor, or a landscape architect.

   The landscape plan shall include a site base map prepared to a 1"=20' minimum scale with the building and driveway and parking lot footprint, property lines, utility locations, etc. This

base map must clearly show proposed landscape areas with square footage area calculations to meet the water usage requirements required in this plan. In addition to the above, the landscape plan must include:

- a plant species list keyed to plant locations on the plan. The plant list must include plant sizes and quantities;
- an indication of surface material(s) in non-landscaped areas; and,
- agricultural soils test results and proposed soils improvement/amendment methods.

The irrigation plan shall be prepared to scale on the same base map as the landscape plan. The irrigation plan must include the following:

- point of connection to water source;
- location, type and installation detail of backflow prevention device;
- remote control valve location, manufacturer's name, product number, size and gallons per minute for each lateral zone;
- irrigation main and lateral line type, size and depth of bury;
- sprinkler head locations, manufacturer's name, product number, nozzle size and number, radius, gallons per minute and psi operation rate;
- drip system - valve location and size; lateral line type and location; emitter type; product number and amount per plant; and
- control clock manufacturer's name, product number and installation location.

Community Facilities

There are two community facilities that do not have water allocations in other sections of this water budget. They are the proposed elementary school site and the proposed county service center in the Village Center.

Elementary School Site

The domestic water use of the elementary school is calculated as follows:

Washoe County School District's method for determination of the number of elementary school age students is to multiply the population times 9.4%. Washoe County Planning staff utilizes 9.8% figure in determining elementary school age students.

4,010 (general rural population) + 4,352 (SPA population) x .098 = 819 elementary students.

The average daily water use of elementary students equals 5 gallons per student per day. (Source: Dale Sanderson, Washoe County School District). There are 180 days per school year. The yearly domestic water use based on the total population of the Warm Springs area for both of the Warm Springs elementary schools is:

819 students x 5 gpd x 180 days = 737,100 gallons, or 2.3 acre feet.

The yearly domestic water use based on the student population of the SPA is:

426 students x 5 gpd x 180 days = 383,400 gallons, or 1.2 AFY.

A five-acre playground/play field allocation has been set aside to accommodate recreational opportunities at the school site. The water use for five acres of turf grass play field equals 4,591,224 gallons, or 14 acre feet of demand for the school playground site.

The total allocation for the school site utilizing student population of the SPA would be 15.2 acre feet. This compares with an average consumption of other schools of similar size in the Washoe County District. Utilizing data obtained from the district (refer to appendix), the following was yearly usage during the 1984-1985 and 1985-1986 school years prior to the current drought.

School	Number of Students	Water Usage (AFY)	Average AFY/ 100 Students
Dunn	523	13.39	2.6
Lenz	472	14.25	3.0
Warner	554	5.33	1.0
Towles	512	2.42	0.5
Gomm	329	5.55	1.4
Beck	567	9.02	1.6
Anderson	395	5.56	1.4
Elmcrest	460	4.70	1.0
Mt. Rose	409	3.86	0.9
Dodson	668	12.40	1.9
Average	**489**	**7.65**	**1.56**

426 students x 1.56 AF/100 students = 6.64 AFY

Typically, the SPA school water demand is 14 AFY for turf irrigation, 1.2 AFY for domestic use, approximately 7 AFY above the average 7.65 AFY water usage.

County Service Center

The County Comprehensive Plan designates a typical service center facility that could be developed by the County in the Village Center. This center would be built in phases on a five acre site. (Refer to Washoe County Comprehensive Plan.)

Building Usage/Allocation

1. County standards in the Land Use and Transportation Element of the Comprehensive Plan for Public Services and Facilities establishes a standard of 8.4 employees per acre for use in calculating water and sewer demand for community facilities.

	County Standard	**Total Occupants**
5 Acre Site	8.4 Employees per Acre	42
This approximates 2% of the total current workforce of the County to serve less than 2% of the total current population of the County, if the SPA were built out today.		

a. Utilizing the minimum plumbing facilities of one water closet per 25 people, one lavatory per 15 people, and one drinking fountain per 75 people, the following fixture units are estimated:

Type	**Number of Fixtures**	**Number of Fixture Units**
Water Closets	42 ÷ 25 = 2	@ 3 FU/Fix 6
Lavatories	42 ÷ 15 = 3	@ 1 FU/Fix 3
Drinking Fountains	42 ÷ 75 = 1	@ 1 FU/Fix 1
		10

Source: U.B.C. 1988, Page 153.

Utilizing Westpac's ratio of 15 g.p.d. (gallons per day) supply per fixture unit creates a water usage estimate of 150 gallons per day at buildout. This translates to 0.175 acre feet per year.

Landscape Usage/Allocation

The plan design guidelines require 20% landscape coverage of the service center site, or 1 acre of the five acres planned for. Utilizing the same .354 acre feet/acre basis (.57 AFY minus domestic use) as the residential uses would equal a total of 1.77 acre feet or 576,673 gallons. The following chart develops the total water use per acre of landscape area:

10,890 sq. ft. of turf (25% coverage) at 21 gallons/sq. ft.	228,690 gallons
58 trees (1 tree per 750 sq. ft.) at 1,496 gallons/mature tree	86,768 gallons
290 shrubs (5 shrubs per tree) at 837 gallons/mature shrub	242,730 gallons
= total water use per acre of landscape	558,188 gallons

558,188 gallons equals the water use per acre of landscape coverage. Multiply this number times one acre to get the total landscape water consumption for the service center site. Total service center landscape consumption would equal 558,188 gallons or 1.7 acre feet.

Potential options for variations in material mixes should also be considered where appropriate.

The controlling factor is 0.354 acre feet per acre, and all proposed county development will be required to submit landscape and irrigation plans with water use calculations to demonstrate compliance with the design guidelines.

Total service center usage allocated equals 2.4 acre feet.

Total community facilities usage allocated equals 17.5 acre feet.

Business Park

There are 47 acres of restricted business park designated on the plan. To determine the water allocation, the following factors were considered:

Building Usage

1. In the Land Use and Transportation Element of the County Comprehensive Plan, standards establish 5.8 employees per acre (industrial land uses) and 32.2 employees per acre (office commercial land uses) for use in calculating water and sewer demand.

	County Standard	**Total Occupants**
28 Acres Manufacturing	5.8 Employees/Acre	162
19 Acres Office	32.2 Employees/Acre	612
		774*
*This approximates one job per every two households for the SPA at buildout.		

   a. Utilizing the minimum plumbing facilities of one water closet per 25 people, one lavatory per 15 people, and one drinking fountain per 75 people, the following fixture units are estimated:

Type	**Number of Fixtures**	**Number of Fixture Units**
Water Closets	774 ÷ 25 = 31	@ 3 FU/Fix 93
Lavatories	774 ÷ 15 = 52	@ 1 FU/Fix 52
Drinking Fountains	774 ÷ 75 = 10	@ 1 FU/Fix 10
		155

Source: U.P.C. 1988, pg. 153.

Utilizing Westpac's ratio of 15 g.p.d. (gallons per day) supply per fixture unit creates a water usage estimate of 2,325 gallons per day at buildout. This translates to 2.5 acre feet per year.

Landscape Usage/Allocation

The plan design guidelines require 20% landscape coverage of the business park, or 9.4 acres of the 47 acres planned for. Utilizing the same 0.354 acre feet/acre basis (.57 AFY minus domestic use) as the residential uses would equal a total of 16.6 acre feet or 5,408,347 gallons. The following chart develops the total water use per acre of landscape area:

10,890 sq. ft. of turf (25% coverage) at 21 gallons/sq. ft.	228,690 gallons
58 trees (1 tree per 750 sq. ft.) at 1,496 gallons/mature tree	86,768 gallons
290 shrubs (5 shrubs per tree) at 837 gallons/mature shrub	242,730 gallons
= total water use per acre of landscape	558,188 gallons

558,188 gallons equals the water use per acre of landscape coverage. Multiply this number times 9.4 acres to get the total landscape water consumption for the business park site. Total business park landscape consumption would equal 5,246,967 gallons or 16 acre feet.

Options for variations in material mixes should also be considered where appropriate.

The controlling factor is .354 acre feet per acre, and all proposed business park developments will be required to submit landscape and irrigation plans with water use calculations to demonstrate compliance with the design guidelines.

Total business park usage allocated equals 23 acre feet.

Golf Course and Open Space

Golf Course

The plan currently designates 80 acres for a golf course. The intent of the plan is to use existing agricultural wells and not include the course in the community water system. No allocation for irrigation of the course is provided for in the water budget. The transition zone and open space designated on the lots adjacent to the golf course will be utilized for development of the golf course.

Open Space

The plan currently designates the following open spaces:

Golf Course or Open Space	80 acres
Other Open Space	360 acres
Total Open Space	440 acres

Community Park

12 Acre School Site with Five Acre Park	5 acres
Community Park	30 acres
Equestrian Center	16 acres
Total Park Space	51 acres

The following allocation was made based on the assumption that the park would include a 5 acre active use playfield area planted with a durable tall fescue grass mixture and the rest of the park area would have a 50% turf area/landscape coverage and would be planted with a lower water use turf mixture or native grasses and wildflowers.

- Playing field/playground — 5 acres

  918,244.8 gal/ac/year[1] = 2.8 acre feet/acre or 14 acre feet total
  trees 65,824 gal/ac/year[3]= .2 acre feet/acre or 1 acre foot total

- Open Areas/Equestrian Facilities — 12.5 acres

  turf 540,144 gal/ac/year[2] = 1.6 acre feet/acre or 20 acre feet total
  trees 65,824 gal/ac/year[3]= .2 acre feet/acre or 2.5 acre feet total

Notes:
[1]0.5 inches twice a week for 16 weeks and .75 inches twice per week for 12 weeks during the summer months.

[2]0.5 inches once a week for 16 weeks and 0.5 inches twice per week for 12 weeks during the summer months.

[3]1,496 gal/tree/year, 44 trees/acre

The total allocation for the community park would be 37.5 acre feet. The Community Park would be irrigated from existing agricultural wells and would not be included in the community water system.

All Other Open Space

The plan designates 360 acres of other open space. The following allocation is based on reseeding and reestablishing native landscape cover on all open space areas disturbed during construction activity. Upon native landscape re-establishment, the supplemental irrigation will be converted to use for development of ornamental landscape with low water consumptive native grasses, trees, shrubs and wildflowers for up to 18% or 65 acres of open space area.

- Open Space Landscape Area - 65 acres

  Grasses: 540,144 gal/acre/year[1] = 1.6 acre feet/acre or 106 acre feet
  Trees: 32,912 gal/acre/year[2] = 0.1 acre feet/acre or 6 acre feet total

Notes:
[1]0.5 inches once a week for 16 weeks and 0.5 inches twice per week for 12 weeks during the summer months.

[2]22 trees per acre at 1,496 gal/tree/year

Total allocation for all other open space would be 112 acre feet. In all other open space, the intent of the Plan is to not disturb the areas and retain existing cover.

Individual Lot Open Space

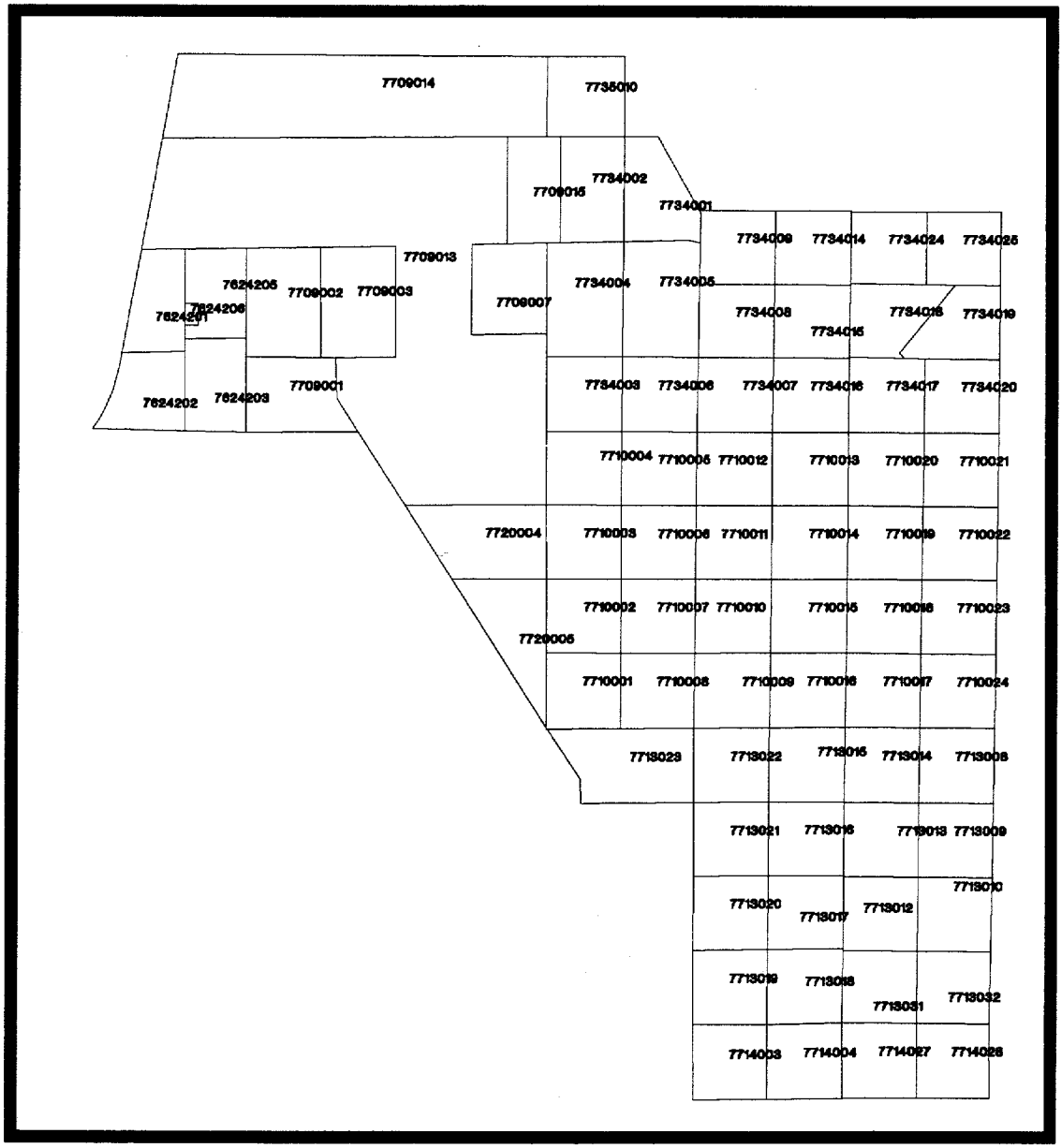
Other open space is designated for individual lots through the design guidelines for residential development. This open space is in addition to the acreage noted above. The intent of the plan is to retain existing cover in these areas and not disturb these designated areas. Some of these open space corridors may become special entry features for neighborhoods or be included within an SPA trail system.

Any proposed landscaping of these areas would also be irrigated from agricultural wells and would not be included in the community water system. Any proposed open space landscaping included in a development proposal will be required to submit water use calculations for the proposed landscaping.

APPENDIX B

WARM SPRINGS SPECIFIC PLAN AREA PROPERTY OWNERS

Assessor's Parcel No.	Acres	SP Land Use Designations	Owners First Name	Owners or Company Name	Mailing Address	City	St	Zip
76-242-01	43.57	GC, OC, GR	Family Trust Agreement	Anderson	4851 Koenig Road	Reno,	NV	89506
76-242-02	45.45	OC, MDR, GR	Dora I.	MaHaney	P.O. Box 5062	Sparks,	NV	89432
76-242-03	41.94	MDR, GR	Jack E. & Margaret M.	Ivers	3950 Mack Rd, Space 69	Sacramento,	CA	95823
76-242-05	38.76	OC, MDR, GR	H. B. Jr	Chapman	2900 Main Street	Alameda,	CA	94501
76-242-06	2.41	OC	Warm Springs	TMFPD	P.O. Box 11130	Reno,	NV	89520
77-090-01	51.71	MDR	Mike & Debbie	DePoali	5705 Tartan Road	Reno,	NV	89510
77-090-02	59.68	MDR, GR	H. B. Jr	Chapman	2900 Main Street	Alameda,	CA	94501
77-090-03	60.18	LDS, PS&F		Thema Holdings, inc.	P.O. Box 4100	Scottsdale,	AZ	85261
77-090-07	48.96	LDS, GR		Thema Holdings, inc.	P.O. Box 4100	Scottsdale,	AZ	85261
77-090-13	554.22	GC, PS&F, LDS, GR		Thelma Holdings, Inc.	P.O. Box 4100	Scottsdale,	AZ	85261
77-090-14	219.14	GC, LDS, GR		Thema Holdings, inc.	P.O. Box 4100	Scottsdale,	AZ	85261
77-090-15	40.97	P&R, GR		Thema Holdings, inc.	P.O. Box 4100	Scottsdale,	AZ	85261
77-100-01	40.27	HDR, LDS	Alan	Oppio	7900 Pyramid Way	Sparks,	NV	89436
77-100-02	40.39	LDS	Alan	Oppio	7900 Pyramid Way	Sparks,	NV	89436
77-100-03	40.51	LDS, GR		Fahnestock Enterprises	P.O. Box 20065	Reno,	NV	89515
77-100-04	40.62	LDS, GR		Double P Farms	6105 Whiskey Springs Rd	Reno,	NV	89520
77-100-05	40.59	LDS, GR		Double P Farms	6105 Whiskey Springs Rd	Reno,	NV	89520
77-100-06	40.47	LDS, GR		Fahnestock Enterprises	P.O. Box 20065	Reno,	NV	89515
77-100-07	40.35	LDS	Alan	Oppio	7900 Pyramid Way	Sparks,	NV	89436
77-100-08	40.24	HDR, LDS	Alan	Oppio	7900 Pyramid Way	Sparks,	NV	89436
77-100-09	40.42	LDS, GR	Alan	Oppio	7900 Pyramid Way	Sparks,	NV	89436
77-100-10	40.32	LDS, GR	Alan	Oppio	7900 Pyramid Way	Sparks,	NV	89436
77-100-11	40.44	LDS, GR		Fahnestock Enterprises	P.O. Box 20065	Reno,	NV	89515
77-100-12	40.55	HDR, LDS, GR	Ines R.	Cross	2979 Pickering Place, NE	Bremerton,	WA	98310-9757
77-100-13	40.52	HDR	Ines R.	Cross	2979 Pickering Place, NE	Bremerton,	WA	98310-9757
77-100-14	40.40	LDS		Fahnestock Enterprises	P.O. Box 20065	Reno,	NV	89515
77-100-15	40.28	LDS	Jack	Cochrane	6933 E. Jensen Avenue	Fresno,	CA	93727
77-100-16	40.17	LDS	Gladys M.	Lewis	2230 Menalto Avenue	Palo Alto,	CA	94303
77-100-17	40.00	MDR	Philip P. & Janet H.	Sun	304 Wilson	Kodiak,	AK	99615
77-100-18	40.01	MDR	Lorin F. Sr.	Lewis	2985 Clearland Circle	Pittsburg,	CA	94565
77-100-19	40.00	MDR	Chris S. & Min-Min W.	Tiong	15510 N W Barkton Court	Beaverton,	OR	97005
77-100-20	40.02	HDR	Jack	Cochrane	6933 E. Jensen Avenue	Fresno,	CA	93727
77-100-21	40.01	MDR	Kam P. & Joy	Lee	440 Elm Street	Reno,	NV	89503
77-100-22	40.00	MDR	Edward J.	Cogan	5255 Amy Road	Reno,	NV	89510
77-100-23	40.06	MDR	Lorin F. Sr.	Lewis	2985 Clearland Circle	Pittsburg,	CA	94565
77-100-24	40.05	MDR	Denise M.	Miller	P. O. Box 590	Sparks,	NV	89432
77-130-08	40.03	MDR	Gloria M.-c/o Marina G.	Villatoro	1132 Susay Way	Novato,	CA	94947
77-130-09	40.00	MDR	Harry A. & Jewell V.	Rice	3555 Sunnybrook Court	Sparks,	NV	89436
77-130-10	40.03	LDS, GR	Jack	Cochrane	6933 E. Jensen Avenue	Fresno,	CA	93727
77-130-12	40.06	LDS, GR	Jack	Cochrane	6933 E. Jensen Avenue	Fresno,	CA	93727
77-130-13	40.01	LDS, GR	Jack	Cochrane	6933 E. Jensen Avenue	Fresno,	CA	93727
77-130-14	40.04	MDR, GR	George W.	Stinson	4400 Broken Spur Road	Reno,	NV	89510
77-130-15	40.16	MDR, LDS, GR	Jack	Cochrane	6933 E. Jensen Avenue	Fresno,	CA	93727
77-130-16	40.01	MDR, GR	Jack	Cochrane	6933 E. Jensen Avenue	Fresno,	CA	93727
77-130-17	40.01	LDS, GR	George W. & Lolita L.	Newell	1200 Sharrock Road	Reno,	NV	89510
77-130-18	40.01	LDS, GR	George W. & Lolita L.	Newell	1200 Sharrock Road	Reno,	NV	89510
77-130-19	40.02	LDS, GR		Palomino Val Estates, Inc.	1200 Sharrock Road	Reno,	NV	89510
77-130-20	40.02	MDR	Richard J. & Randi D.	Cieri	4700 Grass Valley Road	Reno,	NV	89510
77-130-21	40.02	MDR	Kim J. & Vicki L.	Corbett	4800 Grass Valley Road	Reno,	NV	89510
77-130-22	40.17	MDR, LDS, GR	Chi-Yau & Shau C.	Li	574 Arastradero Rd #30	Palo Alto	CA	94306
77-130-23	67.60	HDR	Alan	Oppio	7900 Pyramid Way	Sparks,	NV	89436
77-130-31	38.71	LDS, GR	Jack	Cochrane	6933 E. Jensen Avenue	Fresno,	CA	93727
77-130-32	38.71	LDS, GR	Jack	Cochrane	6933 E. Jensen Avenue	Fresno,	CA	93727
77-140-03	40.23	LDS, GR	Dave & Donna B.	Wendland	2155 Paiute Creek Road	Reno,	NV	89510
77-140-04	40.27	MDR	John B. & Sybal I.	Hallbauer	730 Lobos Avenue	Point Richmond,	CA	94801
77-140-27	39.25	MDR	Brian R. & Cydney M.	Harding	1355 Sharrock Road	Reno,	NC	89510
77-140-28	39.26	MDR	K. G. & Rae	Watson	964 W. Camino Asturias	Green Valley,	AZ	85614
77-200-04	62.13	LDS		Fahnestock Enterprises	P.O. Box 20065	Reno,	NV	89515
77-200-05	49.20	LDS	Alan	Oppio	7900 Pyramid Way	Sparks,	NV	89436
77-340-01	47.11	HDR		Double P Farms	6105 Whiskey Springs Rd	Reno,	NV	89520
77-340-02	50.08	HDR		Double P Farms	6105 Whiskey Springs Rd	Reno,	NV	89520
77-340-03	41.10	LDS, GR		Double P Farms	6105 Whiskey Springs Rd	Reno,	NV	89520
77-340-04	63.57	LDS, GR		Double P Farms	6105 Whiskey Springs Rd	Reno,	NV	89520
77-340-05	64.27	LDS, GR		Double P Farms	6105 Whiskey Springs Rd	Reno,	NV	89520
77-340-06	40.95	LDS, GR		Double P Farms	6105 Whiskey Springs Rd	Reno,	NV	89520
77-340-07	40.56	HDR, LDS, GR	Jess C. & Suzanne K.	Andrell	P.O. Box 588	Fernley	NV	89408
77-340-08	40.01	HDR	Brent & Katherine D.	Douglas	4013 Clover Creek Court	Reno,	NV	89509
77-340-09	40.40	MDR, HDR	Max A. & Gail A.	Lopez-Gonzalez	5600 Grass Valley Road	Reno,	NV	89510
77-340-14	40.40	MDR	Gary	Raffanelli	P.O. Box 20988	Reno,	NV	89515
77-340-15	40.09	MDR, HDR	Brent & Katherine D.	Douglas	4013 Clover Creek Court	Reno,	NV	89509
77-340-16	40.39	HDR	Robert H. & Nancy A.	Turner	16985 Mtn Bluebird Drive	Reno,	NV	89511
77-340-17	40.35	MDR, HDR	George W. & Lolita L.	Newell	1200 Sharrock Road	Reno,	NV	89510
77-340-18	40.06	MDR, HDR	Russell C. & Sandra A.	Johnson	1300 Whiskey Springs Rd	Reno,	NV	89510
77-340-19	40.43	MDR	A. Lawrence & Marilyn J.	Tabor	23531 Lochlomond	Laguna Niguel,	CA	92677
77-340-20	40.26	MDR	Maureen	Connell-c/o M.J. Del Torto	2038 Palm Street 3 484	Las Vegas,	NV	89104
77-340-24	39.67	MDR	James E. & Ann P.	Hess	297 Lenwood Drive	Sparks,	NV	89431
77-340-25	39.67	MDR	Timothy W. & Patricia H.	Hess	4083 Ridgewood Ave	Las Vegas,	NV	89120
77-350-10	44.71	HDR	James A. & Darlene D.	Pruitt	P.O. Box 12486	Reno,	NV	89510
Total	3,983.70					Updated		11-7-94



WARM SPRINGS SPECIFIC PLAN

ASSESSORS PARCEL INFORMATION

0 800 1600

SCALE IN FEET

WASHOE COUNTY DEPARTMENT OF COMPREHENSIVE PLANNING

APPENDIX C

WSSP PLANNING SCHEDULE/MEETING DATES

	Task Force	CAB	All SP Owners
1991			
Data Gathering/Issues/Opportunities			
June 3rd	X		
June 17th	X		X *
July 1st	X		
July 8th		X	
Alternative Plans/Select Draft Plan Elements			
July 15th	X		
August 5th	X		
Draft Plan Review and Recommendation			
August 12th	X	X	X *
Draft Plan and Text Review			
September 2nd	X		
Draft Plan and Text Review			
September 9th		X	X *
Review & Plan Recommendation to C.A.B.			
September 23rd	X		
Review & Text Recommendation to C.A.B.			
October 7th	X		
Review & Plan Recommendation to Staff			
October 21st		X	X *
County Staff Comment Review			
November 4th	X		
Review & Text Recommendation to Staff			
November 18th		X	X

*** SPA Owners Notified Individually**

	Task Force	CAB	All SP Owners
1992			
Review Plan and Description Guidelines January 13th		X	X
Review Plan and Design Guidelines as Separate Document Recommendation to CAB February 5th	X		
Review Plan and Design Guidelines as Separate Documents Received Staff Comments February 10th		X	X
Plan and Design Guidelines Recommendation to Planning Commission March 9th		X	X

APPENDIX D

WATER RESOURCES

WATER RESOURCES EVALUATION

Introduction

Warm Springs Valley is located approximately 20 miles north of Reno, Nevada. The valley floor occupies roughly 30 square miles. Warm Springs Valley trends northwest-southeast, and is approximately 10 miles in length with a maximum width of approximately 4 miles. Elevation of the valley floor ranges from approximately 4,500 feet at the north and south ends to approximately 4,200 feet in the central portion. Surface drainage flows southeast in the northern half and northwest in the southern half, with outflow toward Pyramid Lake through Mullen Pass. Plate 10 is a basin map that shows some of the topographic features of Warm Springs Valley The Virginia Mountains are located to the northeast, the Pah Rah Mountains to the south, and Dogskin Mountain is located to the northwest. Elevations of surrounding mountains range from 6,000 to a maximum of 8,722 feet at Tule Peak in the Virginia Mountains.

Present land usage is divided between agricultural, ranch/residential, and undeveloped. Future trends in land use are proposed to decrease agricultural usage in conversion to increased residential development. Agricultural usage is concentrated in the southeast portion. Crops are primarily alfalfa, potatoes, turf grass, and garlic.

Previous Investigations

Numerous hydrogeologic investigations have been conducted on Warm Springs Valley. Glenn (1961) presents one of the earliest evaluations of the valley, in which general ground water conditions including basin recharge and water yield based on "mining" techniques were calculated. Glenn's report referenced a reconnaissance study conducted by Killingsworth (1959) for which we could not locate a copy.

North American Aviation, Incorporated (Glenn, King, and Reed, 1965) further evaluated the water resources and water yield from Warm Springs Valley through an extensive test drilling program.

A United States Geological Survey (USGS) Water Reconnaissance report was prepared by Rush and Glancy in 1967. This regional study covered numerous valleys located north of Reno, Nevada, including Warm Springs Valley. Individual water budgets and perennial basin yields were estimated as part of this reconnaissance report.

Sharp, Krater, Engstrom & Associates conducted three ground water resources studies between 1972 and 1974. The 1972 and 1973 studies primarily concentrated on refining a ground water budget and determination of a perennial yield for the basin. In 1974, a detailed hydrogeochemical investigation was conducted with an emphasis on nitrate concentrations.

William F. Guyton Associates, Incorporated prepared a ground water conditions investigation for Warm Springs Valley in 1987. This evaluation summarized the hydrogeology of the valley primarily based on the USGS Reconnaissance Report (Rush and Glancy, 1967) and provided recommendations for development of ground water resources.

In 1990, the Washoe County Department of Comprehensive Planning (WCDCP) prepared a water budget for land use planning proposed in Warm Springs Valley. Included in this water budget is a water rights discount for conversion of agricultural water rights to residential water rights, in an effort to alleviate suspect ground water withdrawals in excess of a long term perennial basin yield.

The Nevada Department of Conservation and Natural Resources, Division of Water Resources (State Engineer) compiled a 1990 Ground Water Pumpage Inventory which summarizes basin extractions and historical water level measurements from 1983 to 1990.

Hydrogeologic Summary

Tributary drainage to Warm Springs Valley includes Hungry Valley, located to the southwest, and Winnemucca Valley which is located to the northwest. Total surface area within the tributary drainage boundaries is 257 square miles (Glenn, 1961).

Several investigators have evaluated the hydrogeology of Warm Springs Valley, with regards to estimating a ground water budget for the valley and a perennial yield. A summary of results of previous studies is presented in Table D-1.

Briefly, the ground water budget for a basin under equilibrium conditions may be thought of as a system wherein the amount of water coming into the basin (recharge) equals the amount leaving the basin (discharge).

Natural recharge to ground water in Warm Springs Valley occurs from direct infiltration of precipitation and infiltration of runoff from the tributary watershed. Average annual precipitation ranges is estimated to be from about 7 inches at the valley floor to 15 to 20 inches over the tributary mountainous areas (Glenn, 1961). Discharge of ground water occurs through subsurface flow through Mullen Pass, consumptive use by pheatophytes, and by pumping extractions.

Perennial yield of a basin is customarily defined as that amount of ground water that may be withdrawn from a basin without creating adverse impacts upon the basin. Adverse impacts include such things as the unreasonable lowering of ground water levels within the basin or adverse ground water quality impacts created by pumping. Perennial yield cannot exceed the natural recharge to the basin, and may be less in some basins.

Early investigators of Warm Springs Valley determined the recharge to the valley based on percentages of average annual precipitation which would be expected to infiltrate in different geographic regions within the tributary drainage area. Glenn (1961 and 1965) estimated approximately 4,000 AF/yr of average annual recharge.

The USGS (Rush and Glancy, 1967) likewise determined the recharge to be approximately 6,000 AF/yr using the Eakin Method (1951). They also attempted to compile a ground water budget for the basin. Discharge was calculated to be 2,000 AF/yr which resulted in a large imbalance in the budget. Under steady-state conditions, the net recharge should be equal to net discharge. Since all of the values in a ground water budget are estimates, usually some difference in recharge and discharge values is expected. The difference in net values in the USGS evaluation is, however, excessive. Perennial yield was estimated to be 3,000 AF/yr based on this ground water budget. This perennial yield estimate is currently being used by the State Engineer for management of ground water resources in the Warm Springs Valley.

Table D-1

WARM SPRINGS VALLEY
GROUND WATER BUDGET SUMMARY

Source	Date	Recharge (AF/yr)*	Discharge (AF/yr)*	Perennial Yield (AF/yr)*
Glenn, R.J.	April, 1961	3,975	NC	NC
Glenn, King, Reed	February, 1965	3,972	NC	NC
Rush and Glancy (USGS)	November, 1967	6,000	2,000	3,000
Sharp, Krater, Engstrom & Associates	April, 1972	4,000 to 6,000	5,450	6,000
Sharp, Krater, Engstrom & Associates	April, 1973	4,000 to 6,000	4,415 to 4,917	4,400 to 4,900
Guyton & Associates	February, 1987	No new values determined		
Washoe County Department of Comprehensive Planning	October, 1990	NC	NC	4,000

NC = Not Calculated
* AF/yr = acre-feet per year

Sharp, Krater, Engstrom and Associates in 1972 and 1973 conducted detailed evaluations, with an emphasis on refining the average annual ground water discharge quantity for the valley. Their final discharge estimate was 4,400 to 4,900 AF/yr, which results in a relatively balanced ground water budget.

WCDCP also reviewed the data from the basin in 1990 and concluded that a reasonable perennial yield for the basin is approximately 4,000 AF/yr.

Previous studies have concentrated on refining and balancing the natural ground water budget for the valley (i.e., the groundwater inflow and outflow quantities). The current components of the ground water budget for the valley has changed since these studies. The current budget should include increased discharge through pumping extractions (approximately 5,100 AF/yr) and most probably decreased pheatophyte consumption and subsurface outflow. Secondary recharge of applied irrigation water would also be incorporated into a current ground water budget for Warm Springs Valley.

Current Ground Water Conditions

The State Engineer has been actively collecting measurements of ground water levels from thirteen wells in the valley since 1983. The data has been most recently published in the 1990 Ground Water Pumpage Inventory for Warm Springs Valley. Four water level hydrographs are presented as Plates 11 and 12. Since 1983, a general decrease in water levels has been experienced. Ten wells experienced water level declines ranging from 0.41 to 44.08 feet. Three wells experienced water level increases ranging from 0.99 to 5.85 feet. These three wells are located along the periphery of the valley (21/20-7AC, 22/21-7BD, and 22/21-23CDA). The most dramatic decline in ground water levels has been experienced in the southern portion of the basin where agricultural irrigation extractions are occurring. Based on the State Engineer's data, the average decline in ground water elevation in Warm Springs Valley from 1983 to 1990 is 8.71 feet.

Total pumpage extractions in 1990 have been estimated by State Engineer to be 5,104 AF. Approximately 95 percent of the total 1990 pumpage extractions was determined to be for irrigation usage (4,836/AF).

Water level data collected by the State Engineer has been used to construct ground water elevation contours for the valley for 1983 and 1990 (See Plates 13 and 14). A pumping depression is illustrated in the southern portion of the valley, were extractions for irrigation are concentrated. Generally, ground water flows towards the center of the valley were Mullen Pass and irrigation extractions are located. The average gradient of the ground in the southern portion of the valley is approximately 100 feet per mile northwest, and approximately 20 feet per mile eastward in the northern portion of the valley.

Some degree of natural ground water elevation decrease would be expected due to generally below average precipitation quantities from 1983 to present. Plate 15 illustrates the historical annual precipitation quantities as measured at the downtown Reno and Reno Cannon Airport stations. While the average annual precipitation in Reno (7.57 inches) is lower than the estimated average annual precipitation in Warm Springs Valley (9.76 inches) (WCDCP, 1990), the general precipitation trends should be similar.

A cumulative departure from mean precipitation was prepared from the Reno area data (see Plate 16). The cumulative departure curve can be used to illustrate historical wet and dry trends. Ground water recharge is directly dependent on natural precipitation replenishment and, therefore, natural fluctuations in ground water storage quantities and subsequent ground water elevations tend to mimic the cumulative departure trend. During wet meteoric trends natural ground water levels should rise and during dry trends the ground water levels would be expected to decline. A lag-time in response of aquifer fluctuations is typical, as water migrates down through the vadose zone. The lag-time is primarily a function of quantity of precipitation, depth to ground water, and lithology of the vadose zone.

As illustrated in the cumulative departure curve a very large surplus in ground water was expected during the late 1800's through the early 1920's. Following was a long period of generally below average precipitation quantities (until approximately 1950) during which natural ground water levels would be expected to have declined. From 1950 to present the fluctions in the cumulative departure curve shows cyclic trends of wet and dry periods, each trend roughly 10 years in duration. Since 1983, a dry period has been in progress and natural ground water declines would be expected.

The observed declining trend in ground water elevations in Warm Springs Valley during the past eight years is expected to be at least partially resultant of below average precipitation, thus a natural fluctuation in ground water level. Extraction of ground water at rates which can not be replenished (rates greater than the perennial yield) could also be a contributing factor. Unfortunately, a lack of historical water level data in the basin precludes any specific conclusions regarding the causes of this decline.

Conclusion

Numerous detailed hydrogeologic investigations have been conducted on Warm Springs Valley. Based on review of available data, it appears the WCDCP's recommendation that a reasonable perennial yield for the basin is 4,000 AF/yr. While the State Engineer is currently using a perennial yield quantity of 3,000 AF/yr as determined by the USGS (1967), this value was based on a water budget which was not balanced. Evaluations conducted both prior to and after the USGS reconnaissance evaluation indicate that the average annual natural recharge and discharge to the valley is on the order of 4,000 to 5,000 AF/yr.

Water levels in Warm Springs Valley have generally declined during the last 8 years. This decline is expected to be at least partially the result of natural precipitation quantities being below average since 1983. The observed decline may also be in part due to increased pumping extractions which have progressed in the valley. In 1990, the pumping extractions were estimated to be 5,104 AF/yr.

Recommendations

While more detailed hydrogeological investigations could be performed including an analysis of aquifer storage fluctuations versus precipitation fluctuations and determination of a current ground water budget, these analyses would not be expected to produce a conclusive perennial yield due to the limited period of record of the available historical data.

As detailed above, it appears appropriate to use the WCDCP's perennial yield estimate for planning and development in Warm Springs Valley. Continued monitoring of ground water levels and extractions should be conducted in order to establish a historical data base with a sufficient period of record to evaluate the ground water budget. A quarterly monitoring program, which will help determine the presence of any seasonal fluctuations, should be established. In addition to continued water level and extraction monitoring, it is also recommended that the monitoring network be expanded to incorporate more existing wells and provide more thorough coverage of the basin.

GROUNDWATER MONITORING NETWORK

Expanded groundwater level monitoring in Warm Springs Valley should be initiated. Recommended locations for additional monitoring points within the project vicinity are shown on Plate 10. Three locations are at existing wells and two locations will require construction of permanent monitoring wells. This expansion of the monitoring network will provide more thorough coverage of the south central portion of Warm Springs Valley, where a pumping depression is present from irrigation water extractions.

Monitoring of all wells should include both measurement of static and pumping water levels and metering of well production. In order to provide a data framework which will lend itself to use in further refining aquifer parameters in the basin, all measurements should be conducted on a quarterly basis. Preferably, a pumping water level measurement should be obtained, a ground water quality sample obtained, then the pump turned off, with water levels allowed to recover for a minimum of 72 hours, followed by the measurement of the static water level.

Plate 10

BASIN MAP - WARM SPRINGS VALLEY

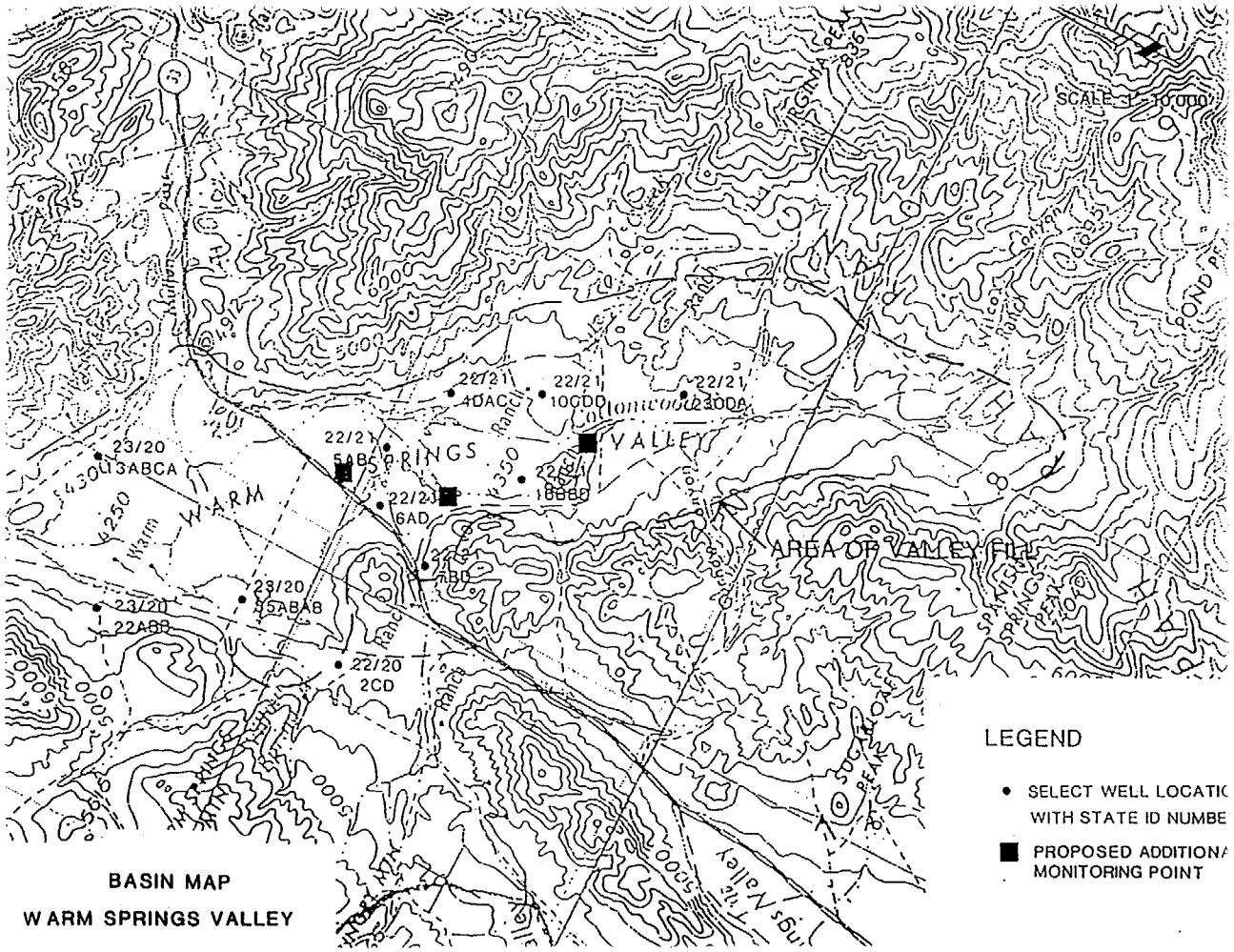
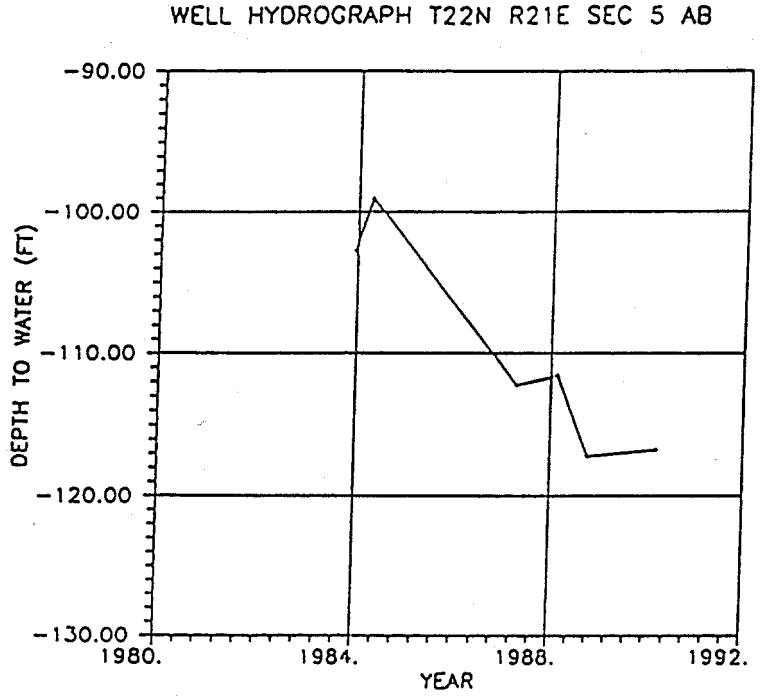


Plate 11

GROUND WATER HYDROGRAPHS

Section 5, T22N, R21E and Section 8, T21N, R20E



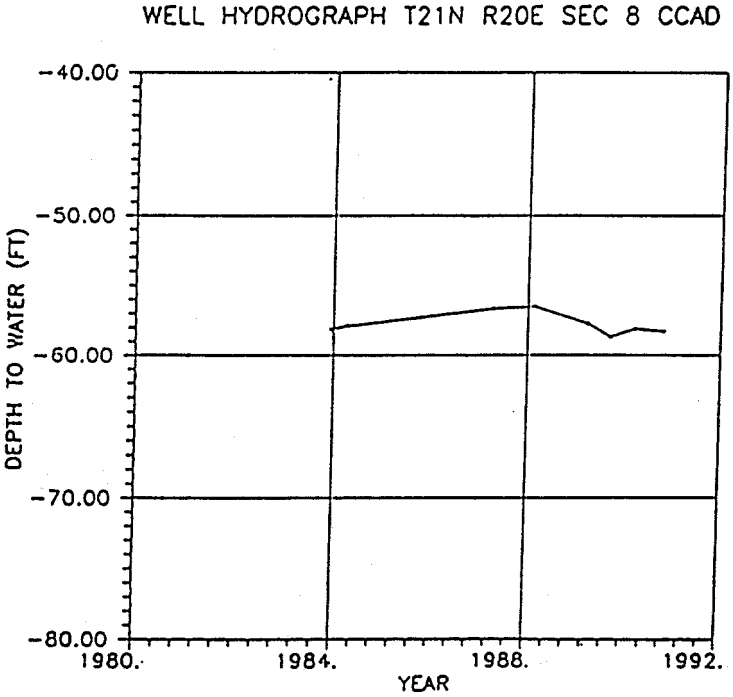
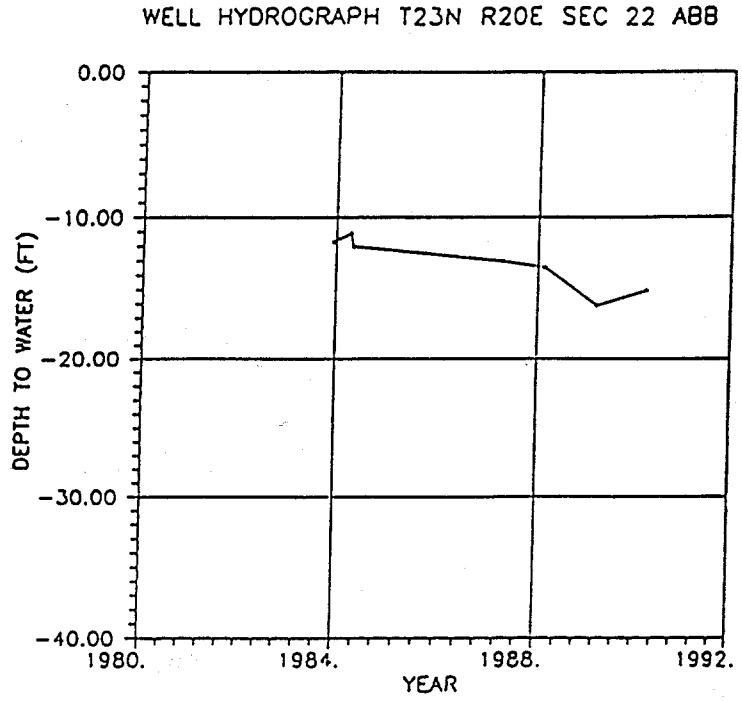


Plate 12

GROUND WATER HYDROGRAPHS
Section 22, T23N, R20E and Section 35, T23N, R20E



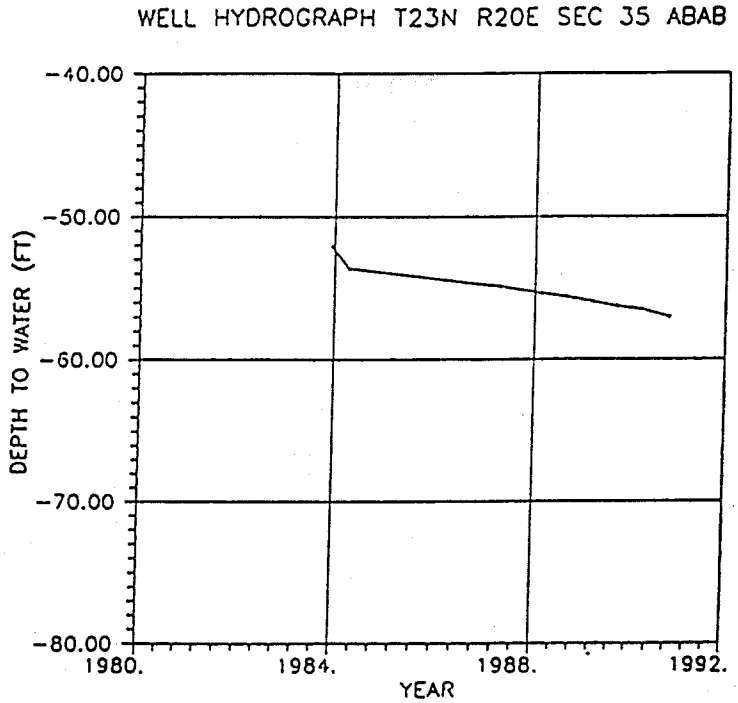


Plate 13

GROUND WATER CONTOURS - 1983

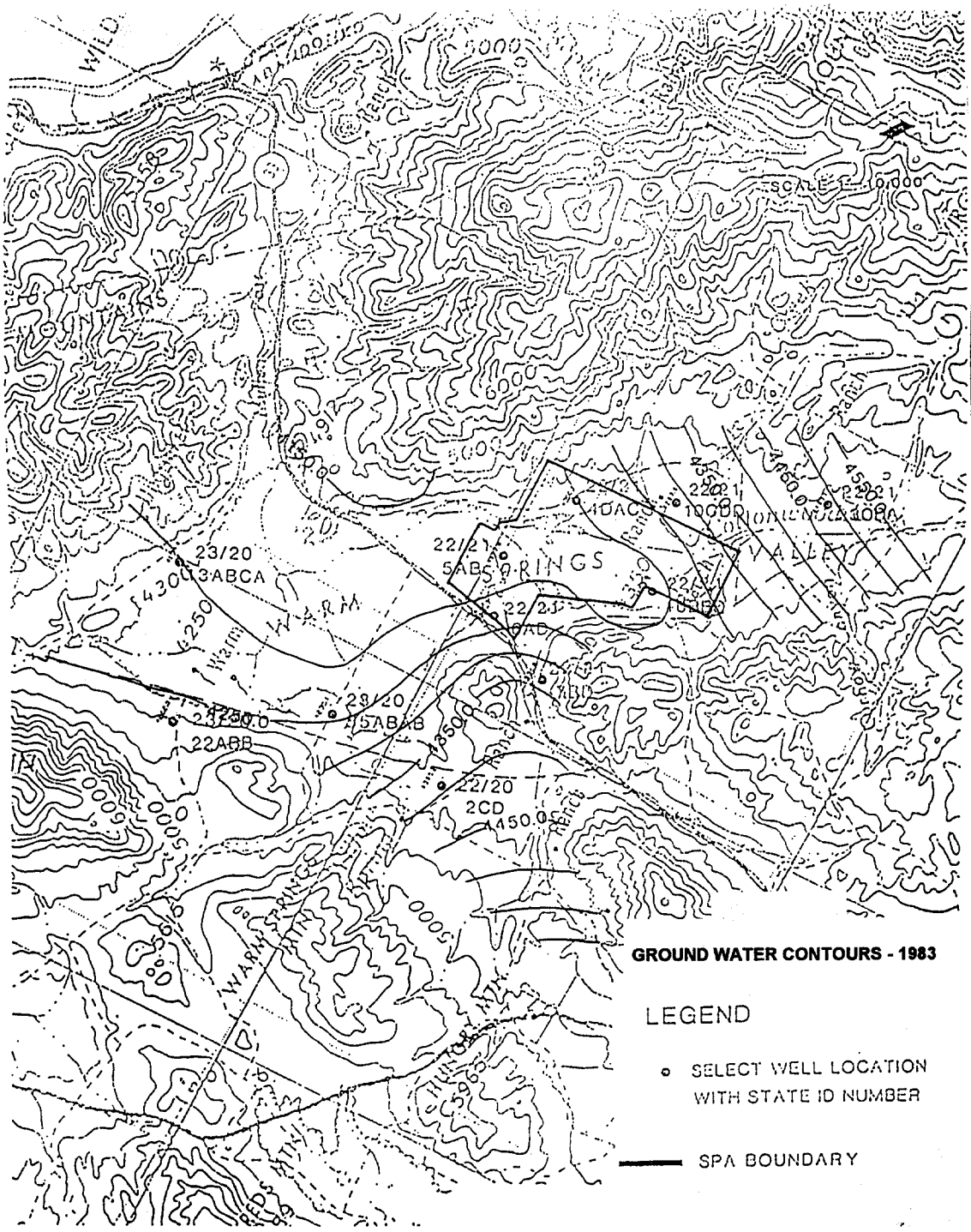


Plate 14

GROUND WATER CONTOURS - 1990

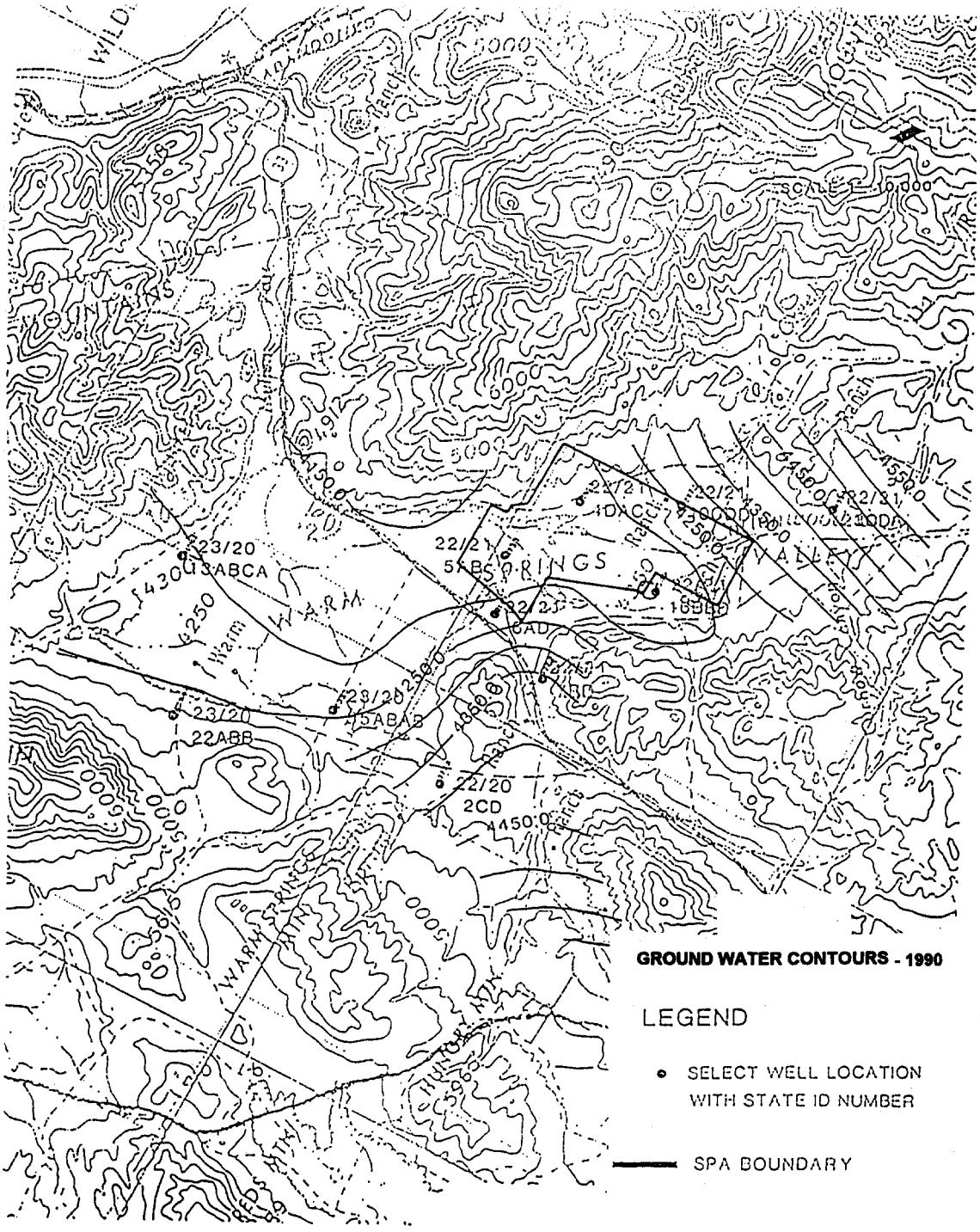


Plate 15

ANNUAL PRECIPITATION HYDROGRAPH
Reno 1888 to 1989

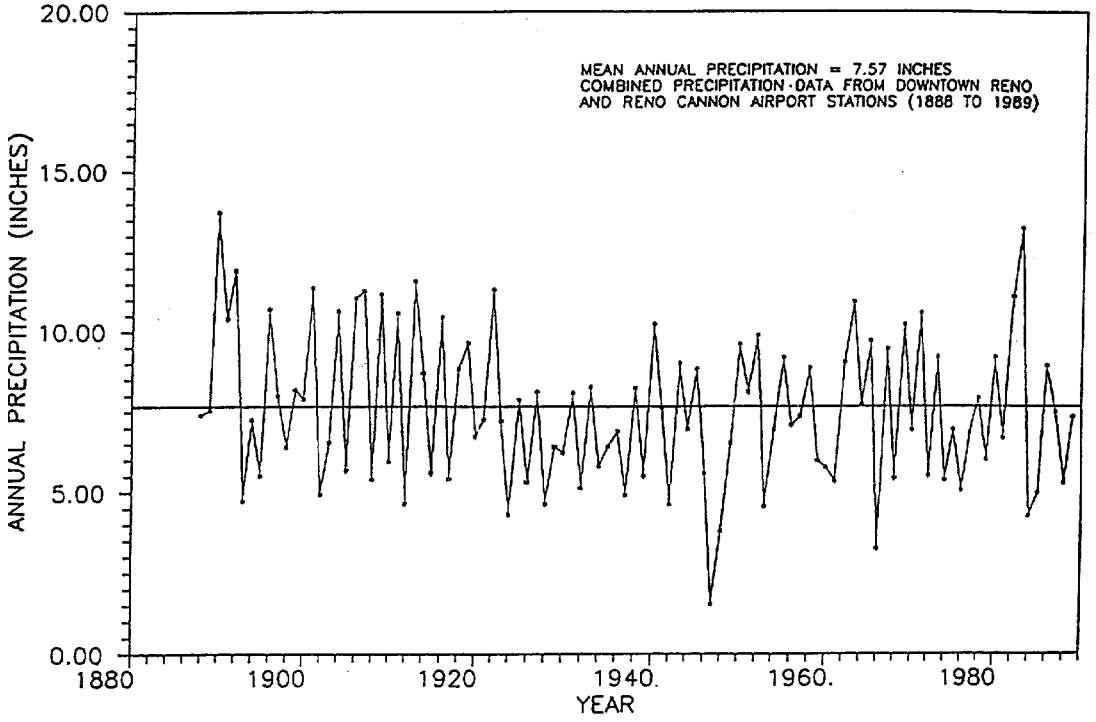
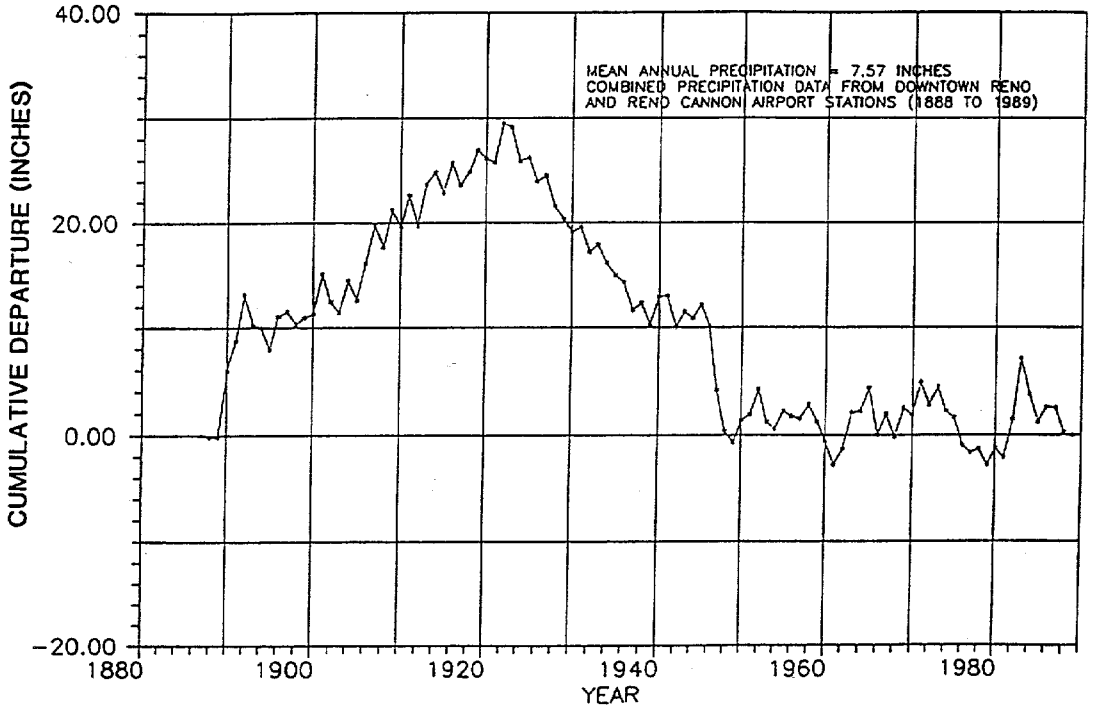


Plate 16

PRECIPITATION CUMULATIVE DEPARTURE
Reno 1888 to 1989



APPENDIX E

AGENCY RESPONSE LETTERS

WASHOE COUNTY

"To Protect and To Serve"

WASHOE COUNTY LIBRARY
MARTHA B. GOULD
DIRECTOR

301 S. CENTER STREET
POST OFFICE BOX 2151
RENO, NEVADA 89505
PHONE: (702) 785-4518

DISTRIBUTION

R.W.A.		J.D.	
R.B.		T.G.	
H.E.		L.L.	
J.H.		R.W.	✓
L.J.		R.G.	
M.D.		ACCTG.	
P.A.		PERSONNEL	
A.G.		L.T.	
T.T.		FILE	
D.H.		E.C.	
P.H.			
M.W.			

FILE NO. 270.01-1

December 17, 1991

Barbara Hatch
Senior Planning Technician
SEA Consulting Engineers
950 Industrial Way
Sparks, NV 89431-6092

Dear Ms. Hatch:

I have read with interest the information you sent to Mr. Manley regarding the Warm Springs Specific Plan Area. At this time, the Washoe County Library does not have any specific plans for providing library service to the Warm Springs Area.

However, as the project is developed, library service should be provided by a satellite operation, either housed in the Community Center or under a joint use agreement with the School District in one of the proposed schools.

Such a facility would have a small collection of approximately 6,000 volumes, on-line circulation, on-line catalog, reference materials, and children's programming. Depending on whether or not the library would be in a school or community center the number of staff would be either 2 or 3 persons.

I hope this information is of help in your planning. I am enclosing a copy of the planning criteria from the Washoe County Comprehensive Plan. If you have any questions, please contact me at 785-4742.

Sincerely,

Martha Gould
Director

cc: John Hester

WASHOE COUNTY SCHOOL DISTRICT

425 EAST NINTH STREET
RENO, NEVADA 89520
(702) 348-0200

January 22, 1992

Mr. Randy Walter
SEA Consulting Engineers
950 Industrial Way
Sparks, NV 89431-6092

7 1992

Dear Mr. Walter:

Regarding our recent phone conversation concerning the Warm Springs Area Plan and the potential need for an elementary school, please be advised that the school site shown on the specific plan area map will be sufficient for school district purposes until approximately the year 2010, based on the table that was attached in Barbara Hatch's letter to me dated November 25, 1991.

Please increase the size of the site from 10 acres to 12 acres and buffer the school on all sides with park, roadway, green belt, etc.

Thank you for your help and consideration and please call me with any questions.

Sincerely,

Roger Means
Director, School Planning
& Governmental Relations

RM:gl
cc: Mary Nebgen
Don Webb

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Carson City District Office
1535 Hot Springs Rd., Ste. 300
Carson City, NV 89706-0638

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

RECEIVED
AUG 16 1991
SE&A, INC.

15 August 1991

SEA Engineering, Inc.
Attn: Barbara
950 Industrial Way
Sparks, NV 89431

To Whom It May Concern:

I was requested on 12 August 1991 to consider that portion of Warm Springs Valley (north of Sparks and east of the Pyramid Lake Highway), bounded by the Whiskey Springs Road on the north and Sharrock Road on the south, for wildlife values.

Based on my knowledge of the area, a brief consultation with Mike Dobel of the Nevada Department of Wildlife about this area, and perusal of BLM records of special status plants, there are no threatened, endangered, or sensitive plants or wildlife species in this general area, nor is there any identified unusual or important wildlife habitat.

Sincerely,

William R. Brigham

William R.-Rick-Brigham
Wildlife Management Biologist

DISTRICT HEALTH DEPARTMENT

DATE: June 25, 1992

TO: Bob Webb
Department of Comprehensive Planning

FROM: Bart Hooley, P.E.

SUBJECT: Warm Springs Valley - Septic Systems

The Nevada Division of Environmental Protection has determined the capacities of the hydrologic basins to receive treated effluent from septic systems without causing groundwater quality to exceed any of the Federal Safe Drinking Water Act Standards. This has been done for each hydrologic basin in Nevada and the capacities vary widely. These capacity determinations are first approximations and are being used as 'triggers' for more in-depth groundwater quality investigations and analyses to be performed by consultants proposing new subdivisions.

The approximate unit capacity determination for the Warm Springs hydrobasin is ninety-seven lots (or homes) per square mile. Until the results of additional investigation and analysis are available, it is recommended that planned densities not exceed this number of 97 per square mile.

We need to keep in mind that septic systems located above aquifers are a potential source for producing large-scale contaminant plumes in aquifers which will increasingly be used for drinking water supplies.

Bart Hooley

Bart Hooley, P.E.
Chief Engineer
Environmental Health Services

BH:sw

cc: Carl R. Cahill
John Nelson, Division of Environmental Protection
Leonard Crowe, Department of Comprehensive Planning

1001 EAST NINTH STREET P.O. BOX 11130, RENO, NEVADA 89520 (702) 328-2400 FAX (702) 328-2279

APPENDIX F

WASHOE COUNTY CLERK'S AMENDED ORDERS

OFFICE OF THE WASHOE COUNTY CLERK

COUNTY COURTHOUSE, VIRGINIA AND COURT STS.
P.O. BOX 11130, RENO, NEVADA 89520
PHONE (702) 328-3260

JUDI BAILEY
County Clerk

October 5, 1992

AMENDED ORDER

Bob Webb, Planner
Department of Comprehensive Planning
Washoe County, Nevada

Dear Mr. Webb:

I, Judi Bailey, County Clerk and Clerk of the Board of County Commissioners, Washoe County, Nevada, do hereby certify that at a regular meeting of the Board of County Commissioners, held on September 22, 1992, Vice Chairman Beck issued the following order:

92-1006 WARM SPRINGS SPECIFIC PLAN - PUBLIC HEARING

This was the time set in a Notice of Public published in the Reno Gazette-Journal on September 11 and 16, 1992, to consider adoption of the Warm Springs Specific Plan, including the Development Standards Handbook Framework, as a part of the Warm Springs Area Plan. Proof was made that due and legal Notice had been given.

Bob Webb, Planner, Department of Comprehensive Planning, stated that the Washoe County Planning Commission was unable to reach the required two-thirds majority vote on this issue so they have no recommendation. He reviewed other versions of the plan and gave a historical accounting of the previous Planning Commission hearings and findings stating that the major issues of concern were lots as small as one-third acre, potential contamination of ground water due to the septic systems, and water dedication requirements. Mr. Webb presented a viewfoil demonstration using maps and charts to describe the proposed plan in detail and reviewed the current water dedication policies. He advised that these will remain in effect until the water study is completed and accepted by the State Engineer. He then answered questions of the Board regarding water and called upon Leonard Crowe, Natural Resources Planner, who explained in detail how the current water study in Warm Springs is being conducted. Mr. Crowe pointed out that there is currently 5,200 acre feet of water being pumped for agricultural purposes, and they estimate that residential usage would only require 4,000 acre feet.

Randy Walter, SEA, Inc., expanded on Mr. Webb's presentation giving more detail, stating that the subject area represents only two percent of the Warm Springs area and that the remaining 98 percent will remain in rural, 40-acre parcels. He stated that the intent of the plan is to provide for a small town type of opportunity to serve the people in the basin. He also talked about the original plan, how it evolved to the

current plan, and how the development standards framework was created and is intended to guide the type of development that will occur in the Specific Plan Area. Mr. Walter stated that a community water system is a basic element of the plan, but that a sewer system is not economically easible. He stated that each project to be developed within the SPA will have to justify its own quality by submitting plans that meet established criteria.

Tom Pratt, member of the Task Force, stated that this planning has been on-going since January, 1990, and that he believes they have come up with a plan for orderly growth and development. He talked briefly about the water and pointed out that Sierra Pacific wanted to import water from Warm Springs to supply needs created by the drought. He stated that the Task Force feels its job is completed and that they request the plan be adopted.

Vice Chairman Beck opened the public hearing and called on those wishing to speak regarding the Warm Springs Specific Plan.

Speaking in support of the plan were Jim Hess, Wanda Wright, Richard Roe, Allen Oppio, Richard Eubanks, Dave Wendland, George Stinson, Harry Fahnestock, Evelyn Roe, John Claypool, Don Brown, Inez Cross, George Newell, Al Pacini, Gary Tanner and Rich Richards. Some of these people own property located within the SPA and do have plans to develop. Others indicated that since growth is inevitable, this type of plan provides for orderly and controlled development.

Speaking against the plan were Raymond Joseph, Debbie DePoali, Wayne Dennis, Cathy Leedy, John Baird, Maxine Obacka, Sandy Ferris, Rick Pearson, Philip Anderson, Susan Ambrose, Sue Mcquire and Sally Bonham. The main reasons given for the opposition were the impacts on water quality, environmental issues, and changes in the rural lifestyle of the area.

There being no one else wishing to speak, the hearing was closed.

Commissioner Cornwall asked about well drilling procedures and stated that this might be the appropriate time to determine and draft well standards. Mr. Crowe noted that there is a set of standards on this and the wells will be placed where the water tables lie as shown on maps that are available to property owners. He added that they will also be able to tell them where water quality problems may exist, but as far as specifying where the wells should go, the legal implications would have to be explored as people must be allowed to make up their own minds.

Commissioner Cornwall then asked about a community sewer system. Mr. Webb advised that based on economic viability, this was deemed not feasible, and that John Collins will address this in detail at one of the meetings.

Commissioner Reid stated that the exploration of concerns regarding traffic, dust control, bonding of developers, and the placing of schools have been addressed and can be further pursued on a case-by-case basis.

Commissioner Beck stressed that the major concern was the type of development that would occur in the specific plan area (SPA) to allow for controlled growth in the area and advised that everyone wants high quality development necessitating that all projects be brought before the Citizens Advisory Board and the technical board for review. He further commented that extensive review has occurred in connection with this specific plan, and that he believes this will give the area a definite charm and hospitable quality, which are assets to any community.

Following discussion, on motion by Commissioner Reid, seconded by Commissioner Leighton, which motion duly carried, Vice Chairman Beck ordered that the Warm Springs Specific Plan Area Plan and Development Standards Handbook Framework be adopted as the Warm Springs Specific Plan, the Board having determined, following a public hearing, that the Handbook framework satisfies the minimum content requirements for a specific plan; that the Plan adequately directs planned growth for residential development and for a community service center in the Warm Springs planning area; that the Plan provides for development which maintains and enhances the rural atmosphere of the Warm Springs planning area; and that it is consistent with the goals, policies, and standards of the Warm Springs Area Plan and the elements of the Washoe County Comprehensive Plan. It was further ordered that the Warm Springs Specific Plan Area Plan and Development Standards Handbook Framework be approved with the staff proposed modifications outlined in the Planning Commission Staff Report dated July 29, 1992, which Report was placed on file with the County Clerk.

Very truly yours,

Judi Bailey

JUDI BAILEY, County Clerk and
Clerk of the Board of Washoe
County Commissioners

slg
cc: Dev. Review

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OFFICE OF THE WASHOE COUNTY CLERK

COUNTY COURTHOUSE, VIRGINIA AND COURT STS.
P.O. BOX 11130, RENO, NEVADA 89520
PHONE (702) 328-3260

JUDI BAILEY
County Clerk

May 10, 1995

Dean Diederich
Department of Comprehensive Planning
Washoe County, Nevada

Dear Mr. Diederich:

I, Judi Bailey, County Clerk and Clerk of the Board of County Commissioners, Washoe County, Nevada, do hereby certify that at a regular meeting of the Board of County Commissioners held on April 18, 1995 Chairman Shaw issued the following order:

95-308 COMPREHENSIVE PLAN AMENDMENT CASE NO. CPA94-WS-1 - FINANCING PLAN FOR THE WARM SPRINGS AREA PLAN SPECIFIC PLAN - COMPREHENSIVE PLANNING

7:00 p.m. This was the time set in a Notice of Public Hearing published in the Reno Gazette-Journal on April 7, 1995 to consider the Washoe County Planning Commission recommendation to approve an amendment to the adopted Warm Springs Specific Plan, being a part of the Warm Springs Area Plan contained in the Washoe County Comprehensive Plan, by adopting a "Financing Plan" for Medium Density Rural (MDR: 1 du/10 ac to 1 du/5 ac) and High Density Rural (HDR: 1 du/5 ac to 1 du/2.5 ac) development in the adopted Specific Plan area and to include minor changes to the adopted Specific Plan, including the substitution of the geographic information systems version of the land use map for the original zip-a-tone map; changes to the "technical design review committee" pthat the Rhodes Road residents were not informed of the first CAB meeting when the original motion was adopted, and that the CAB should have taken the time to look at the property and the impacts the first proposal would have. She then discussed South Valleys Area Plan Policies SV.2.5 and SV.2.5(C) and stated that the CAB believes the applicant's request for MDS would not be in conformance with those policies.

John Rhodes, Rhodes Road resident, advised that he was speaking on behalf of his family and a great many neighbors who could not be present today; that they are requesting that the Board approve the Planning Commission's recommendation, which they feel does represent a compromise; that the staff's initial recommendation was made before the Rhodes Road residents knew of this issue; and that after staff received their input, a second staff recommendation was made, which was adopted by the Planning Commission and is being presented to the Board today. He advised that a petition was presented to the development of the densities that were envisioned in the adopted Warm Springs Specific Area Plan and address infrastructure needs; that the four applicants, Jim Hess, George

Newell, Timothy Hess, and Brent Douglas, paid a consultant to work with staff and the community to identify the necessary components of the Financing Plan; that a number of meetings were held by the Warm Springs Citizen Advisory Board, the Palomino Valley General Improvement District (PVGID), and County agencies; and that staff mailed a copy of the draft document of the plan to each property owner. He reviewed the various issues and concerns addressed by the Planning Commission including the concern expressed by the District Attorney's office that the County may be trying to embark on an impact fee process, which is authorized by the Nevada Revised Statutes, but not necessarily following to the letter of the law the process to complete an impact fee. He explained that the Plan is relying on the concept of the development agreement, also authorized under NRS, which allows for special approaches for dealing with development issues. Mr. Diederich then discussed the master fee schedule that would provide the revenues for infrastructure and responded to questions of the Board.

A discussion commenced relative to roads, water system, infrastructure maintenance, and other issues related to the proposed amendment.

Commissioner Sims referred to the memorandum from Rusty Nash, Deputy District Attorney, indicating that he felt the concept was extremely risky and that his preference would be that a Special Assessment District be established. Mr. Diederich commented that the Planning Commission attempted to address the District Attorney's concerns and felt the proposed approach was workable. He explained that a financing plan is required to implement the previously adopted Specific Area Plan, noting that, while this Plan is not the traditional approach, it is consistent with the Comprehensive Plan.

Chairman Shaw opened the public hearing and called on those wishing to speak.

Randy Walter, SEA Engineering, representing applicants, conducted a slide presentation of the project and answered questions of the Board. He advised that the location of the Specific Plan Area is based on existing water rights; that the overall plan envisioned several elements including drainage, open space, recreation, water system, roadway system, etc.; that all development requests to the Specific Plan Area must provide a Development Standards Handbook and draft CC&R's; and that the process cannot be done without first having a financing plan in place. He reviewed the Financing Plan and stated that the issue of roadway improvements has been a key issue and the proposed plan provides a means by which the roads could ultimately get paved; that the plan addresses capital infrastructure and creates adequate revenue allocated on a fair and equitable basis to insure that roads get paved, parks get developed, etc.; and that maintenance is a different issue which they tried to address through the PVGID. Mr. Walter noted that, with reference to the DA's concerns about the financing mechanism, the County's interim traffic impact fee and a TMFPD fee for acquisition of fire equipment do not meet the criteria of NRS; that there is legal precedence and if a lawsuit was going to be filed it would have happened on those two issues; and that these fees are able to be imposed because everyone is treated equally.

Raymond Joseph, Patrick Jones, Andrea Davis, Chuck Fulkerson, and Tammy Strauss, area residents, spoke in opposition to the plan and expressed concerns regarding increases in traffic, impacts on the rural lifestyle and wildlife, and responsibility for collecting and overseeing the funds. Mr. Jones and and Ms. Davis also stated that they had not received any notices of meetings held regarding this issue.

Chairman Shaw noted for the edification of those present that tonight the Board is only addressing the Finance Plan, and that the other issues of traffic, wildlife, etc. would be addressed prior to any development.

Helen Weintritt, President, Palomino Valley GID, advised that they are underfunded now and are concerned there will not be adequate funds in the future to maintain the roads; and that they feel any shortfalls should be underwritten by the County.

George Newell, applicant, commented that development will generate enough income to offset the additional maintenance from which the residents will benefit; and that the only way there will be decent roads in the Valley is through development that generates additional funds to pay for them.

Jim Hess, applicant, advised that he supports planned growth in the Valley; that the Specific Plan was addressed over a number of years with a great deal of public input during the many meetings held before it was approved; that a survey was sent out and 26 people in the Specific Plan Area responded by certified mail that they agree, which represents over 75% of the property in the plan area; and that they are trying to plan growth so it will benefit the area.

Tom Pratt, Whiskey Springs Road resident, spoke in support of the plan and advised that he is looking at developing 380 acres of his property, and that his father owns approximately 923 acres, and he is also looking at development. Evelyn Roe and Earl Been, area residents, also spoke in support of the Financial Plan. Richard Roe, Vice Chairman, Warm Springs Advisory Board, stated that he was surprised at the comments made by many of the people tonight as they never presented their concerns at the CAB meetings during the Plan process, and that the Citizen Advisory Board feels the plan is in order and fully supports it.

There being no one else wishing to speak, Chairman Shaw closed the public hearing.

Commissioner Sims asked if state statute authorizes any monies for capital improvements. Mr. Diederich commented that state law allows for development agreements noting that it doesn't specifically enumerate the collection of fees but does not disallow them, which is the basis staff is working on. Legal Counsel Shipman further advised that there is a provision in state law that allows for development agreements; that it does not specifically state anything about being able to assess fees as part of a development agreement and seems to be directed more towards standards; that, however, it has been argued that an entity can deviate

from state standards or other authorizations through the means of a development agreement; that this is being challenged in Douglas County and in Henderson and there is a bill in the legislature that would make it clear that this could not be done through development agreements; and that the District Attorney's office feels the Board needs to be advised of risk, noting that the amount of risk the Commission wishes to take is a policy decision.

Commissioner Mouliot commented that the six people who spoke against the Financing Plan are not listed as property owners in the Specific Area Plan.

Mr. Diederich reviewed noticing requirements and advised that the number of notices staff mailed far exceeded the minimum requirement. He noted that the only people affected by the Financing Plan are those located within the Specific Area Plan.

Commissioner Bradhurst stated that he is concerned about the risk factor pointed out in the letter of February 8, 1995 from Deputy District Attorney Rusty Nash; and that he feels financing alternatives are available, such as an assessment district, even though the properties are not contiguous. A discussion commenced regarding possible alternatives and Mr. Diederich reviewed the criteria the County looks at to form an assessment district. Bob Jasper, Assistant County Manager, also provided information relative to assessment districts.

Mr. Walter stated that they looked at the assessment district possibility and advised that this is an alternative for the large property owners, but not for the four applicants; that assessment districts work good for 1,000 acres or so, but do not work on 40-acre parcels; and that they tried to accommodate everyone and have everybody pay their fair share equitably, and this is the only way they know of to make that happen.

Commissioner Sims asked what the impact to the County would be if the proposed bill referred to by Legal Counsel is approved. Ms. Shipman emphasized that the concern of the District Attorney's office is not with the applicants requesting the Financing Plan before the Board tonight, as they have clearly chosen to go forward, but rather the issue and concern is that, once infrastructure is built and monies are still being collected from other property owners subject to the plan, they may protest that the financing plan is void as there was no legal right to collect fees. She advised that this could create a shortfall of funds since the County would not have the authority to enforce the payment of fees.

Mr. Walter commented that the parties that built the infrastructure would be the ones that come up short, not the County.

Commissioner Bradhurst stated that he is reluctant to move forward with the Financing Plan based on the District Attorney's concerns, and he feels an assessment district is a financing mechanism that is legal and could be utilized.

Following further discussion, on motion by Commissioner Bond, seconded by Commissioner Mouliot, which motion duly carried, with Commissioners Bradhurst and Sims voting "no," it was ordered that Comprehensive Plan Amendment Case No. CPA94-WS-1, Financing Plan for the Warms Springs Area Plan, Specific Plan be approved.

Very truly yours,

Judi Bailey

JUDI BAILEY, County Clerk
and Clerk of the Board of
Washoe County Commissioners

bbt

cc: Brent & Katherine Douglas, 4013 Clover Creek Court, Reno, NV 89509
James & Ann Hess, 297 Lenwood Drive, Sparks, NV 89431
Timothy & Patricia Hess, 2415 Alpine Meadows Av., Henderson, NV 89014
George & Lolita Newell, 1200 Sharrock Road, Reno, NV 89510
Randal Walter, SEA, Inc., 950 Industrial Way, Sparks, NV 89431-6092
Helen Weintritt, President, Palomino Valley GID, P.O. Box 10528, Reno, NV 89510
John Claypool, Chair, Warms Springs CAB, 5900 Sage Flats Road, Reno, NV 89510

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APPENDIX G - FINANCING PLAN ELIMINATED BY BOARD OF COUNTY COMMISSION RESOLUTION NUMBER R19-004 DATED FEBRUARY 26, 2019

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