

Water Quality Management Plan for the Lake Tahoe Region

Volume IV. Capital Improvements Program for Erosion and Runoff Control



November 30, 1988

WATER QUALITY MANAGEMENT PLAN
FOR THE
LAKE TAHOE REGION

VOLUME IV. CAPITAL IMPROVEMENTS PROGRAM
FOR EROSION AND RUNOFF CONTROL

Tahoe Regional Planning Agency

November 30, 1988

WATER QUALITY MANAGEMENT PLAN

FOR THE

LAKE TAHOE REGION

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VOLUME IV

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I. INTRODUCTION

A. PURPOSE OF THE CAPITAL IMPROVEMENTS PROGRAM

The purpose of the Capital Improvements Program (CIP) for erosion and runoff control is to identify projects and an implementation program for control of erosion and surface runoff on public rights-of-way in the Tahoe Region. TRPA's goal is to complete the necessary capital improvements in 20 years.

The street, road, and highway network on public rights-of-way affects water quality in several ways. The network increases the density of drainage conduits, adds impervious surfaces to the watershed, and creates surface runoff of rainwater and snowmelt. In turn, these changes increase the sources of sediment coming into contact with runoff waters, increase sediment and nutrient yields from the watershed, increase peak flows, increase flow velocities, increase a storm's energy and ability to transport sediment, decrease hydrologic lag time and flow time, and short-circuit the watershed's natural ability to remove nutrients and sediments from runoff.

In addition to altering the hydrology of the watershed, the street, road, and highway network also contributes to erosion and sediment delivery to Lake Tahoe and its tributaries by exposing unstabilized road shoulders, cut banks, fill slopes, and ditches to the erosive force of runoff waters, and by scouring soils at culvert outfalls.

For a more-detailed discussion of runoff, water quality, and related phenomena, refer to the Setting in Volume I.

B. RELATIONSHIP TO THE OTHER VOLUMES OF THE WATER QUALITY MANAGEMENT PLAN

The CIP described in this volume is a detailed implementation program, part of the overall water quality management plan. It is a companion document to the other volumes of the plan.

Volume I, the Water Quality Management Plan, sets forth the required water quality control measures in the Tahoe Region, establishes the need for the CIP, identifies management agencies and implementation authority, and analyzes probable environmental impacts of program implementation. Volume I is a policy-level document.

Volume II, the Handbook of Best Management Practices, identifies required management practices covering construction sites, slope stabilization, infiltration, runoff collection and conveyance, soil stabilization, and practices for the shorezone. It includes management practices covering recommended vegetative species, fertilizer management, and irrigation. All capital improvement projects should be constructed in a manner consistent with the Handbook of Best Management Practices.

Volume III, the Stream Environment Zone Protection and Restoration Program, identifies a program to attain and maintain TRPA thresholds related to SEZ protection and restoration. The restoration program overlaps with, and is closely related to, the capital improvements identified in this volume, Volume IV. Where overlap occurs, the text of Volume IV cross-references Volume III.

C. RELATED PROGRAMS OF OTHER AGENCIES

This Capital Improvements Program is closely related to two other documents of the California Tahoe Conservancy and the U.S. Forest Service, Lake Tahoe Basin Management Unit:

California Tahoe Conservancy, State of California, March, 1987.
A Report on Soil Erosion Control Needs and Projects in the Lake Tahoe Basin.

United States Forest Service, Lake Tahoe Basin Management Unit,
February, 1987. Watershed Improvement Needs Inventory.

These documents are incorporated herein by reference. They are available for public inspection at the offices of the California Tahoe Conservancy (2161 Lake Tahoe Boulevard, S. Lake Tahoe, CA) and the Lake Tahoe Basin Management Unit (LTBMU) (870 Emerald Bay Road, S. Lake Tahoe, CA), respectively, or at the offices of the Tahoe Regional Planning Agency (195 U.S. Highway 50, Round Hill, NV).

These two documents are incorporated by reference in their entirety to avoid redundancy in this volume. The Conservancy Report identifies potential projects and estimated costs for portions of the Tahoe Region within California, evaluates and sets priorities for the projects primarily on the basis of their potential for sediment reduction per dollar spent, and provides other information on program needs. Local government and TRPA contributed to the preparation of the report, particularly in the field evaluations.

The LTBMU inventory is a summary of improvement needs, costs, and acreage for the portions of the Tahoe Region managed by the U.S. Forest Service. The inventory was revised in 1986 and is based on several years of experience with an intensive annual watershed restoration program, and detailed surveys of many watersheds.

D. OTHER RELATED IMPROVEMENT PROGRAMS

This CIP is also related to several other TRPA programs which identify necessary improvements in the Region, along with costs and time schedules for those improvements. TRPA desires to eventually integrate these various programs for the 175 TRPA plan areas, to provide affected agencies and the public with a comprehensive list of needed improvements. The related TRPA programs are: (1) the Regional Transportation Plan, action element, adopted in April, 1988, (2) the pending five-year list of public service facilities, (3) the pending

five-year list of recreation improvements, (4) the pending fish habitat restoration program, and (5) the pending Scenic Implementation Program.

II. PROGRAM HISTORY AND BACKGROUND

A. PLANNING

TRPA developed the original CIP for erosion and runoff control as part of the 208 plan adopted, certified, and approved in 1981. The CIP was a part of the Lake Tahoe Basin Water Quality Management Plan, Volume I, Water Quality Problems and Management Program (TRPA, 1977), Chapter VIII, Surface Water Management Systems. It included unit costs, total costs, control priorities, and management systems for the six local governments and the affected state agencies. The management systems were depicted on maps, which are today official TRPA capital improvement program maps. (See CIP Maps, below.)

The CIP from the 1981 208 plan estimated the total cost of the program at \$77 million (1976 dollars). TRPA, local government, and the affected state agencies have used the CIP for planning, administering, and reviewing capital improvements projects since its adoption. This CIP is based on the CIP from the 1981 208 plan, but has been revised to account for new problem areas which have been identified, for projects completed since 1977, and for updated estimates of costs of specific projects or problem areas. In the Final Environmental Impact Statement: Plan Area Statements and Implementing Ordinances of the Regional Plan (TRPA, 1987), TRPA estimated the total cost of the program at \$163 million (1986 dollars), and estimated that \$148 million remained to be spent.

The Tahoe Conservancy report post-dates the TRPA's 1987 estimate, and is the basis for the revised California-side cost estimates which appear in this document. The Conservancy identified 101 project areas with a total cost of \$160 million. The average estimated project cost was about \$1.6 million.

B. PROJECTS COMPLETED

Tables 1 and 2 present lists of erosion and runoff control projects completed on public rights-of-way in the Tahoe Region since 1979. Sixty-five projects have been completed at a cost of about \$31 million. In California, Caltrans has completed 23 projects at a cost of \$7,979,000 while local governments have spent \$15,763,000 on 30 projects. In Nevada, NDOT has completed four projects at a cost of \$4,322,000, while local governments have spent \$3,350,000 on eight projects.

C. SOURCES OF FUNDING FOR COMPLETED PROJECTS

Funding for the 65 completed erosion and runoff control projects has come from a variety of federal, state, and local sources. Clean Lakes grants under the Federal Clean Water Act assisted with projects in California and Nevada. The State of California bonded for \$10 million in State Assistance Grants administered through the Lahontan Board. Caltrans and NDOT utilized \$7,979,000 and \$4,322,000, respectively, in state transportation improvement funds to complete projects on their facilities. Local governments used local funds and water quality mitigation funds collected and held in trust for them by TRPA. Erosion control grants under the federal Santini-Burton program and administered by the LTBMU assisted with projects in both states. In California, the Tahoe Conservancy has awarded \$10,068,900 in grants to local governments for erosion control site improvements, and land acquisition projects. The site improvement grants were funded from a number of sources including the Environmental License Plate Fund and other revenues. The land acquisition grants are funded from a California bond act. To help complete the large Tahoma project in El Dorado County, residents of the project area approved a benefit assessment district, which resulted in individual property owners contributing funds.

III. GOALS AND POLICIES

The following Goals and Policies have been excerpted from the Implementation Element, Regional Plan for the Lake Tahoe Basin, Goals and Policies (TRPA, 1986).

A. INSTITUTIONAL

TRPA's goal is to identify and seek commitments from agencies to implement the capital improvements program. TRPA will seek consensus among the individuals and agencies responsible for specific functions relating to capital improvements. Memoranda of Understanding (MOUs) or other forms of agreements between TRPA and implementing agencies will provide the coordination necessary to ensure efficient implementation of the Plan (Goals and Policies, p. VII-2).

B. DEVELOPMENT AND IMPLEMENTATION PRIORITIES

TRPA's goal is to condition approvals for new development on positive improvements in off-site erosion and runoff control (Goals and Policies, p. VII-16). New residential, commercial, and public projects shall offset 150 percent of their water quality impacts through one of the following methods:

1. implementing off-site erosion and runoff control projects as a condition of project approval and subject to TRPA concurrence as to effectiveness, or

2. contributing to a fund established by TRPA for implementing off-site erosion and runoff control projects.

This policy continues the water quality mitigation funds established in the 1981 208 plan. The fee schedules and distribution formula shall be reviewed and revised as part of TRPA's ordinances and programs (Goals and Policies, p. VII-17).

C. FINANCING

The Regional Plan creates a linkage between the rate of funding for capital improvements, management of new development, and the environmental thresholds. If progress toward meeting the environmental thresholds is slower than anticipated, the Plan calls for adjustments in the rate of both capital improvements and development (Goals and Policies, p. VII-17).

TRPA's goal, in cooperation with other agencies, is to provide funds to carry out the capital improvements program, provide for revenue sources that distribute costs equitably among the users of the Region, meet performance objectives, and attain environmental thresholds (Goals and Policies, p. VII-17).

Another TRPA goal is to coordinate the revenue program for implementation of the Regional Plan with other responsible agencies, and to direct the utilization of regional revenues to solve high-priority water quality problems. TRPA depends on the actions of local governments, state agencies, and special entities to carry out the capital improvements program. Therefore, the development of a financing approach will be coordinated with the entities. TRPA will oversee the use of regional revenue sources to ensure the proper phasing of capital improvements (Goals and Policies, p. VII-18).

TRPA shall consult with other responsible agencies and establish regional water quality project priorities consistent with the Regional Plan. Local units of government require flexibility in scheduling capital improvements. TRPA, after consultation with those entities, will provide guidance on project priorities and, through project review, will ensure that capital improvements are consistent with the Regional Plan. The detailed program will be reviewed and revised periodically in cooperation with all the affected agencies (Goals and Policies, p. VII-19).

A third TRPA goal is to meet the performance targets for reductions in loads of dissolved inorganic nitrogen to Lake Tahoe and restoration of SEZs through a capital improvements program. Local units of government, state transportation departments, and other agencies shall be responsible for carrying out capital improvements for water quality, with oversight by TRPA. Local units of government shall generally observe the water quality priorities set forth in the CIP, and all CIP projects shall be designed and constructed in accordance with the Handbook of Best Management Practices (Goals and Policies, p. VII-19, 20).

IV. PRIORITIES

A. BACKGROUND ON PRIORITIES

There have been three priority systems established for the Capital Improvements Program for erosion and runoff control since 1977. The 1977 water quality management program of TRPA considered the rates of soil loss for lands within three levels of erosion hazard rating as defined by the Bailey system of land capability classification (Bailey, 1974), combined with an analysis of control system costs, to determine levels of cost-effectiveness in CIP expenditures. TRPA concluded that for half of the total CIP costs, about three-fourths of the erosion problems and resultant soil loss could be controlled.

The California State Water Resources Control Board established a priority system in the Lake Tahoe Basin Water Quality Plan (SWRCB, 1980). TRPA made this system a part of the 1981 208 plan. (For details on the relationships between the SWRCB and TRPA plans, see Volume I.) The SWRCB system set priorities for implementing erosion and runoff control projects based on the cost of the projects and their effectiveness in controlling erosion. Priority groups were set based on the cost-effectiveness of five kinds of projects (revegetation of bare areas, slope stabilization and revegetation, protective surface cover on dirt roads, roadside drainage, and storm drainage) on high, moderate, and low erosion hazard lands. Effectiveness was estimated based on controllable soil loss.

The SWRCB system established twelve priority groups. The top four groups addressed erosion control for steep slopes and bare areas on all lands. The next three groups dealt primarily with dirt roads, eroding shoulders, and drainage control for high erosion hazard lands. The remaining five groups addressed dirt roads, eroding shoulders, and drainage control on moderate and low erosion hazard lands. The Lahontan Board used this priority system to help with the administration of erosion control grant funds from 1980 to 1987 in their jurisdiction.

The California Tahoe Conservancy in their Program Announcement and Guidelines for the soil erosion control grant program adopted on September 23, 1988 utilizes the following seven criteria to evaluate and set priorities for projects.

1. Significant and Documentable Benefit to Lake Tahoe Water Quality.

The project addresses a significant erosion and/or water quality problem and results in documentable improvements in water quality. Preference is given to projects with the greatest potential to benefit Lake Tahoe's water quality, such as high priority projects listed in the Report on Soil Erosion Control Needs and Projects in the Lake Tahoe Basin

or the 208 plan, projects in watersheds with a high potential to deliver sediment and nutrients to Lake Tahoe, and projects involving the restoration of disturbed SEZs.

2. Adequacy of Design

The project uses proven, cost-effective techniques to control soil erosion or water quality problems. Preference will be given to projects that have aesthetically appealing designs.

3. Comprehensiveness

The project considers and addresses all aspects of soil erosion in the project area. Preference will be given to comprehensive, integrated project proposals.

4. Cost-effectiveness

The project will meet program objectives in the most cost-effective manner. Preference will be given to projects with sediment reduction efficiencies substantially above the minimum requirement. Preference will also be given to programs which use the California Conservation Corps where appropriate. Local or other funding may be applied to a project to increase its cost-effectiveness.

The CTC has established a priority system for their identified projects that uses sediment reduction efficiency as a ranking tool. Their projects were divided into three priority groups. Priority group one (highest priority) projects include those with sediment reduction efficiencies between 6.4 pounds/dollar and 50.9 pounds/dollar. These projects typically involve areas with steep slopes that use low-cost control measures such as revegetation and rock-lined ditches. Priority group two (medium priority) projects had sediment reduction efficiency ratings between 5.0 and 6.3. These projects are generally the steeper sites that require more expensive control measures such as curbs, gutters, and retaining walls. The third priority group (lowest priority) include projects with a sediment reduction efficiency of 4.9 pounds/dollar or less. These projects involve gently sloping sites that require the most costly control measures such as curbs, gutters, and pipe.

5. Implementation

The applicant demonstrates its ability and commitment to implement the project in a timely manner. If a project is large and complex and depends on other funding sources, the portion of the project to be funded by the Conservancy must be able to be implemented by itself in a manner consistent with the objectives of the program.

6. Model

The project is useful as a model for future soil erosion control projects. Projects incorporating effective and innovative approaches to solving problems will be given preference.

7. Cooperation and Support

The applicant demonstrates the support of the project by other public agencies, landowners, and other parties necessary for the successful implementation and long-term viability of the project.

B. GUIDANCE ON PROJECT PRIORITIES

Under the TRPA Goals and Policies (above) it is the policy of the TRPA that local governments and other implementing agencies require flexibility in project priorities to match funding sources with specific projects. TRPA will establish priorities, in consultation with the implementing entities, so as to direct revenues to high-priority projects.

The highest priorities should be for erosion and runoff control projects in the watersheds with the highest ability to deliver nutrients and sediments to receiving waters within each jurisdiction.

TRPA has selected the watershed condition classification developed by the IPES Technical Committee for use in this priority system. The IPES Committee consisted of experts in the fields of soil science, hydrology, engineering, and planning. See Volume I, attachment 3, Members, IPES Technical Committee.

As documented in the Technical Appendix, Volume VII, the committee evaluated a watershed's ability to deliver nutrients and sediments using the following three criteria:

1. The geomorphic, precipitation, and streamflow characteristics of each watershed.

2. The streamflow water quality characteristics expressed as nutrient and sediment loading per unit area of watershed. Nitrate-nitrogen, dissolved organic nitrogen, dissolved orthophosphate, and suspended sediment data was used.
3. The existing land coverage compared to allowable land coverage, as defined by the Bailey Land Capability System.

Each of 64 major watersheds was evaluated and given a numerical rating ranging from zero to 70. TRPA used this rating to place each watershed into one of three categories which reflect a watershed's relative ability to deliver nutrients and sediments to receiving waters.

TRPA used the watershed ratings to assign each capital improvement project in Tables 3 through 18 to a priority category (1-high, 2-medium, or 3-low). In addition, TRPA used the following six criteria to account for conditions specific to a given Plan Area (PA).

1. The percentage of SEZ land in the PA.
2. The percentage of high hazard land in the PA.
3. The proximity to a tributary.
4. The proximity to Lake Tahoe.
5. The presence or absence of a direct hydrological connection to either a tributary or Lake Tahoe.
6. The type of SEZ in each PA, i.e., tributary, meadow, alluvial soils, high groundwater table.

The process of attaching scores to watersheds addresses nutrient and sediment loading to Lake Tahoe, in-stream water quality problems, and contributes to an equitable, cost-effective application of available revenues around the Region. This process directs projects to those watersheds most in need and provides a cost-effective means of controlling erosion and runoff problems in the Tahoe Region.

TRPA believes a priority system should address sediment and nutrient delivery. TRPA recognizes different systems that incorporate this consideration and other considerations to varying degrees. The different systems can co-exist in the short term, and be more fully integrated in the long term. The goal is full program implementation, which can only be accomplished through effective inter-agency communications, cooperation, and flexibility. TRPA will work with the various implementing agencies to incorporate the 208 priority concept into their long range work programs and track and evaluate their progress at regular five-year intervals.

V. INSTITUTIONAL ROLES AND MANAGEMENT AGENCIES

Volume I of the Water Quality Management Plan assigns responsibility for water quality control programs to management agencies, pursuant to the Clean Water Act and the federal regulations. Volume I assigns responsibility for capital improvement programs for erosion and runoff control to state transportation departments (for the state highways), local government and improvement districts (for local streets and roads), utility districts (for lands under their control), and the LTBMU and state parks departments (for forest roads).

TRPA's role in the CIP is to facilitate program implementation through the distribution of water quality mitigation funds and expedition of required permits; to pursue additional sources of revenue for erosion and runoff control; and to provide technical input in program and project design. The Tahoe Resource Conservation District and the Nevada Tahoe Conservation District provide technical assistance to project design and implementation. The Lahontan Board and the Nevada Division of Environmental Protection may also participate in project design and, where appropriate, issue waste discharge requirements or discharge permits to individual projects.

VI. SUMMARY OF ANTICIPATED REVENUES AND EXPENSES

A. PROJECTED REVENUES

Reliable 20-year projections of anticipated revenues are not possible, in general, since the majority of revenue sources rely on periodic legislative reauthorization, voter approvals, and state agency appropriations. TRPA projects future revenues based primarily on the past performance of the funding agencies. Although revenues for CIP implementation will come partly from local general funds and benefit assessment districts, TRPA has not projected revenues from these sources. There is great competition for local general funds, and local governments have not relied heavily on this source for erosion and runoff control. Benefit assessment districts are usually project-specific, and require voter approval.

Funding for CIP implementation from the following six sources should provide over \$7 million annually to the program:

Santini-Burton Grants. The LTBMU administers erosion control grants for units of local government funded by the federal Santini-Burton program. The allocations to local government are based on a formula based, in turn, on the amount of land acquisition which has occurred under the Santini-Burton program in that jurisdiction. The U.S. Congress must appropriate funds annually. Projected revenues from this source are \$1,500,000 per year.

California Tahoe Conservancy. The CTC administers erosion control grants for units of local government in California. They are funded by the California bond act and other sources which provides funding for land acquisition and erosion control site improvements in the Tahoe Region. A portion of the funds is allocated by formula, while another portion is discretionary. Projected revenues from this source are \$2 to 4 million per year.

CALTRANS. The California Department of Transportation (CALTRANS) implements a number of erosion and runoff control projects on the state and federal highway system in California each year. The source of the funds is California state revenues programmed through the State Transportation Improvement Program (STIP) for both major and minor (under \$250,000) projects. Projected revenues from this source, which will be used only on state and federal highways in California, are \$600,000 per year.

Nevada Department of Transportation. NDOT is responsible for implementing erosion and runoff control projects on the state and federal highway system in Nevada. In the past, NDOT projects have been supported by federal Clean Lakes grants from USEPA, and federal forest highway funds, but there is no assurance of continued funding from those sources. Projected revenues from NDOT, to be used on state and federal highways in Nevada, will average about \$200,000 per year, based on past expenditures, unless forest highway funds are once again made available for these purposes.

Nevada Division of State Lands. The Nevada Division of State Lands will administer erosion and runoff control grants to units of local government in Nevada under the Nevada bond act which authorizes acquisition and erosion control in the Tahoe Region. Projected revenues for erosion and runoff control from this source are \$1.4 million per year, at least until the current approved amount of \$7.7 million is obligated.

Water Quality Mitigation Funds. TRPA collects water quality mitigation funds as a condition of approval on additional development in the Region which creates new impervious coverage. The mitigation fee is presently \$0.29 per square foot of impervious coverage. TRPA holds these funds in trust for local government, which can apply to use the funds to implement the CIP. Projected revenues, based on full utilization of TRPA's allocations of additional residential, commercial, and tourist development, are \$200,000 per year.

B. PROJECTED COSTS

1. Methodology

The cost estimates for CIP implementation come from a variety of sources. For urbanized areas in California, TRPA has relied on the CTC Report on Soil Erosion and Control Needs and Projects in the Lake Tahoe Basin (1987). However, since the CTC report does not cover all parts of the urbanized area in California, TRPA has made separate

estimates for areas not covered, using average cost-per-acre figures based on the CTC report. Also, since the CTC report does not cover the state and federal highways, TRPA relies on the estimate prepared for the FEIS: Plan Area Statements and Implementing Ordinances of the Regional Plan (TRPA, 1987) for the state and federal highways.

For urbanized areas in Nevada, TRPA has used the cost estimates from the Water Quality Problems and Management Program (TRPA, 1977), adjusted for inflation and for projects already completed. For state and federal highways in Nevada, TRPA has used the estimate prepared for the 1987 FEIS.

TRPA has not made cost estimates for CIP projects in the non-urban areas and relies, instead, on the Watershed Improvement Needs Inventory (USFS, LTBMU, 1987) for those areas. In this publication the USFS estimates that \$25,253,204 will be needed to address the capital improvement needs and plans to fully implement their program within 20 years.

2. Projected Costs

For the urbanized portions of the Region, TRPA estimates the remaining costs of the CIP over the next 20 years as follows:

California (1988 dollars)

1.	Projects in the CTC Report	\$160,000,000
2.	Projects not in the CTC Report	27,000,000
3.	State and federal highways	<u>18,000,000</u>
	Subtotal	\$205,000,000

Nevada (1988 dollars)

1.	Local streets and roads	\$35,000,000
2.	State and federal highways	<u>25,000,000</u>
	Subtotal	\$60,000,000
	Total	\$265,000,000

O&M costs have not been included in this list.

For more detailed cost estimates, see the project lists, below. Since it is customary to consider the implementation of the CIP in five-year phases, the cost of the first five-year would be about \$66 million (1988 dollars), compared to currently projected revenues of about \$35 million plus local contributions.

VII. PROGRAM UPDATE PROCESS

TRPA considers the Capital Improvements Program for erosion and runoff control to be a dynamic document, and intends to update the program annually or semi-annually, with cooperation and input from local government, the CTC, Nevada State Lands, state transportation departments, the LTBMU, and others. Updates will be presented to the TRPA Governing Board for approval with all affected agencies and entities being asked to review and comment on the updates prior to approval. In addition, it is our intent to merge this document with the other capital improvement programs (discussed on pages 2 and 3) to provide one document addressing these interrelated needs while at the same time maintaining their integrity.

TRPA would submit any significant changes in this program to the states and EPA for review, certification, and approval. This would include merging this volume with the other improvement programs, changing our program direction or philosophy such that program costs are significantly changed, significantly changing our priority setting process, or significantly changing our implementation strategy, institutional roles, or management agencies.

VIII. CAPITAL IMPROVEMENT PROGRAM MAPS

The TRPA Code of Ordinances, Chapter 12, establishes the Capital Improvements Program maps as official TRPA maps. At this time, the maps included in the Lake Tahoe Basin Water Quality Management Plan, Volume I, Water Quality Problems and Management Program (TRPA, 1977) are official interim maps under the provisions of Chapter 12. Upon completion of revised CIP maps, TRPA will adopt them as part of the integrated map overlay system. The CIP maps are available for public inspection at the TRPA offices, 195 U.S. Highway 50, Round Hill, Nevada.

IX. PROJECT LISTS

Tables 3 through 10 are the CIP 20-year project, priority, and cost lists for the individual local governments, CALTRANS, and NDOT. Tables 11 through 18 presents this information in summary form. These lists were developed according to the methodology, above. TRPA has identified 175 individual plan areas in the Tahoe Region (see Volume I) and has attempted to list projects under their appropriate Plan Area. In the future, the plan areas will be the common denominator for listing all capital improvement projects and related projects, except for the state and federal highway system, for which projects will be listed by highway segment.

TABLE 1

CALIFORNIA EROSION CONTROL PROJECTS CONSTRUCTED
IN THE TAHOE REGION BEFORE 1988

<u>Project Name</u>	<u>Year</u>	<u>Agency</u>	<u>Cost</u>
Echo Summit	1981	Caltrans	\$ 55,000
Echo Summit Grade	1982	Caltrans	15,000
Upper Truckee Bridge	1983	Caltrans	57,000
Rufus Allen	1982	Caltrans	834,000
Wye to Stateline	1976	Caltrans	560,000
Luther Pass	1985	Caltrans	244,000
Camp Rich to Emerald Bay	1984	Caltrans	1,400,000
Emerald Bay Slipout	1981	Caltrans	744,000
Bliss #1	1980	Caltrans	160,000
Bliss #2	1984	Caltrans	290,000
Bliss #3	1985	Caltrans	748,000
Sunnyside	1983	Caltrans	46,000
Fanny Bridge	1975	Caltrans	214,000
Old County Road	1984	Caltrans	16,000
Cedar Flat	1985	Caltrans	22,000
Beesley's Cabins	1985	Caltrans	77,000
Griff Creek	1985	Caltrans	113,000
Deer Street	1982	Caltrans	80,000
Brockway	1982	Caltrans	160,000
N. of Airport to Wye	1986	Caltrans	645,000
Elizabeth Dr.	1987	Caltrans	300,000
Rubicon #1	1987	Caltrans	606,000
Rubicon #2	1987	Caltrans	593,000
		Subtotal	7,979,000
Tahoe Park Heights	1982	Placer	\$135,000
Ward Creek Blvd.	1984	Placer	185,000
Griff Creek	1985	Placer	703,000
Fox Street	1985	Placer	96,000
Sequoia Ave	1985	Placer	65,000
Bearing Drive	1985	Placer	24,000
Old County Road	1985	Placer	120,000
McKinney-Rubicon Spr	1985	Placer	495,000
Dollar Point	1986	Placer	730,000
Carnelian Woods	1986	Placer	300,000
Talmont Estates	1986	Placer	289,000
Trout Creek	1986	Placer	50,000
Speedboat Beach	1986	Placer	11,000
Carnelian Woods	1986	Placer	15,000
Agatam Beach	1987	Placer	32,000
		Subtotal	3,250,000

Table 1, cont.

<u>Project Name</u>	<u>Year</u>	<u>Agency</u>	<u>Cost</u>
El Dorado Beach	1985	CSLT	\$392,000
Dirt Streets	varies	CSLT	200,000
Bijou-Wildwood I	1986-87	CSLT	3,100,000
Regan Beach	1986	CSLT	650,000
D Street	1986	CSLT	971,000
Saddle Road	1987	CSLT	188,000
		Subtotal	\$5,501,000
Pioneer/High Meadow	1982	El Dorado	\$ 30,000
Rubicon Palisades - I	1986	El Dorado	731,000
Tahoma	1987	El Dorado	4,471,000
Rubicon-Tahoe Hills - II	1987	El Dorado	882,000
Country Club	1987	El Dorado	377,000
Echo View	1987	El Dorado	269,000
Tahoe Mountain	1987	El Dorado	195,000
Tahoe Paradise 60	1987	El Dorado	30,000
Twin Peaks*	1987	El Dorado	27,000
		Subtotal	7,012,000
		Total	23,742,000

* This project was done by the South Tahoe Public Utility District (STPUD).

TABLE 2

NEVADA EROSION CONTROL PROJECTS CONSTRUCTED
IN THE TAHOE REGION BEFORE 1988

<u>Project Name</u>	<u>Year</u>	<u>Agency</u>	<u>Cost</u>
Mt. Rose Highway	1979	NDOT	\$3,781,000
Nevada 28	1985	NDOT	198,000
U.S. 50	1984	NDOT	192,000
Spooner Maintenance Yd	1987	NDOT	151,000
		Subtotal	4,322,000
Marla Bay-Zephyr Hts	1984	Douglas	\$ 540,000
Lower Kingsbury I	1984	Douglas	198,000*
Lower Kingsbury II	1984	Douglas	290,000*
Kingsbury CAT	1982	Douglas	923,000
Kingsbury RC&D	1981	Douglas	215,000
County Yard	1987	Douglas	257,000
		Subtotal	2,423,000
Upper Fairview	1979	Washoe	327,000
Fairview-Incline	1987	Washoe	600,000
		Subtotal	927,000
		Total	\$7,672,000

* Douglas County was responsible for maintaining this section of highway until 1984 when NDOT took over the responsibility.

TABLE 3
Local Capital Improvement Projects for
Erosion and Runoff Control
(by TRPA Plan Area)

CITY OF SOUTH LAKE TAHOE

PA 085, Lakeview Heights, is located on TRPA maps H-17 and H-18.

This area is southeast of Pioneer Trail, next to the Heavenly Valley Ski Area. The major roads in this area are Keller Road, Wildwood Avenue, Needle Peak Road, and Saddle Road.

This PA is approximately 50 percent high hazard lands, 35 percent moderate hazard lands, and 15 percent SEZ. The SEZ portions consist of Bijou Park Creek, some small tributaries, and several meadows. TRPA has rated Bijou Park Creek medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA and part of PA 094 for rock-lined ditches, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$6,000,000.

Also in this PA, and in PA 093, approximately 10 acres in the intervening area between Edgewood and Bijou Creeks have been identified as needing SEZ restoration. See Volume III for details.

PA 089B, California South Stateline Resort Area, is located on TRPA maps H-16 and H-17.

This area is on the California side of South Stateline. The major roads in this PA are Pine Boulevard, Park Avenue, and Stateline Avenue.

This PA is a mixture of high and low hazard lands. This PA is in priority category 3.

CTC has identified a CIP, Stateline, in this PA that needs rock-lined ditches, curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$1,257,000.

TRPA has identified additional CIP needs in this PA and PA 090 for rock-lined ditches, curbs, gutters, storm drains, and sediment basins at an estimated cost of \$2,800,000.

Table 3. cont.

PA 090, Tahoe Meadows, is located on TRPA maps H-16 and H-17.

This area is between Lake Tahoe and Highway 50 and extends from Ski Run Boulevard to Park Avenue. The major roads in this PA are Pine Boulevard, Azure Avenue, and Beach Road.

This area is mostly SEZ, with some low hazard lands. The SEZ portions consist of large meadows with a few drainageways. This PA is in priority category 1.

TRPA has identified CIP needs in this PA. See PA 089B.

PA 091, Ski Run, is located on TRPA maps G-17 and H-17.

This area is the commercial development at the Highway 50/Ski Run Boulevard intersection.

This PA is approximately 25 percent low hazard lands and 75 percent SEZ. The SEZ is an area of high groundwater, alluvial soils, and small tributaries. This PA is in priority category 2.

CTC has identified two CIPs for this area. The first project, Ski Run, includes part of this PA and a portion of PA 092 and includes curbs, gutters, and storm drain pipes at an estimated cost of \$4,876,000. The second project, East Pioneer Trail, includes portions of this PA and PAs 092 and 093, and calls for curbs, gutters, and storm drain pipes at an estimated cost of \$952,000.

PA 092, Pioneer/Ski Run, is located on TRPA map H-17.

This area is southeast of the Highway 50/Ski Run Boulevard intersection. The major roads in this PA are Pioneer Trail, Wildwood Avenue, and Sonora Avenue.

This PA is approximately 70 percent low hazard lands and 30 percent SEZ. The SEZ portion consists of an area with high groundwater and alluvial soils. This PA is in priority category 3.

CTC has identified a CIP in this PA. See PA 091.

Table 3, cont.

Also in this PA, approximately 5 acres in the intervening area between Edgewood and Bijou Creeks have been identified as needing SEZ restoration. See Volume III for details.

PA 093, Bijou, is located on TRPA maps G-17 and H-17.

This area is south of Highway 50 and between Ski Run Boulevard and Johnson Boulevard. The major roads in this PA are Glenwood Way, Blackwood Road, and Fairway Avenue.

This PA is approximately 70 percent low hazard lands and 30 percent SEZ. The SEZ portions consist of the meadow along Bijou Creek, Bijou Park Creek, and other meadows. TRPA has rated both Bijou and Bijou Park Creeks medium in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified two CIPs in this PA. The first, Bijou, includes this PA and portions of PA 094 and calls for rock-lined ditches, curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$6,158,000. See PA 091 for details on the second project.

TRPA has identified additional CIP needs in this PA and PAs 097, 098, 101, and 094 that call for rock-lined ditches, curbs, gutters, storm drain pipes and sediment basins at an estimated cost of \$1,120,000.

Also in this PA, one acre in the intervening area between Edgewood and Bijou Creeks has been identified as needing SEZ restoration. See Volume III for details.

PA 094, Glenwood, is located on TRPA maps G-17, G-18, H-17, and H-18.

This area is around the Glenwood Way/Pioneer Trail intersection. The major roads in this PA are Glenwood Way, Walkup Road, and Herbert Avenue.

This PA is approximately 25 percent high, 15 percent moderate, and 30 percent low hazard lands. The remaining 30 percent is SEZ. The SEZ portions consist of the meadow along Bijou Creek and some small tributaries. TRPA has rated Bijou Creek medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

Table 3, cont.

CTC has identified three CIPs affecting this PA. See PA 093 for details on the first project. The second project, Pioneer Trail-Al Tahoe to Needle Peak, also includes a portion of PA 101 and calls for revegetation, curbs, gutters, retaining walls, and sediment basins at an estimated cost of \$767,000. The third project, Rancho Bijou, needs curbs, gutters, and storm drain pipes at an estimated cost of \$1,028,000.

TRPA has identified an additional CIP in this PA. See PA 093.

PA 096, Pioneer Village, is located on TRPA maps G-18 and H-18.

This area is east of Al Tahoe Boulevard. The major roads in this PA are Murietta Drive and Friant Drive.

This PA is approximately 70 percent low hazard lands and 30 percent SEZ. The SEZ portion consists of the meadow area along Bijou Creek. TRPA has rated Bijou Creek medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified a CIP, Al Tahoe Boulevard, in this PA and portions of PAs 098 and 101 that calls for revegetation, rock-lined ditches, curbs, and gutters at an estimated cost of \$602,000.

TRPA has identified additional CIP needs in this PA for revegetation at an estimated cost of \$113,000.

PA 097, Bijou Pines, is located on TRPA map G-17.

This area is between Highway 50 and Johnson Boulevard. The major roads in this PA are Cape Horn Road, Valley Avenue, and Treehaven Drive.

This PA is approximately 88 percent low hazard lands and 12 percent SEZ. The SEZ portion consists of the meadow adjacent to Bijou Creek. TRPA has rated Bijou Creek medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

Table 3, cont.

CTC has identified a CIP, Bijou Pines, in this PA and a portion of PA 098 that calls for rock-lined ditches, curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$2,982,000.

PA 098, Bijou/Al Tahoe, is located on TRPA maps G-17 and G-18.

This area extends from Lake Tahoe to just north of where Heavenly Valley Creek flows into Trout Creek. The major roads in this PA are Lyons Avenue and Johnson Road.

This PA is approximately 90 percent low hazard lands and 10 percent SEZ. The SEZ portions consist of the meadows along Bijou and Trout Creeks. TRPA has rated both these creeks medium in their ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified two CIPs affecting this PA. See PAs 096 and 097.

PA 099, Al Tahoe, is located on TRPA maps G-17 and G-18.

This area is northwest of the Al Tahoe Boulevard/Highway 50 intersection. The major roads in this PA are El Dorado Avenue, San Francisco Avenue, and Lakeview Avenue.

This PA is approximately 95 percent low hazard lands and five percent SEZ. The SEZ portion consists of the meadow area along the Trout Creek/Upper Truckee River marsh. TRPA has rated both of these creeks medium in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

CTC has identified two CIPs in this PA. The first, Al Tahoe Subdivision, includes rock-lined ditches, curbs, gutters, and sediment basins at an estimated cost of \$705,000. The second, El Dorado Avenue, includes revegetation, curbs, gutters, storm drain pipes, retaining walls, and sediment basins at an estimated cost of \$2,127,000.

TRPA has identified additional CIP needs for this PA that include rock-lined ditches, curb and gutters, and sediment basins at an estimated cost of \$3,630,000.

Table 3, cont.

PA 100, Truckee Marsh, is located on TRPA maps G-17, G-18, and G-19.

No CIP needs have been identified in this PA, but this PA has been identified as having areas that need SEZ restoration. See Volume III for details.

PA 101, Bijou Meadow, is located on TRPA maps G-17, G-18 and H-18.

This is the meadow area adjacent to Bijou Creek. Most of this PA remains undeveloped and requires very little capital improvements. This PA is in priority category 1.

CTC has, however, identified two CIPs that encompass small portions of this PA. See PAs 094 and 096.

PA 102, Tahoe Keys, is located on TRPA maps F-17, F-18, G-17, and G-18.

This area is north of the South "Y" area and is adjacent to Lake Tahoe. The major roads in this PA are Venice Drive, Christie Drive, and Beach Drive.

This PA is fill land placed on top of part of the Truckee marsh. This has been reclassified as man-modified and recognized as being land capability 6 lands.

No CIPs have been identified in this PA.

PA 103, Sierra Tract Commercial, is located on TRPA map G-18.

This area is the commercial strip along Highway 50 between Trout Creek and the Upper Truckee River.

This PA is approximately 90 percent low hazard lands and 10 percent SEZ. The SEZ portions consist of the meadows along Trout Creek and the Upper Truckee River. TRPA has rated both of these medium in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

CTC has identified three CIPs in this PA. The first, Sierra Boulevard, also includes a portion of PA 105 and calls for revegetation, curbs, gutters, and storm drain pipes at an estimated cost of \$532,000. The second

Table 3, cont.

North Sierra, includes this PA and a portion of PA 105, and calls for curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$3,806,000. The third, Lodi/Brockway, also includes a portion of PA 104 and calls for rock-lined ditches, curbs, gutters, and sediment basins at an estimated cost of \$970,000.

TRPA has identified additional CIP needs for this PA and PAs 104 and 150 that include revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$440,000.

Also in this PA, approximately one-half an acre of SEZ along Trout Creek has been identified as needing restoration. See Volume III for details.

PA 104, Highland Woods, is located on TRPA map G-18.

This area is north of Highway 50 adjacent to the Truckee River marsh. The major roads in this PA are Springwood Drive and Silver Dollar.

This PA is approximately 90 percent low hazard lands and 10 percent SEZ. The SEZ portion is the Upper Truckee River Marsh meadow. TRPA has rated the Upper Truckee River medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

CTC has identified a CIP in this PA. See PA 103.

TRPA has identified additional CIP needs in this PA. See PA 103.

PA 105, Sierra Tract, is located on TRPA map G-18.

This area is south of Highway 50, between Trout Creek and the Upper Truckee River. The major roads in this PA are Lodi and Martin Avenue.

This PA is approximately 85 percent low hazard lands and 15 percent SEZ. The SEZ portions consist of the meadows along Trout Creek and the Upper Truckee River and a small drainage in the eastern part of this PA. TRPA has rated both Trout Creek and the Upper Truckee River medium in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

Table 3, cont.

CTC has identified three CIPs for this PA. See PA 103 for details about the first project. The second, East Sierra Tract, requires curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$1,248,000. The third, Lindberg/Becker, calls for re-vegetation, rock-lined ditches, curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$1,594,000.

TRPA has identified additional CIP needs for this PA. See PA 103.

PA 108, Winnemucca, is located on TRPA maps G-18 and G-19.

This area is south of Highway 50 and encompasses a narrow strip of land on either side of Winnemucca Avenue. The major roads in this PA are Winnemucca Avenue and Truckee Drive.

This PA is approximately 90 percent low hazard lands and 10 percent SEZ. The SEZ portion is the meadow area adjoining the Upper Truckee River. This PA is in priority category 3.

CTC has identified a CIP, East "Y", that includes this PA and PA 110 and calls for curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$1,288,000.

TRPA has identified additional CIP needs in this PA and PAs 110 and 111 for curbs, gutters, storm drain pipes, sediment basins, and rock-lined ditches at an estimated cost of \$3,500,000.

PA 109, Tahoe Valley Campground, is located on TRPA map G-19.

This area is to the east of Highway 50, between the airport and Barton Memorial Hospital.

No CIPs have been identified in this PA.

PA 110, South "Y", is located on TRPA maps F-18, F-19, G-18, and G-19.

This area is the commercial zone around the South "Y". The major roads in this PA are Highways 50 and 89.

Table 3, cont.

This PA is approximately 65 percent low hazard lands, 10 percent moderate hazard lands, and 25 percent SEZ. The SEZ portions consist of several small tributaries to the Upper Truckee River. TRPA has rated the Upper Truckee River medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified a CIP in this PA. See PA 111.

TRPA has identified additional CIP needs in this PA. See PA 108.

Also in this PA, 10 acres in the Upper Truckee River watershed has been identified as needing SEZ restoration. See Volume III for details.

PA 111, Tahoe Island, is located on TRPA maps F-18 and G-18.

This area is south of the Tahoe Keys and north of the South "Y". The major roads in this PA are Eloise Avenue, Tahoe Island Drive, and James Avenue.

This PA is approximately 50 percent SEZ and 50 percent low hazard lands. The SEZ areas have been extensively disturbed and built upon and consist of several small tributaries to the Upper Truckee River and areas of high groundwater and alluvial soils. This PA is in priority category 2.

CTC has identified five CIPs in this PA. The first CIP, Tahoe Valley, also includes a portion of PA 110, and calls for rock-lined ditches, curbs, gutters, and sediment basins at an estimated cost of \$667,000. The second, 15th Street, calls for curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$56,000. The third, Tahoe Island Park #4, calls for rock-lined ditches, curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$1,803,000. The fourth, North 89, also includes a portion of PA 112, and calls for rock-lined ditches, curbs, gutters, and sediment basins at an estimated cost of \$1,465,000. The fifth, North "Y", calls for curbs and gutters, storm drain pipes, and sediment basins at an estimated cost of \$1,448,000.

TRPA has identified additional CIP needs in this PA. See PA 108.

Table 3, cont.

PA 112, Gardner Mountain, is located on TRPA maps F-18 and F-19.

This area is west of the South "Y". The major roads in this PA are Gardner Street, Glorene Avenue, and Clement Street.

This PA is approximately 75 percent low hazard lands, 20 percent moderate hazard lands, and five percent SEZ. The SEZ portions consist of several small tributaries. These tributaries drain into the Upper Truckee River and into an intervening area. This PA is in priority category 3.

CTC has identified five CIPs in this PA. For the first project, see PA 111. The second project, Gardner, calls for revegetation, rock-lined ditches, curbs, gutters, retaining walls, and sediment basins at an estimated cost of \$763,000. The third project, West "Y", calls for rock-lined ditches, curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$1,472,000. The fourth, 10th Street, requires rock-lined ditches, curbs, gutters, storm drain pipes, and sediment basins at an estimated cost of \$1,246,000. The fifth, 13th Street, calls for rock-lined ditches, curbs, gutters, and sediment basins at an estimated cost of \$876,000.

Also in this PA and a portion of PA 110, approximately 10 acres in the Upper Truckee River watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 113, Industrial Tract, is located on TRPA map F-19.

This area is southwest of the South "Y". The major roads in this PA are Industrial Avenue and Shop Street.

This PA is approximately 35 percent low hazard lands, 10 percent high hazard lands, and 55 percent SEZ. The SEZ portions consist of a small tributary and an area of high groundwater.

No CIPs have been identified in this PA.

PA 114, Bonanza, is located on TRPA maps F-19 and G-19.

This area is south of the South "Y". The major roads in this PA are Bonanza Avenue and Julie Lane.

Table 3, cont.

This PA is approximately 55 percent low hazard lands, five percent moderate or high hazard lands, and 40 percent SEZ. The SEZ portion is a drainageway that flows through the middle of this PA and drains into the Upper Truckee River. This PA is in priority category 2.

TRPA has identified CIP needs in this PA for revegetation at an estimated cost of \$642,000.

TABLE 4
Local Capital Improvement Projects for
Erosion and Runoff Control
(by TRPA Plan Area)

EL DORADO COUNTY

PA 087, Heavenly Valley California, is located on TRPA maps H-17 and H-18.

This is the California side of Heavenly Valley Ski Area.

No CIPs have been identified in this PA.

PA 095, Trout/Cold Creek, is located on TRPA maps G-20, G-21, H-18, and H-29 and on the South Lake Tahoe and Freel Peak Quadrangles.

This is a large undeveloped area south of the City of South Lake Tahoe.

No CIPs have been identified in this PA.

PA 100, Truckee Marsh, is located on PA maps G-17, G-18, and G-19.

This is the meadow area adjoining the Upper Truckee River and Trout Creek. This area extends along the Upper Truckee River from Lake Tahoe to just below the airport and along Trout Creek to just past Pioneer Trail. This PA is undeveloped and has no CIPs identified in it.

SEZ restoration projects have been identified in this PA. See PA 100, in the South Lake Tahoe section.

PA 106, Montgomery Estates, is located on TRPA maps G-19 and H-19.

This area is next to Pioneer Trail and includes the subdivision southwest of Lake Christopher and the two subdivisions surrounding Cold Creek. The major roads in this PA are Plateau Circle, Marshall Trail, and Cold Creek Trail.

Table 4, cont.

This PA is approximately 10 percent high, 30 percent moderate, and 40 percent low hazard lands. The remaining 20 percent is SEZ. The SEZ portions consist of Cold Creek and its tributaries and several tributaries to Trout Creek. TRPA has rated Trout Creek medium in its ability to deliver nutrients and sediments to the Lake while Cold Creek is unrated. This PA is in priority category 2.

CTC has identified three CIPs in this PA. The first, Marshall, calls for revegetation and retaining walls at an estimated cost of \$125,000. The second, High Meadows, requires revegetation and retaining walls at an estimated cost of \$176,000. The third, Del Norte, calls for revegetation, curbs, gutters, storm drain pipes, retaining walls, rock slope protection, and pavement at an estimated cost of \$1,038,000.

TRPA has identified additional CIP needs for this PA. These are revegetation, retaining walls, rock slope protection, storm drain pipes, curb, gutters, and pavement at an estimated cost of \$1,260,000.

Also in this PA, approximately 25 acres in the Cold Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 107, Black Bart, is located on TRPA maps G-18, G-19, and H-19.

This area is the subdivided area along Black Bart Avenue between Pioneer Trail and the South Tahoe Public Utility District. The major roads in this PA are Black Bart Avenue and Meadow Crest Drive.

This PA is approximately 80 percent low hazard lands and 20 percent SEZ. The SEZ portion is the meadow area along Trout Creek. TRPA has rated Trout Creek medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, and storm drain pipes at an estimated cost of \$1,540,000.

Table 4, cont.

PA 115, Golden Bear, is located on TRPA map G-19.

This area is the subdivision west of the Pioneer Trail/Golden Bear Trail intersection. The major roads in this PA are Golden Bear Trail, Gold Dust Trail, and Jacarillo Trail.

This PA is approximately 70 percent low and 30 percent moderate hazard lands. This PA is in priority category 3.

TRPA has identified CIP needs in this PA for revegetation and rock-lined ditches at an estimated cost of \$1,430,000.

PA 116, Airport, is located on TRPA maps G-19 and G-20.

This area includes the airport and is to the east of Highway 50.

This PA is approximately 10 percent high hazard lands, 20 percent low hazard lands, and 70 percent SEZ.

No CIPs have been identified in this PA.

PA 117, Tahoe Paradise (T.P.) Washoan, is located on TRPA maps G-19 and G-20.

This area is between the Lake Tahoe Airport and Pioneer Trail. The major roads in this PA are Washoan Boulevard, Apalachee Drive, and Susquehana Drive.

This PA is approximately 45 percent low hazard lands, 45 percent moderate hazard lands, and 10 percent SEZ. The SEZ portions consist of small tributaries to both Trout Creek and the Upper Truckee River. TRPA has rated both of these medium in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified six CIPs in this PA. The first, Pioneer Trail II, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$4,771,000. The second, Jicarilla, calls for rock-lined ditches, curbs, gutters, pavement, and retaining walls at an estimated cost of \$945,000. The third, Glen Eagles, calls for revegetation, rock-lined ditches,

Table 4, cont.

curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$766,000. The fourth, Washoan, calls for revegetation, curbs, gutters, storm drain pipes, and retaining walls at an estimated cost of \$1,475,000. The fifth, Muskwaki, needs revegetation, curbs, gutters, storm drain pipes, retaining walls, rock slope protection, and sediment basins at an estimated cost of \$648,000. The sixth, Apalachee, calls for revegetation, rock-lined ditches, curbs, gutters, and retaining walls at an estimated cost of \$2,860,000.

TRPA has identified additional CIP needs in this PA for revegetation, rock-lined ditches, storm drain pipes, and rock slope protection at an estimated cost of \$560,000.

PA 118, Twin Peaks, is located on TRPA maps F-19, F-20, G-19, and G-20.

This area is between the airport and Angora Highlands, is mostly undeveloped, and serves as backdrop country.

No CIPs have been identified in this PA, but additional SEZ restoration work is needed. See Volume III for details.

PA 119, County Club Meadow, is located on TRPA maps F-20, F-21, G-19 and G-20.

This area extends along the Upper Truckee River from the airport area to Echo Summit.

This PA is approximately 80 percent SEZ, with areas of intensive modifications and disturbances.

No CIPs have been identified in this PA, but approximately 60 acres in the Upper Truckee River watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 120, Tahoe Paradise (T.P.) Meadowdale, is located on TRPA maps F-21, G-20, and G-21.

This area is northeast of the Pioneer Trail/Highway 50-89 intersection. The major roads in this PA are Elks Club Drive, Thunderbird Drive, and O'Flyng Drive.

Table 4, cont.

This PA is approximately 50 percent moderate hazard lands, 47 percent low hazard lands, and three percent SEZ. The SEZ portions consist of small tributaries. This PA is in priority category 3.

CTC has identified five CIPs in this PA. The first, Iroquois, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$570,000. The second, Ottawa, needs revegetation, rock-lined ditches, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$950,000. The third, Osage, calls for revegetation, rock slope protection, curbs, gutters, and retaining walls, at an estimated cost of \$407,000. The fourth, O'Flyng, needs revegetation, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$613,000. The fifth, Pioneer Trail I, calls for revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, and retaining walls at an estimated cost of \$1,212,000.

PA 121, Freel Peak, is located on TRPA maps F-21, F-22, F-23, F-24, G-20, and H-19 and on the Freel Peak, South Lake Tahoe, and Echo Lake Quadrangles.

This area is backdrop country that forms the headwaters of Saxon and Trout Creeks.

No CIPs have been identified in this PA.

PA 122, Tahoe Paradise-Mandan, is located on TRPA maps F-21 and G-21.

This area is northeast of the intersection of Highways 50 and 89. The major roads in this area are Apache Avenue, Mandan Street, and Carnelian Drive.

This PA is approximately 30 percent low hazard lands, 45 percent moderate hazard lands, five percent high hazard lands, and 20 percent SEZ. The SEZ portions consist of small tributaries, high groundwater areas, and meadows. This PA is in priority category 2.

Table 4, cont.

CTC has identified two CIPs in this PA. The first, Shakori, also includes a portion of PA 125. This project calls for revegetation, rock-lined ditches, and rock slope protection at an estimated cost of \$129,000. The second, Mohican, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, and retaining walls at an estimated cost of \$1,922,000.

TRPA has identified additional CIP needs in this PA for revegetation, rock-lined ditches, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$5,180,000.

PA 123, Meyers Forest, is located on TRPA maps F-21 and G-21.

This area is at the intersection of Pioneer Trail and Highway 50. This PA is undeveloped and is approximately one-third moderate hazard lands, one-third low hazard lands, and one-third SEZ.

No CIPs have been identified in this PA, but approximately 10 acres in the Upper Truckee River watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 124, Meyers/Residential, is located on TRPA maps F-20 and F-21.

This area is west of the Pioneer Trail/Highway 50 intersection. The major roads in this PA are Arrowhead Avenue, Apache Avenue, San Diego Street, and Arapahoe Street.

This PA is approximately 35 percent low hazard lands and 65 percent SEZ. The SEZ portion is part of the Upper Truckee River meadow. The Upper Truckee River has been rated medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified a CIP, Meyers, in this PA, which needs revegetation, rock-lined ditches, curb, gutters, retaining walls, and rock slope protection at an estimated cost of \$3,734,000.

Table 4, cont.

PA 125, Meyers Commercial, is located on TRPA maps F-21 and F-22.

This is the commercial strip around the Highway 50/Highway 89 intersection. It also includes the Pomo Street and Kectak Street areas.

This PA is approximately 70 percent low hazard lands, five percent high hazard lands, and 25 percent SEZ. The SEZ portions consist of small tributaries to the Upper Truckee River. TRPA has rated this river medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified a CIP in this PA. See PA 122.

PA 126, Pope Beach, is located on TRPA maps F-17 and F-18.

This area is along the shoreline between the Tahoe Keys and Jameson Beach.

No CIPs have been identified in this PA.

PA 127, Camp Richardson, is located on TRPA maps E-17, E-18, F-17, and F-18.

This area is between Pope Beach and Taylor Creek.

No CIPs have been identified in this PA.

PA 128, Baldwin, is located on TRPA maps E-17 and E-18.

This area is north of Highway 89 and extends to Baldwin Beach.

No CIPs been identified in this PA.

PA 129, Fallen Leaf North, is located on TRPA maps E-18, E-19, F-18, and F-19.

This area is between Highway 89 and the northern half of Fallen Leaf Lake. The major roads in this PA are Cathedral Road and Fallen Leaf Road.

Table 4, cont.

This PA includes half of Fallen Leaf Lake and encompasses a substantial portion of the Taylor Creek drainage. Although this area has some extensive development, the majority of this PA serves as backdrop country. The outlet of Fallen Leaf Lake is Taylor Creek which TRPA has rated low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified a CIP, Fallen Leaf, in this PA. This CIP needs revegetation, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$141,000.

PA 130, Angora Ridge, is located on TRPA maps E-19, E-20, F-19, F-20, F-21, and F-22 and on the Echo Lake Quadrangle.

This area is undeveloped, backdrop country to the east of Fallen Leaf Lake.

No CIPs have been identified in this PA.

PA 131, Angora Highlands, is located on TRPA maps F-19 and F-20.

This area is northwest of the Lake Tahoe Boulevard/Sawmill Road intersection. The major roads in this PA are Tahoe Mountain Road, Glenmore Way, and Boulder Mountain Drive.

This PA is approximately 40 percent moderate hazard lands and 60 percent low hazard lands. This PA is in priority category 3.

CTC has identified two CIPs in this PA. The first, Angora Highlands I and II, needs revegetation, curbs, gutters, storm drain pipes, and retaining walls at an estimated cost of \$815,000. The second, Boulder Mountain, calls for revegetation, rock-lined ditches, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$2,465,000.

PA 132, Mountain View, is located on TRPA map F-20.

This area is around the Lake Tahoe Boulevard/North Upper Truckee Road intersection. The major roads in this PA are Mount Rainier Road and View Circle.

Table 4, cont.

This PA is approximately 60 percent moderate hazard lands, five percent high hazard lands, and 35 percent SEZ. The SEZ portions consist of Angora Creek and several of its meadows and tributaries. Angora Creek is a tributary to the Upper Truckee River which the TRPA has rated medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified three CIPs in this PA. The first, View, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, and retaining walls at an estimated cost of \$1,446,000. The second, Mt. Rainier, needs revegetation, rock-lined ditches, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$695,000. The third, Cochise, needs revegetation, rock-lined ditches, curbs, and gutters at an estimated cost of \$483,000.

Also in this PA, approximately 15 acres in the Angora Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 133, Tahoe Paradise-Upper Truckee, is located on TRPA maps F-20 and F-21.

This area is north of the North Upper Truckee Road/Highway 50 intersection. The major roads in this PA are Mewuk Drive, Delaware Street, Kiowa Drive, and San Bernadino Street.

This PA is approximately 65 percent moderate hazard lands, 20 percent low hazard lands, and 15 percent SEZ. The SEZ portions primarily consist of tributaries to the Upper Truckee River. TRPA has rated this river medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified three CIPs in this PA. The first, Mewok, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$2,108,000. The second, Delaware, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$1,923,000. The third, San Bernadino, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$1,731,000.

Table 4, cont.

PA 134, Echo View, is located on TRPA map F-20.

This is the small subdivision north of the Echo View Drive/Sawmill Road intersection. The major roads in this PA are Echo View Drive and Mountain Canary Drive.

This PA is approximately 50 percent high hazard lands, 45 percent low hazard lands, and five percent SEZ. The SEZ portions are tributaries to Angora Creek. This PA is in priority category 3.

CTC has identified a CIP, Sawmill, in this PA. This project needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$3,272,000.

PA 135, Tahoe Paradise Chiapa, is located on TRPA maps F-21 and F-22.

This area is west of the Highway 50/North Upper Truckee Road intersection. The major road in this PA is Chiapa Drive.

This PA is approximately 70 percent high hazard lands, 25 percent moderate hazard lands, and five percent low hazard lands and SEZ. The SEZ portions are small drainages that ultimately flow into the Upper Truckee River. This PA is in priority category 3.

CTC has identified a project, Chiapa, in this PA. This CIP needs revegetation, rock-lined ditches, curbs, gutters, and rock slope protection at an estimated cost of \$429,000.

PA 136, KOA/Rainbow, is located on TRPA maps F-21 and F-22.

This area is a developed KOA campground along the Upper Truckee River.

No CIPs have been identified in this PA.

PA 137, Christmas Valley, is located on TRPA maps F-21, F-22, F-23 and F-24.

This area is south of Meyers and encompasses most of the subdivided lands along the Upper Truckee River. The major roads in this PA are South Upper Truckee Road, Santa Claus Drive, and River Park Drive.

Table 4, cont.

This PA is approximately 20 percent high hazard lands, 10 percent moderate hazard lands, 40 percent low hazard lands, and 30 percent SEZ. The SEZ portions consist primarily of tributaries and meadows of the Upper Truckee River. TRPA has rated this river medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

CTC has identified three CIPs in this PA. The first, Santa Claus, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, and retaining walls at an estimated cost of \$532,000. The second, Panorama, needs revegetation, rock-lined ditches, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$282,000. The third, Grass Lake, needs revegetation, rock-lined ditches, curbs, gutters, and rock slope protection at an estimated cost of \$164,000.

PA 138, Tahoe Paradise Nahane, is located on TRPA map F-22.

This area is south of the Highway 50/South Upper Truckee Road intersection. The major roads in this PA are Nahane Drive and Kekin Street.

This PA is approximately 65 percent low hazard lands, five percent high hazard lands, and 30 percent SEZ. The SEZ portions consist of areas with high groundwater and the meadows along the Upper Truckee River. TRPA has rated this river medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

CTC has identified a CIP, Nahane, in this PA which calls for revegetation, rock-lined ditches, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$135,000.

PA 139, Dardenelles, is located on TRPA maps F-22, F-23, and F-24 and on the Freel Peak and Echo Lake Quadrangles.

This area is backdrop country and extends from Echo Summit to Luther Pass.

No CIPs have been identified in this PA.

Table 4, cont.

PA 140, Echo Summit, is located on TRPA maps F-22 and F-23.

This area lies along the Basin's ridgeline near Echo Summit. This area primarily serves as backdrop country with just a few residences.

No CIPs have been identified in this PA.

PA 141, Luther Pass, is located on TRPA maps F-23 and F-24 and on the Freel Peak Quadrangle.

This area is along the Highway 89 corridor near Luther Pass. This PA is relatively undeveloped backdrop country.

No CIPs have been identified in this PA.

PA 142, Echo Lake, is located on TRPA map F-22 and on the Echo Lake Quadrangle.

This is the Upper and Lower Echo Lakes area. This area primarily serves as backdrop country with a few scattered homes along the two lakes.

No CIPs have been identified in this PA.

PA 143, Desolation, is located on TRPA maps D-15, E-17 and on the Echo Lake, Emerald Bay, Rockbound Valley and Homewood Quadrangles.

This area extends along the ridgeline on the western part of the Region. This PA is undeveloped and serves as backdrop country.

No CIPs have been identified in this PA.

PA 144A, Fallen Leaf Forest Service Tract, is located on TRPA maps E-19 and E-20.

This area is along the southwest shoreline of Fallen Leaf Lake. The major road in this PA is Fallen Leaf Road.

Table 4, cont.

Most of this PA is high hazard lands with very little SEZ being present. The outlet of Fallen Leaf Lake is Taylor Creek, which TRPA has rated low in its ability to deliver nutrients and sediments to Lake Tahoe. This PA is in priority category 2.

CTC has identified a CIP in this PA. See PA 129.

El Dorado county has provided information that the capital improvement needs in this PA are not within their jurisdiction. The estimated costs for the CIP needs in this PA are not included in summary table 12 or El Dorado's interim or 20-year targets.

PA 144B, Lily/Angora Lakes, is located on TRPA map E-20 and on the Echo Lake Quadrangle.

This area is relatively undeveloped backdrop country south of Fallen Leaf Lake.

No CIPs have been identified in this PA.

PA 145, South Fallen Leaf Lake, is located on TRPA maps E-19 and E-20.

This area is along the south and east shores of Fallen Leaf Lake. The major road in this PA is Fallen Leaf Road.

This PA is approximately 78 percent high hazards lands, five percent SEZ, and the remaining being low and moderate hazard lands. The SEZ portions consist of a small meadow area in the north part of this PA and Alpine Creek in the south. The outlet of Fallen Leaf Lake is Taylor Creek. TRPA has rated this creek low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified a CIP in this PA. See PA 129.

El Dorado county has provided information that the capital improvement needs in this PA are not within their jurisdiction. The estimated costs for the CIP needs in this PA are not included in summary table 12 or El Dorado's interim or 20-year targets.

PA 146, Emerald Bay, is located on TRPA maps D-15 and E-17 and is on the Rockbound Quadrangle.

This area is primarily undeveloped backdrop country with a few homes located around Cascade Lake. The area extends from Cascade Lake to Rubicon Point.

Table 4, cont.

This PA is primarily high hazard lands and SEZ. The area of needed improvements is along Cascade Lake and Cascade Creek. TRPA has rated Cascade Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1. CTC has identified a CIP, Cascade, in this PA and a portion of PA 175 calling for revegetation, curbs and gutters, retaining walls, and rock slope protection at an estimated cost of \$1,296,000.

El Dorado county has provided information that the capital improvement needs in this PA are not within their jurisdiction. The estimated costs for the CIP needs in this PA are not included in summary table 12 or El Dorado's interim or 20-year targets.

PA 147, Paradise Flat, is located on TRPA maps D-14 and D-15.

This area is between Bliss State Park and the Rubicon area. The major road in this PA is Paradise Flat Lane.

This PA is approximately 97 percent low hazard lands and three percent SEZ. The SEZ portions consist of small tributaries to Paradise Flat Creek. TRPA has rated this creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA for rock-lined ditches, pavement, and sediment basins at an estimated cost of \$2,750,000.

El Dorado county has provided information that the capital improvement needs in this PA are not within their jurisdiction. The estimated costs for the CIP needs in this PA are not included in summary table 12 or El Dorado's interim or 20-year targets.

PA 148, Meeks Creek, is located on TRPA maps D-13, D-14, and D-15 and on the Homewood and Rockbound Valley Quadrangles.

This area is the undeveloped, backdrop country west of Rubicon Bay.

No CIPs have been identified in this PA.

PA 149, Rubicon, is located on TRPA maps D-13 and D-14.

This is the subdivided area west of Rubicon Bay and south of Meeks Bay adjacent to Lake Tahoe. The major roads in this PA are Kehlet Drive, Lower Scenic Drive, Lakeview Drive, and Sierra Drive.

Table 4, cont.

This PA is approximately 65 percent high hazard lands, 25 percent moderate hazard lands, and 10 percent SEZ. The SEZ portions consist of Lonely Gulch Creek and Sierra Creek. Both of these creeks have been rated by TRPA as being high in their ability to deliver nutrients and sediments to the Lake.

TRPA has identified three CIPs in this PA. The first calls for revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, rock slope protection, pavement, and sediment basins at an estimated cost of \$280,000. The second calls for revegetation, rock-lined ditches, storm drain pipes, retaining walls, rock slope protection, and sediment basins at an estimated cost of \$1,840,000. The third calls for rock-lined ditches, retaining walls, rock slope protection, and sediment basins at an estimated cost of \$1,810,000.

El Dorado County is currently constructing a remedial project in this PA and is scheduled to finish work in fiscal year 1989-90.

PA 150, Meeks Bay, is located on TRPA map D-13.

This area is at Meeks Bay, adjacent to Lake Tahoe. This area is managed by the USFS as a campground.

This PA is almost 100 percent SEZ and is in priority category 1.

TRPA has identified CIP needs in this PA for revegetation and pavement at an estimated cost of \$1,100,000.

El Dorado county has provided information that the capital improvement needs in this PA are not within their jurisdiction. The estimated costs for the CIP needs in this PA are not included in summary table 12 or El Dorado's interim or 20-year targets.

PA 151, Glenridge, is located on TRPA map D-13.

This area is a small subdivision just north of Meeks Bay and adjacent to Lake Tahoe. The major roads in this PA are Chinquapin Road and Glenridge Parkway.

This PA is approximately 70 percent high hazard lands with the remaining 30 percent being moderate hazard lands and SEZ. The SEZ consists of an unnamed tributary to Lake Tahoe that flows through the middle of this PA. This PA is in priority category 2.

Table 4, cont.

TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$840,000.

PA 152, McKinney Lake, is located on TRPA map C-12 and on the Homewood Quadrangle.

This is the undeveloped backdrop country that extends from the Sugar Pine Point State Park westward to the Region's boundary.

No CIPs have been identified in this PA.

PA 153, Sugar Pine Point, is located on TRPA maps C-12 and D-12 and on the Homewood Quadrangle.

This area is adjacent to Lake Tahoe and extends from Sugar Pine Point to Meeks Bay and contains the General Creek Campground.

No CIPs have been identified in this PA.

PA 154, Tahoma Residential, is located on TRPA maps C-11, C-12, and D-12.

This is the subdivided area at the Placer/El Dorado County line. The major roads in this PA are Elm Street, Antelope Way, and Pine Street.

This PA is approximately 90 percent low hazard lands with the remaining 10 percent being mixed land classifications.

El Dorado county has completed constructing a major capital improvements project in this PA and part of PA 155.

PA 155, Tahoma Commercial, is located on TRPA map C-12.

This area is the commercial strip along Highway 89 at the Placer/El Dorado County Line.

TRPA has identified CIP needs in this PA. See PA 154.

PA 175, Cascade Properties, is located on TRPA map E-17.

This area is along Cascade Creek adjacent to Lake Tahoe. The major roads in this area are Cascade Road and Sugar Pine Road.

Table 4, cont.

This PA is approximately 35 percent high hazard lands, 25 percent moderate hazard lands, 15 percent low hazard lands, and 25 percent SEZ. The SEZ portion consists of Cascade Creek. TRPA has rated this creek high in its ability to deliver nutrients and sediments to the Lake. This PA is priority category 1.

CTC has identified a CIP in this PA. See PA 146.

El Dorado county has provided information that the capital improvement needs in this PA are not within their jurisdiction. The estimated costs for the CIP needs in this PA are not included in summary table 12 or El Dorado's interim or 20-year targets.

TABLE 5
Local Capital Improvement Projects for
Erosion and Runoff Control
(by TRPA Plan Area)

PLACER COUNTY

PA 001A, Tahoe City, is located on TRPA map C-7.

This area is both south and north of the Truckee River. The major roads in this PA are Tonopah Drive and Highway 28.

This PA is approximately 35 percent low hazard lands, five percent high or moderate hazard lands, and 60 percent SEZ. The SEZ portions consist of meadows and small tributaries. This PA is in priority category 2.

The CTC has identified two CIPs in this PA. The first, Tahoe City Service Road, is completely within this PA and needs revegetation and storm drain pipes at an estimated cost of \$151,000. The other project, Tahoe Tavern Heights, also encompasses portions of PAs 171, 172, and 174 and calls for revegetation, curbs, gutters, storm drain pipes, retaining walls, rock slope protection, and pavement at an estimated cost of \$4,627,000.

Also in this PA and PA 002, the intervening area between the Truckee River and Burton Creek has been identified as an SEZ restoration project. See Volume III for details.

PA 001B, Tahoe City Industrial, is located on TRPA maps C-6 and C-7.

This area is north of Tahoe City and is mostly undeveloped, backdrop country.

No CIPs have been identified within this PA.

PA 002, Fairway Tract, is located on TRPA map C-7.

This area is north of the Highway 89/Highway 28 intersection. The major roads in this PA are Fairway Drive and Bunker Road.

Table 5, cont.

This PA is approximately five percent high hazard lands, 15 percent moderate hazard lands, 40 percent low hazard lands, and 40 percent SEZ. The SEZ portions consist of a large meadow area and an unnamed tributary to the Truckee River. This PA is in priority category 3.

The CTC has identified a CIP, Tahoe City, in this PA which calls for revegetation, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$2,404,000.

Also in this PA and PA 001, the intervening area between the Truckee River and Burton Creek has been identified as an SEZ restoration project. See Volume III for details.

PA 003, Lower Truckee, is located on TRPA maps B-7, B-8, C-7, and C-8 and the Tahoe City Quadrangle.

This is the area along the Truckee River Canyon. This area is mostly undeveloped, backdrop country with a few homes and businesses along the Truckee River. This PA is in priority category 3.

The TRPA has identified a CIP in this PA which calls for revegetation, rock-lined ditches, retaining walls, and rock slope protection at an estimated cost of \$560,000.

PA 004, Burton Creek, is located on TRPA maps B-7, C-6, C-7, D-6 and the Tahoe City Quadrangle.

This area is undeveloped, backdrop country north of Tahoe City.

No CIPs have been identified for this PA.

PA 005, Rocky Ridge, is located on TRPA maps C-6, C-7, and D-6.

This area is between Tahoe City and Burton Creek. The major road in this PA is Rocky Ridge Drive.

This PA is approximately 60 percent low hazard lands, 25 percent high hazard lands, and 15 percent SEZ. The SEZ portion is the meadow at the outlet of Burton Creek. TRPA has rated Burton Creek low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

Table 5, cont.

The TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$560,000.

Also in this PA, approximately 13 acres of the Burton Creek watershed has been identified as needing SEZ restoration. See Volume III for details.

PA 006, Fish Hatchery, is located on TRPA map D-6.

This area is at the western intersection of Highway 28 and Lake Forest Road.

This PA is almost 100 percent SEZ. The SEZ consists of a meadow area and an unnamed creek that TRPA has rated low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

The CTC has identified a CIP, Lake Forest, that includes this PA and portions of PAs 007, 008 009A, and 010 and calls for revegetation, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$2,806,000.

Also in this PA, approximately 5 acres of the Burton Creek watershed has been identified as needing SEZ restoration. See Volume III for details.

PA 007, Lake Forest Glen, is located on TRPA map D-6.

This PA is along Highway 28, just west of its eastern intersection with Lake Forest Road. The major roads in this PA are Glenwood Circle and Crynos Way.

This PA is approximately 55 percent low hazard lands and 45 percent SEZ. The SEZ portion is an unnamed creek that TRPA has rated low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

CIP needs for this area are included in CTC's Lake Forest project. See PA 006.

PA 008, Lake Forest, is located on TRPA map D-6.

This area is west of Dollar Point. The major roads in this area are Sierra View Avenue and Lake Terrace Avenue.

Table 5, cont.

This PA is approximately 75 percent low hazard lands and 25 percent SEZ. The SEZ portion consists of an unnamed creek that TRPA has rated low in its ability to deliver nutrients and sediments to the Lake. This PA is priority category 3.

CIP needs for this area are included in CTC's Lake Forest project. See PA 006.

PA 009A, Lake Forest Commercial, is located on TRPA map D-6.

This is the commercial area along Lake Forest Road.

This PA is mostly low hazard lands with some SEZ areas. The SEZ portion consists of an unnamed creek that TRPA has rated low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

CIP needs for this area are included in CTC's Lake Forest project. See PA 006.

PA 009B, Dollar Hill, is located on TRPA map D-6.

This is the commercial area at the Highway 28/Fabian Way intersection.

This PA is all low hazard land and is in priority category 3.

The CTC has identified a CIP, Dollar Point II, that includes this PA and PA 011 and calls for revegetation, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$2,414,000.

PA 010, Dollar Point, is located on TRPA map D-6.

This area is at Dollar Point and is adjacent to Lake Tahoe. The major roads in this PA are Edgewater Drive, Edgewood Drive, and Observation Drive.

This PA is approximately 55 percent low hazard lands, 35 percent moderate hazard lands, and 10 percent high hazard lands and SEZ. The SEZ portions are small tributaries that flow directly into Lake Tahoe. This PA is in priority category 3.

Table 5, cont.

CIP needs for this area are included in CTC's Lake Forest project. See PA 006.

The TRPA has identified an additional CIP need in this PA for rock-lined ditches at an estimated cost of \$1,350,000.

PA 011, Highlands, is located on TRPA map D-6.

This area is northwest of Dollar Point. The major roads in this PA are Village Road, Old Mill Road, and Polaris Road.

This PA is almost all low hazard land with just a small percentage being SEZ. The SEZ portion is an unnamed creek that TRPA has rated low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

This PA is included in CTC's Dollar Point II CIP project. See PA 009B.

PA 012, North Tahoe High School, is located on TRPA maps C-5, C-6, D-5, and D-6.

This area includes the high school site north of Dollar Point. This area is mostly undeveloped and serves mainly as backdrop country.

No CIPs have been identified in this PA.

PA 013, Watson Creek, is located on TRPA maps D-4, D-5, D-6, E-3, E-4 and the Martis Peak Quadrangle.

This is the undeveloped, backdrop country between Dollars Point and Flick Point.

No CIPs have been identified in this PA.

PA 014, Cedar Flat, is located on TRPA maps D-5 and D-6.

This is the subdivision adjacent to Lake Tahoe in the Cedar Flat area. The major roads in this area are Old County Road, Summit Road, Terrace Drive, and North Ridge Road.

Table 5, cont.

This PA is approximately 60 percent low , 15 percent moderate, and 15 percent high hazard lands. The remaining 10 percent are SEZ areas consisting of small tributaries that flow directly into Lake Tahoe from this PA. This PA is in priority category 3.

The CTC has identified two CIPs in this PA. The first, Cedar Flat, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$6,551,000. The second, Ridgewood, needs revegetation, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$1,855,000.

PA 015, North Star, is located on TRPA map D-4 and the Kings Beach and Tahoe City Quadrangles.

This area is adjacent to the North Star Ski Area and serves as backdrop country.

No CIPs have been identified in this PA.

PA 016A, Carnelian Woods, is located on TRPA maps D-4 and E-4.

This area is north of the Highway 28/Carnelian Woods Avenue. The major road in this PA is Silver Pine Drive.

This PA is low hazard and SEZ lands. The SEZ portion is Carnelian Creek. TRPA has rated this creek low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

The TRPA has identified a CIP in this PA. It has been incorporated into CTC's Flick Point CIP. See PA 018 for details.

PA 016B, Carnelian Bay Subdivision, is located on TRPA map D-4.

This area is west of Flick Point. The major roads in this PA are Center Street and Olive Street.

This PA is primarily low hazard lands with some SEZ. This SEZ area is an unnamed creek that TRPA has rated low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

Table 5, cont.

CIP needs for this PA have been incorporated into CTC's Flick Point project. See PA 018.

PA 017, Carnelian Bay, is located on TRPA maps D-4 and E-4.

This is the commercial area in Carnelian Bay at the corner of Carnelian Woods Avenue and Highway 28.

This PA is approximately 50 percent low hazard lands and 50 percent SEZ. The SEZ portion is Carnelian Canyon Creek which TRPA has rated low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

CIP needs for this PA have been incorporated into CTC's Flick Point project. See PA 018.

PA 018, Flick Point/Agate Bay, is found on TRPA map E-4.

This is the area north and west of Flick Point. The major roads in this PA are Granite Road, Sahara Drive, and Sunset Road.

This PA is approximately 50 percent high hazard lands and 50 percent low and moderate hazard lands. This PA is in priority category 3.

The CTC has identified two CIPs in this PA. The first, Flick Point, includes this PA and PAs 016A, 016B, and 017 and calls for revegetation, storm drain pipes, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$7,085,000. The second, Agate Bay, needs revegetation, retaining walls, and rock slope protection at an estimated cost of \$112,000.

PA 019, Martis Peak, is located on TRPA maps E-3, F-3, F-4 and the Martis Peak Quadrangle.

This area is relatively undeveloped, backdrop country north of the Kings Beach area.

No CIPs have been identified in this PA.

Table 5, cont.

PA 020, Kingswood West, is located on TRPA map E-3.

This area is between Tahoe Vista and Highway 267. The major roads in this PA are Kings Way, Queens Way, and Lords Way.

This PA is approximately one-third high hazard lands and two-thirds moderate hazard lands. This PA is in priority category 3.

The CTC has identified a CIP, Kingswood West II, for this PA that needs revegetation, rock-lined ditches, curbs, gutters, retaining walls, rock slope protection, and pavement at an estimated cost of \$1,639,000.

PA 021, Tahoe Estates, is located on TRPA maps E-3 and E-4.

This area is adjacent to Lake Tahoe in the Tahoe Vista area. The major roads in this PA are Estates Drive, Laurel Drive, and Wildwood Road.

This PA is approximately 20 percent moderate and 80 percent low hazard lands. This PA is in priority category 3.

The CTC has identified a CIP, Tahoe Vista-Tamarack, that includes this PA and PAs 022 and 023 which calls for revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, rock slope protection, and pavement at an estimated cost of \$4,615,000.

PA 022, Tahoe Vista Commercial, is located on TRPA maps E-3 and E-4.

This is the commercial area near the Highway 28/National Avenue intersection. In addition to these two roads, this PA also includes Toyon Road and Grey Lane.

This PA is approximately 80 percent low hazard lands, 10 percent moderate hazard lands, and 10 percent SEZ. The SEZ portion is immediately adjacent to Lake Tahoe. This PA is in priority category 3.

CIP needs for this PA are included in the CTC's Tahoe Vista-Tamarack project. See PA 021.

Table 5, cont.

PA 023, Tahoe Vista Subdivision, is located on TRPA maps E-3 and E-4.

This area is in the east part of Tahoe Vista, next to the Brockway Golf Course. The major road in this PA is Agatam Circle.

This PA is all low hazard land and is in priority category 3.

CIP needs for this PA are included in the CTC's Tahoe Vista-Tamarack project. See PA 021.

PA 024A, North Tahoe Recreation Area, is located on TRPA maps E-3 and E-4.

This area is undeveloped, open space north of Tahoe Vista.

No CIPs have been identified in this PA.

PA 024B, Snow Creek, is located on TRPA maps E-3, E-4, and F-4.

This area is the undeveloped portion of the Woodvista Subdivision west of the Brockway Golf Course.

No CIPs have been identified in this PA, although approximately 25 acres of the Snow Creek watershed has been identified within this PA as needing SEZ restoration. See Volume III for details.

PA 025, Kingswood East, is located on TRPA maps E-3 and F-3.

This area is on both sides of Highway 267 where it intersects with Commonwealth Drive. The major roads in this PA are Canterbury Drive, Kingswood Drive, and Trent Circle.

This PA is approximately 75 percent low hazard lands and 25 percent moderate hazard lands and SEZ. The SEZ portions consist of Griff Creek, a major tributary to Snow Creek, and other smaller tributaries. TRPA has rated Griff Creek medium in its ability to deliver nutrients and sediments to the Lake, while Snow Creek has not been rated. This PA is in priority category 2.

Table 5, cont.

The CTC has identified two CIPs for this PA. The first, Kingswood, needs revegetation, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$1,367,000. The second, Kings Run, includes part of this PA and part of PA 027 and calls for revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, and pavement at an estimated cost of \$5,165,000.

PA 026, Kings Beach Industrial, is located on TRPA maps F-3 and F-4.

This area is in Upper Kings Beach. The major roads in this PA are Speckled Avenue and Cutthroat Avenue.

This PA is all low hazard land and is in priority category 3.

The CTC identified two CIPs for this PA. The first, Kings Beach II, also includes portions of PAs 028 and 029 and calls for revegetation, curbs, gutters, storm drain pipes, rock slope protection, and pavement at an estimated cost of \$3,557,000. The second, Kings Beach III, includes this PA and portions of PA 028 and 029 and calls for revegetation, curbs, gutters, storm drain pipes, and retaining walls at an estimated cost of \$2,052,000.

PA 027, Woodvista, is located on TRPA maps E-3, E-4, F-3, and F-4.

This area is between Highway 267 and the Brockway Golf Course. The major roads in this PA are Brassie Avenue, Midison Avenue, and Tiger Avenue.

This PA is approximately 80 percent low hazard lands and 20 percent SEZ. The SEZ portions consist of meadow areas and a major tributary to Snow Creek. Snow Creek has not been rated for its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CIP needs for this PA are included in CTC's Kings Run project. See PA 025.

Table 5, cont.

PA 028, Kings Beach Residential, is located on TRPA maps F-3 and F-4.

This is the main residential area of Kings Beach. The major roads in this PA are Coon Street, Deer Street, and Fox Street.

This PA is mainly low hazard land with a few SEZ areas that consist of unnamed tributaries to Lake Tahoe. This PA is in priority category 3.

The CTC has identified four CIPs for this PA; Kings Beach I, Kings Beach II, Kings Beach III, and Fox Street II. For Kings Beach II and Kings Beach III, see PA 026. Kings Beach I includes this PA and a portion of PA 031 and calls for revegetation, curbs, gutters, retaining walls, rock slope protection and pavement at an estimated cost of \$1,620,000. Fox Street II includes this PA and portions of PAs 029 and 031 and calls for revegetation, rock-lined ditches, curbs, gutters, and storm drain pipes at an estimated cost of \$287,000.

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1-7
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PA 029, Kings Beach Commercial, is located on TRPA maps E-4 and F-4.

This is the commercial strip along Highway 28 in Kings Beach.

This PA is approximately 60 percent low hazard lands, 10 percent high hazard lands, and 30 percent SEZ. The SEZ portions consist of Griff Creek, Baldy Creek, and several unnamed tributaries to Lake Tahoe. TRPA has rated Griff Creek medium in its ability to deliver nutrients and sediments to the Lake, while rating the other drainage areas low. This PA is in priority category 2.

CIP needs for this PA are included in CTC's Kings Beach I, II, and III projects and in the Fox Street II project. For Kings Beach I, see PA 028. For Kings Beach II and III, see PA 026. For Fox Street II, see PA 028.

PA 031, Brockway, is located on TRPA map F-4.

This area is between Kings Beach and North Stateline. The major roads in this area are Park Lane, Speedboat Avenue, and Harbor Avenue.

Table 5, cont.

This PA is approximately 30 percent high hazard lands, 60 percent low hazard lands, and 10 percent SEZ. The SEZ portions consist of several small unnamed tributaries to Lake Tahoe. This PA is in priority category 3.

CIP needs for this PA are included in CTC's Kings Beach I project and in the Fox Street II project. See PA 028 for details on these two projects. In addition, the CTC has identified a CIP, Lake Vista, that includes this PA and a portion of PA 032. The Lake Vista project needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, and rock slope protection at an estimated cost of \$982,000.

PA 032, North Stateline Casino Core, is located on TRPA map F-4.

This is the North Stateline Area along Highway 28.

This PA is in priority category 3. CIP needs for this PA are included in the CTC's Lake Vista project. See PA 031.

PA 156, Chambers Landing is located on TRPA maps C-11 and C-12.

This area is just north of the Placer/El Dorado County line. The major roads in this PA are Cascade Drive, Woodside Drive, Grouse Drive, and McKinney Road.

This PA is approximately 70 percent low hazard lands, 20 percent moderate hazard lands, and 10 percent SEZ. The SEZ portions consist of McKinney Creek and its tributaries. TRPA has rated McKinney Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified two CIPs in this PA. The first, McKinney II, needs revegetation, curbs, gutters, storm drain pipes, rock slope protection, and sediment basins at an estimated cost of \$934,000. The second, Chambers Lodge, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$2,248,000.

Table 5, cont.

PA 157, Homewood/Tahoe Ski Bowl, is located on TRPA maps C-10, C-11, and C-12 and on the Homewood Quadrangle.

This area is the Homewood and Tahoe Ski Bowl ski areas.

No CIPs have been identified in this PA.

PA 158, McKinney Tract, is located on TRPA map C-11.

This area is between Homewood and Tahoma. The major roads in this area are Meadow Road and Lagoon Road.

This PA is approximately 65 percent low hazard lands, 10 percent high hazard lands, and 25 percent SEZ. The SEZ portion consists primarily of Homewood Creek. TRPA has rated this creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

CTC has identified two CIPs in this PA. The first, Homewood, needs revegetation, rock-lined ditches, curbs, gutters, storm drain pipes, and rock slope protection at an estimated cost of \$237,000. The second, Homewood Canyon, includes this PA and PA 159 and calls for revegetation, rock-lined ditches, storm drain pipes, and retaining walls at an estimated cost of \$47,000.

Also in this PA, approximately 15 acres of the Quail Creek watershed and 10 acres of the Homewood Canyon Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 159, Homewood/Commercial, is located on TRPA map C-11.

This is the commercial area along Highway 89 in Homewood.

This PA is approximately 75 percent low hazard lands, 10 percent high hazard lands, and 15 percent SEZ. The SEZ portion consists of several small tributaries to Lake Tahoe. This PA is in priority category 2.

CTC has identified a CIP in this PA. See PA 158.

Also in this PA, approximately 5 acres of the intervening area between Homewood and Madden Creeks have been identified as needing SEZ restoration. See Volume III for details.

Table 5, cont.

PA 160, Homewood Residential, is located on TRPA maps C-10 and C-11.

This area is just north of Homewood. The major roads in this PA are Sacramento Avenue and Terrace Avenue.

This PA is approximately 75 percent low hazard lands, 15 percent high hazard lands, and 10 percent SEZ. The SEZ portion consists primarily of Madden Creek. TRPA has rated this creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified a CIP, Cedar Crest, in this PA, which calls for revegetation, curbs, gutters, and pavement at an estimated cost of \$865,000.

PA 161, Tahoe Pines, is located on TRPA maps B-10 and C-10.

This is the residential area just south of Blackwood Creek. The major roads in this PA are Grand Avenue, Interlaken Road, and Bellevue Avenue.

This PA is approximately 25 percent high hazard lands, 20 percent moderate hazard lands, 45 percent low hazard lands, and 10 percent SEZ. The SEZ portion is Blackwood Creek which TRPA has rated high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

CTC has identified three CIPs in this PA. The first, Tahoe Swiss Village, needs revegetation, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$1,391,000. The second, Tahoe Pines, needs revegetation, curbs, gutters, storm drain pipes, and rock slope protection at an estimated cost of \$1,844,000. The third, Skyland II, includes a portion of this PA and a portion of PA 164 and calls for revegetation, rock-lined ditches, curbs, gutters, rock slope protection, and pavement at an estimated cost of \$418,000.

PA 162, Blackwood, is located on TRPA maps B-9, B-10, C-9, C-10 and on the Homewood Quadrangle.

This is mostly undeveloped backdrop country to the west of Tahoe Pines.

No CIPs have been identified in this PA.

Table 5, cont.

PA 163, Lower Ward Valley, is located on TRPA maps B-8, B-9, C-8, and C-9.

This is mostly the undeveloped area around lower Ward Creek. Ward Creek Boulevard is the only road in this PA.

This PA is approximately 82 percent high hazard lands and SEZ. The remaining 18 percent is low and moderate hazard lands. The SEZ portion is the Ward Creek drainage which TRPA has rated high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

CTC has identified a CIP, Ward Creek II, in this PA. This project calls for revegetation, storm drain pipes, retaining walls, rock slope protection, and pavement at an estimated cost of \$611,000.

TRPA has identified additional CIP needs for portions of this PA and PA 167 for revegetation, rock-lined ditches, storm drain pipes, retaining walls, rock slope protection, pavement, and sediment basins at an estimated cost of \$4,340,000.

PA 164, Sunnyside/Skyland, is located on TRPA maps C-8 and C-9.

This area is immediately adjacent to Lake Tahoe and extends from Skyland to Sunnyside. The major roads in this PA are Elizabeth Drive, Hill Street, and Sunnyside Lane.

This PA is approximately 75 percent low hazard lands, 15 percent moderate hazard lands, and 10 percent SEZ. The SEZ portion consists of Ward Creek. TRPA has rated this creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

CTC has identified three CIPs in this PA. See PA 161 for details on the first project. The second project, Pineland, includes a portion of this PA and portions of PAs 169 and 170. This project needs revegetation, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$2,626,000. The third project, Lake Tahoe Park, also includes portions of PAs 168 and 170 and calls for revegetation, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$3,357,000.

Table 5, cont.

PA 165, Timberland, is located on TRPA maps B-9 and C-9.

This is the Timberland subdivision just south of Ward Creek. The major roads in this PA are Timberland Lane and Sugar Pine Drive.

This PA is approximately 50 percent high and 50 percent low hazard lands. This PA is in priority category 3.

CTC has identified a CIP, Timberland, in this PA which calls for revegetation, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$1,632,000.

PA 166, Upper Ward Valley, is located on TRPA maps A-8, B-7, B-8, and B-9 and on the Tahoe City Quadrangle.

This area is mostly undeveloped, backdrop country that forms the headwaters of Ward Creek.

No CIPs have been identified in this PA.

The Ward Creek watershed in this PA and PA 167 has SEZ restoration needs. See Volume III for details.

PA 167, Alpine Peaks, is located on TRPA maps A-8 and B-8.

This is the small subdivided area in upper Ward Valley. The major roads in this PA are Chamonix Road, Courchevel Road, and Gstaad Road.

This PA is approximately 45 percent low hazard lands, 35 percent moderate hazard lands, and 20 percent high hazard lands and SEZ. The SEZ portions consist of several small tributaries to Ward Creek. TRPA has rated Ward Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA. See PA 163.

The Ward Creek watershed in this PA and PA 166 has SEZ restoration needs. See Volume III for details.

Table 5, cont.

PA 168, Talmont, is located on TRPA maps B-8 and C-8.

This area is just north of Ward Creek and west of Sunnyside. The major roads in this PA are Tahoe Park Heights Drive, Skyline Drive, Silver Drive, and Montclair Drive.

This PA is approximately 65 percent low hazard lands, 20 percent moderate hazard lands, and 15 percent high hazard lands and SEZ. The SEZ portions are mainly small seep areas with no tributaries. This PA is in priority category 3.

CTC has identified a CIP in this PA. See PA 164 for details.

PA 169, Sunnyside, is located on TRPA map C-8.

This area is at the Highway 89/Tahoe Parkway intersection.

This PA is approximately 60 percent low hazard lands and 40 percent SEZ. The SEZ portion consists of a small unnamed tributary to Lake Tahoe which has not been rated in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

CTC has identified a CIP in this PA. See PA 164.

PA 170, Tahoe Park/Pineland, is located on TRPA maps B-8, C-8 and, C-9.

This area is north of the Highway 89/Ward Creek Boulevard intersection. The major roads in this PA are Pine Avenue, Kent Avenue, and Washoe Way.

This PA is approximately 70 percent low hazard lands, 10 percent moderate and high hazard lands, and 20 percent SEZ. The SEZ portions consist of Ward Creek and its tributaries. TRPA has rated Ward Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

CTC has identified a CIP in this PA. See PA 164.

Table 5, cont.

PA 171, Tavern Heights, is located on TRPA maps C-7 and C-8.

This area is just south of Tahoe City. The major roads in this PA are Tonopah Drive, Bonanza Drive, and Holly Road.

This PA is approximately 90 percent low hazard lands and 10 percent SEZ. The SEZ portions consist of small unnamed tributaries to Lake Tahoe. This PA is in priority category 3.

CTC has identified a CIP in this PA. See PA 001A.

TRPA has identified additional CIP needs in this PA and PA 173 for revegetation, curbs, gutters, storm drain pipes, retaining walls, rock slope protection, and pavement at an estimated cost of \$5,740,000.

PA 172, Mark Twain Tract, is located on TRPA map C-8.

This area is just south of Granlibakken and includes the condominiums near the resort. There are no major roads in this PA.

This PA is approximately 60 percent moderate hazard lands and 40 percent low hazard lands. Very little SEZ areas exist in this PA. What does exist flows into a small tributary of the Truckee River. This PA is in priority category 3.

CTC has identified a CIP in this PA. See PA 001A.

PA 173, Granlibakken, is located on TRPA maps C-7 and C-8.

This area is south of Tahoe City and includes the Granlibakken resort area. The major roads in this PA are Tonopah Drive and Autumn Way.

This PA is approximately 35 percent low and moderate hazard lands and 65 percent SEZ and high hazard lands. The SEZ portion consists of a small tributary to the Truckee River. This PA is in priority category 3.

TRPA has identified a CIP in this PA. See PA 171.

PA 174, 64-Acre Tract, is located on TRPA map C-7.

This area is immediately south of the Truckee River outlet and is mostly SEZ lands.

This PA is currently being rehabilitated by the USFS to address the capital improvement needs.

TABLE 6
Local Capital Improvement Projects for
Erosion and Runoff Control
(by TRPA Plan Area)

WASHOE COUNTY

PA 030, Mount Rose, is located on TRPA maps F-3, F-4, G-2, G-3, H-1, H-2, and H-3, and on the Mount Rose and Martis Peak Quadrangles.

This area provides access to the Basin by the Mount Rose Highway, State Route 431. Aside from this highway, this area is virtually undeveloped and serves as backdrop country above Incline Village. This PA is almost entirely high hazard lands and SEZ. This area, in addition to PA 053, serves as the headwaters to the five major streams that flow through Incline Village into Lake Tahoe.

No erosion or runoff control needs have been identified in this PA for local roads.

SEZ restoration needs have been identified in the First Creek and Incline watersheds within this PA. See Volume III for details.

PA 032, North Stateline Casino Core, is located on TRPA map F-4.

This is the casino area at North Stateline.

This PA is approximately 65 percent moderate hazard lands, 30 percent high hazard lands, and five percent SEZ. The SEZ consists of a small drainage channel that only flows in response to storms and spring snow melt. This PA is in priority category 3.

TRPA has identified CIP needs in this PA and PA 033 for rock-lined ditches, revegetation, and pavement at an estimated cost of \$646,000.

PA 033, Stateline Point, is located on TRPA map F-4.

This area is to the south and east of the North Stateline casino area and is adjacent to Lake Tahoe. The major roads in this PA are Somers Road and Crystal Drive.

Table 6, cont.

This PA is approximately 80 percent high hazard lands, 15 percent moderate hazard lands, and five percent SEZ. The SEZ portion consists of a small drainage that flows in response to storm and snowmelt input. This PA is in priority category 2.

The TRPA has identified a CIP in this PA. See PA 032 for details.

PA 034, Crystal Bay, is located on TRPA maps F-3, F-4, and G-3.

This area is along Highway 28 in Crystal Bay. The major roads in this PA are Lake View Avenue and Wassou Road.

This PA is 100 percent high hazard lands and is in priority category 2.

The TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$745,000.

PA 035, Crystal Bay Condominiums, is located on TRPA map G-3.

This area is the condominium complex adjacent to Lake Tahoe on the west side of Incline Village.

This PA is approximately 60 percent moderate hazard lands, 25 percent high hazard lands, and 15 percent SEZ. The SEZ portions consist of First Creek, which TRPA has rated high in its ability to deliver nutrients and sediments to the Lake, and two unnamed tributaries. This PA is in priority category 1.

The TRPA has identified CIP needs in this PA and a portion of PA 036 for revegetation, rock-lined ditches, retaining walls, and rock slope protection at an estimated cost of \$1,650,000.

PA 036, Incline Village #4/Ponderosa, is located on TRPA maps G-2 and G-3.

This area is above Highway 28 and to the west of the Mount Rose Highway. The major roads in this PA are Ponderosa Avenue, Sugarpine Drive, lower Tyner Way, Tumbleweed Circle, and Saddlehorn Drive.

Table 6, cont.

This PA is approximately 60 percent moderate hazard lands, 25 percent high hazard lands, and 15 percent SEZ. The SEZ portions consist of First and Second Creeks and two small tributaries. TRPA has rated both First and Second Creeks high in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

The TRPA has identified CIP needs in this PA for revegetation, retaining walls, and rock slope protection at an estimated cost of \$878,000. TRPA has identified additional CIP needs in this PA and portions of PAs 036, 038, 041, 045, and 046 for rock-lined ditches and storm drain pipes at an estimated cost of \$3,051,000.

Also in this PA, a portion of the Second Creek watershed has been identified as needing SEZ restoration. See Volume III for details.

PA 037, Lakeview, is located on TRPA maps G-3, H-3, and H-4.

This area is adjacent to Lake Tahoe and extends from Village Boulevard to the Crystal Bay condominiums. The major roads in this PA are Martis Peak Drive, Mays Boulevard, and Lake Shore Drive.

This PA is approximately 65 percent low hazard lands, 15 percent moderate hazard lands, and 20 percent SEZ. The SEZ portions consist of Second Creek and Wood Creek. TRPA has rated both of these creeks high in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

TRPA has identified CIP needs in this PA plus portions of PAs 045 and 046 for rock-lined ditches and sediment basins at an estimated cost of \$2,090,000.

Also in this PA, the intervening area between the Second Creek and Wood Creek watersheds has been identified as needing SEZ restoration. See Volume III for details.

PA 038, Wood Creek, is located on TRPA maps G-3 and H-3.

This area is northeast of the intersection of the Mount Rose Highway and Tahoe Boulevard. The major roads in this PA are Winding Way, McDonald Drive, and Lucille Drive.

Table 6, cont.

This PA is approximately two-thirds low and moderate hazard lands and one-third SEZ. The SEZ portions consist of Burnt Cedar Creek, Wood Creek, and several unnamed tributaries. Burnt Cedar Creek is a confined creek that TRPA has rated low in its ability to deliver nutrients and sediments to Lake Tahoe. Wood Creek is also confined and is rated high by the TRPA for its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA. See PA 036 for details.

PA 039, Incline Village #2, is located on TRPA maps G-2 and G-3.

This area is northwest of the Mount Rose Highway. The major roads in this PA are upper Tyner Way and Dorcey Drive.

This PA is approximately 70 percent low hazard lands, 25 percent high hazard lands, and five percent SEZ. The SEZ portions consist of small seeps and tributaries. This PA is in priority category 3.

TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, retaining walls, and rock slope protection at an estimated cost of \$692,000.

PA 040, Incline Village #1, is located on TRPA maps G-2 and G-3.

This area is northwest of the Mount Rose Highway and just east of PA 039. The major roads in this PA are Jennifer Street, Geraldine Street, and Randall Avenue.

This PA is approximately 40 percent moderate and 40 percent high hazard lands, with the remaining 20 percent being SEZ. The SEZ portions are small seeps, springs, and tributaries and have been significantly altered by development. This PA is in priority category 2.

TRPA has identified CIP needs in this PA for revegetation, retaining walls, and rock slope protection at an estimated cost of \$669,000.

Table 6, cont.

PA 041, Incline Village #3, is located on TRPA maps G-2, G-3, H-2, and H-3.

This area is southeast of the Mount Rose Highway, west of Country Club Drive, and north of Village Boulevard. The major road in this PA is Golfers Pass Road.

This PA is approximately 55 percent moderate hazard lands, 40 percent SEZ, and five percent low hazard lands. The SEZ portions consist of Third Creek and several unnamed tributaries. Third Creek is confined and has been rated by TRPA as being high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA and a portion of PA 043 for revegetation and retaining walls at an estimated cost of \$1,976,000.

Also in this PA, approximately five acres in the Third Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 042, Incline Village #5, is located on TRPA maps G-2 and H-2.

This area is north of the Mount Rose Highway in the most northern area of Incline Village. The major roads in this PA are Jennifer and Apollo.

This PA is approximately 50 percent high hazard lands, 10 percent moderate hazard lands, and 40 percent SEZ. The SEZ portions consist of Third Creek, several unnamed tributaries, and seep areas. In this PA, Third Creek is confined and deeply incised. TRPA has rated Third Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

TRPA has identified CIP needs in this PA for revegetation and retaining walls at an estimated cost of \$251,000.

PA 043, Chateau/Country Club, is located on TRPA maps H-2 and H-3.

This area is between Country Club Drive and the Mount Rose Highway. The major roads in this PA are Eagle Drive, Fairview Boulevard, Alpine View, and Driver Way.

Table 6, cont.

This PA is approximately 15 percent moderate hazard lands, 50 percent high hazard lands, and 35 percent SEZ. The SEZ portions consist mainly of unnamed tributaries to Incline Creek and several seeped areas. TRPA has rated Incline Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, retaining walls, and rock slope protection at an estimated cost of \$1,060,000.

Also in this PA, approximately 10 acres in the Incline Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 044, Fairway, is located on TRPA maps H-2 and H-3.

This area is between Country Club Drive, Tahoe Boulevard, and Village Boulevard. The major roads in this PA are Driver Way and Fairway Boulevard.

This PA is approximately 70 percent low hazard land and 30 percent SEZ. The SEZ portions include Incline Creek, Third Creek, and several unnamed tributaries and seeps. TRPA has rated both Incline and Third Creeks high in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

TRPA has identified a CIP in this PA that calls for rock-lined ditches at an estimated cost of \$1,273,000.

Also in this PA, approximately 10 acres in the Incline Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 045, Incline Village Commercial, is located on TRPA maps G-3 and H-3.

This PA consists of two separate areas encompassing the commercial areas in the center of Incline Village. The west area is northwest of the Mays Boulevard/Southwood Boulevard intersection. The east area is north of Southwood Boulevard and along part of Village Boulevard. The major roads in the west area are Tahoe Boulevard, Southwood Boulevard, and Mays Boulevard. In the east area, the major roads are Enterprise, Village Boulevard, Incline Way, and Southwood Boulevard.

Table 6, cont.

This PA is approximately 80 percent low hazard land and 20 percent SEZ. The west area is bisected by Burnt Cedar Creek, which TRPA has rated low in its ability to deliver nutrients and sediments to the Lake. The SEZ portions of the east area include Wood Creek, which flows along its western edge, an unnamed tributary that flows along Village Boulevard, and a tributary of Third Creek. TRPA has rated both Wood and Third Creeks as high in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified a CIP in this PA and PAs 045, 046, and 048 for rock-lined ditches at an estimated cost of \$817,000.

Also in this PA, approximately 20 acres in the Third Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 046, Incline Village Residential, is located on TRPA maps G-3 and H-3.

This area is in the central part of Incline Village. It encompasses the western half of the Northwood/Southwood Boulevard Loop. The major roads in this PA are Northwood Boulevard, Southwood Boulevard, and Tahoe Boulevard.

This PA is approximately 90 percent low hazard land and 10 percent SEZ. The SEZ portions consist of Wood Creek and several unnamed tributaries. TRPA has rated Wood Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA. See PAs 036, 037, and 045 for details.

PA 047, Tunnel Creek, is located on TRPA maps H-3 and H-4 and the Marlette Quadrangle.

This area is south of Ski Incline, north of Sand Harbor Beach, and east of Highway 28. This area is mostly undeveloped, backdrop country with limited access.

Table 6, cont.

This PA is predominantly high hazard land with some SEZ. The SEZ portions consist of Tunnel Creek and a couple of unnamed tributaries. TRPA has rated Tunnel Creek medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

No CIPs have been identified in this PA.

PA 048, Incline Village Tourist, is located on TRPA maps H-3 and H-4.

This area is south of Tahoe Boulevard and extends to the Lake. The major roads in this PA are Country Club Drive and Incline Way.

This PA is approximately 60 percent low hazard lands and 40 percent SEZ. The SEZ portions consist of Third and Incline Creeks and an unnamed tributary. TRPA has rated both of these creeks high in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

TRPA has identified CIP needs in this PA. See PA 045 for details.

Also in this PA, approximately 25 acres in the Third Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 049, Mill Creek, is located on TRPA maps H-3 and H-4.

This area is located in the eastern portion of Incline Village and extends south from Tahoe Boulevard to the Lake. The major roads in this PA are Tramway Road, Pine Cone Road, and Mill Creek Road.

This PA is approximately 65 percent low hazard lands, 15 percent high and moderate hazard lands, and 20 percent SEZ. The SEZ portions include Mill Creek and an unnamed tributary. TRPA has rated Mill Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA and portions of PAs 050 and 054 that call for revegetation, rock-lined ditches, curbs, and gutters at an estimated cost of \$2,766,000.

Table 6, cont.

PA 050, Mt. Shadows, is located on TRPA map H-3.

This area is southwest of Ski Incline and east of Country Club Drive. The major roads in this PA are Ski Way, Lucerne Way, and Tomahawk Trail.

This PA is approximately 65 percent moderate hazard lands, 30 percent high hazard lands, and five percent SEZ. The SEZ portions consist of small unnamed tributaries. This PA is in priority category 3.

TRPA has identified CIP needs in this PA. See PA 049.

PA 051, Tyrolian Village, is located on TRPA map H-3.

This area is northwest of Ski Incline. The major road in this PA is Tirol Drive.

This PA is approximately 95 percent high hazard lands and five percent SEZ. The SEZ portion consists of Incline Creek which flows along the northwest side of this PA. TRPA has rated Incline Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

TRPA has identified CIP needs in this PA for revegetation and retaining walls at an estimated cost of \$83,000.

PA 052, Incline Ski, is located on TRPA map H-3 and the Mt. Rose Quadrangle.

This area is east of upper Ski Way and extends to the Region's boundary. Most of this area is high hazard land and SEZ. The SEZ portions consist of Incline Creek and its tributaries. TRPA has rated Incline Creek high in its ability to deliver nutrients and sediments to the Lake.

No CIP needs have been identified in this PA.

PA 053, Incline Lake, is located on TRPA map H-1 and the Mt. Rose Quadrangle.

This area is west of the Mount Rose Highway Summit. The major road in this area is the dirt access road from the Mount Rose Highway to Incline Lake.

Table 6, cont.

This PA is predominantly high hazard land and SEZ. The SEZ portion consists of Incline Lake and its outlet that flows into Third Creek. TRPA has rated Third Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, rock slope protection, and pavement at an estimated cost of \$319,000.

PA 054, Incline Village Industrial, is located on TRPA maps H-3 and H-4.

This area is northeast of the Lake Shore Drive/Tahoe Boulevard intersection. The major roads in this PA are Parvin Road and Sweetwater Road.

This PA has been extensively modified and consists primarily of high hazard lands, with approximately 15 percent of the area being SEZ. The SEZ portion consists of Mill Creek, which is highly modified with culverts and a reservoir. TRPA has rated Mill Creek high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA. See PA 049.

PA 055, East Shore, is located on TRPA map H-4 and the Marlette Lake Quadrangle.

This area is along the lakeward side of a line 300 feet east of Highway 28 and extends from Rocky Point to Skunk Harbor. Only a small portion of this PA is privately owned. The majority is managed for recreational uses by the USFS and Nevada State Parks.

This PA is moderate and high hazard lands with a small percentage being SEZ. The SEZ portions consist of Tunnel Creek, Sand Harbor Creek, Marlette Creek, Secret Harbor Creek, Bliss Creek, plus several unnamed creeks that flow directly into Lake Tahoe. TRPA has rated Marlette Creek high in its ability to deliver nutrients and sediments to Lake Tahoe, with the rest rated medium. This PA is in priority category 3.

Table 6, cont.

TRPA has identified CIP needs for a small portion of this PA that call for revegetation, rock-lined ditches, retaining walls, rock slope protection, and sediment basins at an estimated cost of \$319,000.

PA 056, Marlette Lake, is located on the Marlette Lake Quadrangle.

This area is east of Highway 28 and extends to the Region's boundary. This is mainly undeveloped, backdrop country managed by the USFS and Nevada State Parks.

No CIPs have been identified in this PA.

TABLE 7
Local Capital Improvement Projects for
Erosion and Runoff Control
(by TRPA Plan Area)

CARSON CITY

PA 055, East Shore, is located on TRPA map H-4 and the Marlette Lake Quadrangle.

For more details on this PA, see PA 055 in the Washoe County list of needs.

PA 056, Marlette Lake, is located on the Marlette Lake Quadrangle.

For more details on this PA, see PA 056 in the Washoe County list of needs

PA 057, Spooner Lake, is located on TRPA maps H-10 and H-11 and on the Marlette Lake and Glenbrook Quadrangles.

This area extends east of Glenbrook to the Region's boundary and lies between the southern portion of Marlette Lake and Spooner Summit. This PA is in priority category 2.

TRPA has identified CIP needs in a small portion of this PA and a portion of PA 058 for revegetation, rock-lined ditches, retaining walls, rock slope protection, and pavement at an estimated cost of \$690,000.

The rest of this PA is backdrop country and managed by the USFS and Nevada State Parks.

TABLE 8
Local Capital Improvement Projects for
Erosion and Runoff Control
(by TRPA Plan Area)

DOUGLAS COUNTY

PA 057, Spooner Lake, is located on TRPA maps H-10 and H-11 and on the Marlette Lake and Glenbrook Quadrangles.

For details on this PA, see PA 057 in the Carson City list of needs.

PA 058, Glenbrook, is located on TRPA maps H-10 and H-11.

This area is to the east of Glenbrook Bay. The major roads in this PA are Glenbrook Inn Road, Prey Meadow Road, and the Back Road.

This PA is approximately 25 percent low, 15 percent moderate, and 20 percent high hazard lands with the remaining 40 percent being SEZ. The SEZ portions consist of Slaughter House Creek, Glenbrook Creek, and a large meadow area between the two. TRPA has rated Slaughter House Creek medium and Glenbrook Creek low in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in a portion of this PA. See PA 057 in the Carson City list.

PA 059, Shakespeare Point, is located on TRPA map H-11.

This area lies between Highway 50 and the Lake and is just south of Glenbrook. The major road in this PA is Lakefront Circle.

This PA is approximately two-thirds moderate and one-third high hazard lands. This PA is in priority category 3.

TRPA has identified CIP needs in this PA for revegetation and rock slope protection at an estimated cost of \$72,000.

Table 8, cont.

PA 060, Genoa Peak, is located on TRPA maps H-11, H-12, H-13, H-14, H-15, and H-16 and on the Glenbrook and South Lake Tahoe Quadrangles.

This area extends from Logan Shoals to Zephyr Cove and up to the Region's boundary.

This is backdrop country managed by the USFS. No CIPs have been identified in this PA.

PA 061, Logan Creek, is on TRPA maps H-11 and H-12.

This area includes the Logan House Subdivision and Logan Shoals. The major road in this PA is North Logan Creek Road.

This PA is approximately 90 percent high hazard lands and 10 percent SEZ. The SEZ portions consist of North Logan House Creek and Logan House Creek. TRPA has rated both of the creeks low in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

TRPA has identified CIP needs in this PA for revegetation, curbs, gutters, storm drain pipes, rock slope protection, and sediment basins at an estimated cost of \$966,000.

Also in this PA, portions of the Logan Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 062, Cave Rock, is located on TRPA maps H-12 and H-13.

This area encompasses the subdivided areas both north and south of Cave Rock. The major roads in this PA are Cave Rock Drive and Winding Way.

This PA is approximately 100 percent high hazard land. Although this area has no tributaries in it, TRPA has rated it high in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

TRPA has identified CIP needs in this PA and PA 063 for rock-lined ditches, storm drain pipes, pavement, revegetation, retaining walls, and rock slope protection at an estimated cost of \$1,097,000.

Table 8, cont.

PA 063, Lincoln, is located on TRPA map H-13.

This area is south of Cave Rock. The major roads in this PA are Bedell and Lyons.

This PA is approximately 60 percent high hazard lands, 20 percent low hazard lands, and 20 percent SEZ. The SEZ area consists of Lincoln Creek which TRPA has rated medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 1.

TRPA has identified CIP needs in this PA. See PA 062.

PA 064, Lakeridge, is located on TRPA map H-13.

This area is between Cave Rock and Skyland along Highway 50. The major roads in this PA are Cedar Ridge Drive and Hidden Woods Drive.

This PA is approximately 75 percent high hazard lands, 20 percent moderate hazard lands, and five percent SEZ. The SEZ consists of a small unnamed tributary that TRPA has rated medium in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 3.

TRPA has identified CIP needs in a portion of this PA for revegetation, retaining walls, and rock slope protection at an estimated cost of \$531,000.

PA 065, Skyland, is located on TRPA maps H-13 and H-14.

This is the Skyland Subdivision in the area north of Zephyr Cove.

This PA is approximately 15 percent low hazard lands and 85 percent moderate hazard lands. This PA is in priority category 3.

TRPA has identified CIP needs in this PA for revegetation and rock slope protection at an estimated cost of \$104,000.

PA 066, Zephyr Cove, is located on TRPA map H-14.

This area is just south of Skyland and encompasses both sides of Highway 50. The major road in this PA is Warrior Way.

Table 8, cont.

This PA is approximately 35 percent low hazard lands, 30 percent moderate hazard lands, 10 percent high hazard lands, with the rest being SEZ. The SEZ area consists of North Zephyr Creek, Zephyr Creek, and South Zephyr Creek. TRPA has rated both North Zephyr and Zephyr Creeks medium, and South Zephyr Creek low in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

No CIPs have been identified in this PA, but approximately 10 acres in the Zephyr Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 067, Marla Bay/Zephyr Heights, is located on TRPA maps H-14 and H-15.

This area is the developed portions of the Zephyr Point area. The major roads in this PA are North Martin Drive, Inspiration Drive, and Marla Lane.

This PA is approximately 75 percent high hazard and 25 percent moderate and low hazard lands. This PA is in priority category 3.

TRPA has identified CIP needs in a portion of this PA for revegetation, rock-lined ditches, curbs, gutters, retaining walls, and rock slope protection at an estimated cost of \$193,000.

PA 068, Round Mound, is located on TRPA map H-15.

This area is west of Highway 50 between McFaul Creek and Elks Point Road. There are no major roads in this PA.

This PA is approximately 33 percent high hazard lands, with the rest being moderate hazard lands and SEZ. The SEZ areas are McFaul Creek and a large meadow at the north. McFaul Creek has been rated as being high in its ability to deliver nutrients and sediments to the Lake.

No CIPs have been identified in this PA.

PA 069, Elks Point, is located on TRPA map H-15.

This area is the subdivision at the end of Elks Point Road adjacent to Lake Tahoe. The major road in this PA is Lakeview Avenue.

Table 8, cont.

This PA is all high hazard land and is in priority category 2.

TRPA has identified CIP needs in this PA for rock-lined ditches and sediment basins at an estimated cost of \$228,000.

PA 070A, Edgewood, is located on TRPA map H-16.

This area is mainly the Edgewood Golf Course at South Stateline.

This PA is approximately 40 percent low hazard land and 60 percent SEZ. The SEZ portion consists of Edgewood Creek which TRPA has rated low in its ability to deliver nutrients and sediments to the Lake.

No CIPs have been identified in this PA.

PA 070B, Rabe, is located on TRPA maps H-15 and H-16.

This is the Rabe Meadow area at South Stateline. The main road in this PA is Elks Point Road.

This PA is approximately 25 percent low hazard land, 25 percent moderate or high hazard land, and the rest SEZ. The SEZ portions consist of Burke Creek, several of its unnamed tributaries, and a large meadow area. TRPA has rated Burke Creek low in its ability to deliver nutrients and sediments to the Lake.

No CIPs have been identified in this PA.

PA 071, Round Hill Commercial, is located on TRPA map H-15.

This area is at the intersection of Highway 50 and Elks Point Road.

This PA is approximately 65 percent moderate hazard lands, 10 percent high hazard lands, 10 percent low hazard lands, and 15 percent SEZ. The SEZ portions consist of small unnamed tributaries.

No CIPs have been identified in this PA.

Table 8, cont.

PA 072, Round Hill/Tahoe Dempsey, is located on TRPA map H-15.

This is the undeveloped area between Round Hill and Lake Village, east of Highway 50.

No CIPs have been identified in this PA.

PA 073, Lake Village, is located on TRPA maps H-15 and H-16.

This area is the Lake Village condominiums which are north of Kingsbury Grade and east of Highway 50. The major roads in this area are Lake Village Drive and Rubicon Circle.

This PA is approximately 45 percent high hazard lands, 35 percent moderate hazard lands, with the rest being SEZ or low hazard lands. The SEZ portion consists of an unnamed tributary that flows into Rabe Meadow. This PA is in priority category 3.

TRPA has identified CIP needs in this PA for revegetation, curbs, gutters, and sediment basins at an estimated cost of \$607,000.

PA 074, Round Hill Residential, is located on TRPA map H-15.

This is the area north of the Elks Point Road/Highway 50 intersection. The major roads in this PA are Elks Point Road, McFaul Way, and Seminole.

This PA is 85 percent high hazard lands, with the rest being moderate hazard lands and SEZ. The SEZ portions are small unnamed tributaries. This PA is in priority category 3.

TRPA has identified needs in this PA for revegetation and rock slope protection at an estimated cost of \$135,000.

PA 075, Douglas County Sewer Improvement District, is located on TRPA maps H-15 and H-16.

This area is east of Lake Village and is approximately 50 percent high hazard lands, 40 percent low hazard lands, and 10 percent SEZ. The SEZ portions consist of small unnamed tributaries.

No CIPs have been identified in this PA.

Table 8, cont.

PA 076, Kingsbury Commercial, is located on TRPA map H-16.

This is the commercial area at the intersection of Kingsbury Grade and Highway 50.

This PA is approximately 60 percent moderate hazard lands, 15 percent low hazard lands, and 25 percent SEZ. The SEZ portions consist of unnamed tributaries to Edgewood Creek and Burke Creek. TRPA has rated both of these creeks low in their abilities to deliver nutrients and sediments to the Lake.

No CIPs have been identified in this PA, but approximately 15 acres in the Burke Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 077, Oliver Park, is located on TRPA map H-16.

This area is east of the Highway 50/Kingsbury Grade intersection and extends to Lake Tahoe. The main roads in this PA are Kahle Drive, Arthur, and Eugene.

This PA is 100 percent SEZ and consists of a meadow that has been extensively developed. This PA is in priority category 1.

TRPA has identified CIP needs in this PA for storm drain pipes and sediment basins at an estimated cost of \$1,139,000.

PA 078, Middle Kingsbury, is located on TRPA maps H-16 and I-16.

This area is on both sides of lower Kingsbury Grade. The major roads in this PA are Meadow Lane, Serpentine Way, Cottonwood Drive, and Chimney Road.

This PA is approximately 50 percent moderate hazard lands, 30 percent high hazard lands, and 20 percent SEZ. The SEZ portions consist of small unnamed tributaries and meadows. This PA is in priority category 2.

TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, storm drain pipes, and retaining walls at an estimated cost of \$2,608,000.

Table 8, cont.

PA 079, Chimney Rock, is located on TRPA maps H-15, H-16, I-15, and I-16.

This area is north of middle Kingsbury Grade. The major roads in this area are Chimney Rock Road and Terrace View Drive.

This PA is approximately 50 percent high hazard lands, 25 percent moderate hazard lands, and 25 percent SEZ. The SEZ portions consist of Burke Creek, its tributaries, and several meadows. TRPA has rated Burke Creek low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA for revegetation, curbs, gutters, storm drain pipes, retaining walls, and rock slope protection at an estimated cost of \$1,165,000.

Also in this PA, approximately 5 acres in the Burke Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 080, Kingsbury Drainage, is located on TRPA maps H-16, H-17, I-15, and I-16.

This PA is backdrop country and no CIPs have been identified in this PA.

PA 081, Kingsbury Village, is located on TRPA map I-15.

This area is north of upper Kingsbury Grade. The major road in this PA is Andria Drive.

This PA is approximately 85 percent high hazard lands and 15 percent SEZ. Burke Creek flows just along the edge of this PA, with several unnamed tributaries to both Burke and Edgewood Creeks flowing through this PA. TRPA has rated both of these creeks low in their abilities to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, storm drain pipes, retaining walls, rock slope protection, and sediment basins at an estimated cost of \$2,222,000.

Table 8, cont.

Also in this PA, approximately 25 acres in the Edgewood Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 082, Upper Kingsbury, is located on TRPA map I-16.

This area is to the south of the South Benjamin/Kingsbury Grade intersection. The major roads in this PA are South Benjamin Drive, Beverly Road, and Jack Circle.

This PA is approximately 85 percent high hazard lands and 15 percent SEZ. The SEZ portions consist of tributaries to Edgewood Creek. TRPA has rated Edgewood Creek low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, storm drain pipes, retaining walls, rock slope protection, and sediment basins at an estimated cost of \$1,835,000.

Also in this PA, approximately 10 acres have been identified in the Edgewood Creek watershed as needing SEZ restoration. See Volume III for details.

PA 083, Kingsbury Heights, is located on TRPA map I-16.

This area is on both sides of Kingsbury Grade about halfway up the road. The major roads in this PA are Hubbard Drive and Highlands Drive.

This PA is all high hazard land and is in priority category 3.

TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, storm drain pipes, retaining walls, rock slope protection, pavement, and sediment basins at an estimated cost of \$966,000.

PA 084, Palisades, is located on TRPA map I-16.

This area is south of the intersection of Kingsbury Grade and Palisade Road. The major roads in this PA are Palisade Road and Edgewood Drive.

Table 8, cont.

This PA is 80 percent high hazard lands, 10 percent moderate hazard lands, and 10 percent SEZ. The SEZ portions are Edgewood Creek and several of its tributaries. TRPA has rated Edgewood Creek low in its ability to deliver nutrients and sediments to the Lake. This PA is in priority category 2.

TRPA has identified CIP needs in this PA for revegetation, rock-lined ditches, storm drain pipes, retaining walls, and pavement at an estimated cost of \$773,000.

Also in this PA, approximately 10 acres in the Edgewood Creek watershed have been identified as needing SEZ restoration. See Volume III for details.

PA 086, Heavenly Valley Nevada, is located on TRPA map I-16 and the South Lake Tahoe Quadrangle.

This is the Heavenly Valley ski area on the Nevada side of the Region.

No CIPs have been identified in this PA.

PA 088, Tahoe Village, is located on TRPA map I-16.

This area is south of Daggett Pass (top of Kingsbury Grade). The major road in this PA is Tramway Drive.

This PA is approximately 95 percent high hazard lands and five percent SEZ. The SEZ portion consists of a small unnamed tributary.

No CIPs have been identified in this PA.

PA 089A, Nevada South Stateline Resort Area, is located on TRPA map H-16.

This area is the South Stateline area and includes the casino core area on the Nevada side.

This PA is approximately 60 percent low hazard lands and 40 percent SEZ. The SEZ portions consist of tributaries to Edgewood Creek and several meadows. TRPA has rated Edgewood Creek low in its ability to deliver nutrients and sediments to the Lake.

No CIPs have been identified in this PA.

TABLE 9

State Departments of Transportation
Capital Improvement Projects
for Erosion and Runoff Control
(by highway segment)

CALTRANS

1. HIGHWAY 50 - EL DORADO COUNTY

This section of highway is from Echo Summit (mile marker 66.54) to the junction with Highway 89 (mile marker 70.62) for an estimated length of 4.08 miles. TRPA has rated this highway segment low in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 3.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$240,000.
- B. Mechanical slope stabilization at an estimated cost of \$1,120,000.
- C. Roadside drainage improvements at an estimated cost of \$870,000.
- D. Storm drainage improvements at an estimated cost of \$280,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$810,000.

For a total estimated cost of \$3,320,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Mile marker 66.7 Echo Summit	Sedimentation ponds, revegetation	1981	\$55,000
Mile marker 66.8/ 67.9 Echo Summit Grade	Rebuild drop inlets, sand traps	1982	\$15,000
Mile Marker 70.3 Upper Truckee River Bridge	Sedimentation Basin, slope stabilization, revegetation	1983	\$57,000

Table 9, cont.

2. HIGHWAY 89 - EL DORADO COUNTY

This section of highway is from Luther Pass (mile marker 0.00) to the junction with Highway 50 (mile marker 8.56) for an estimated length of 8.56 miles. TRPA has rated this highway segment medium in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 2.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$160,000.
- B. Mechanical slope stabilization at an estimated cost of \$200,000.
- C. Roadside drainage improvements at an estimated cost of \$1,010,000.
- D. Design, administration, inspection, and implementation needs at an estimated cost of \$430,000.

For a total estimated cost of \$1,800,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Mile Marker 2.5 Luther Pass	Slope stabilization, rock and revegeta- tion, sand traps	1985	\$244,000

Table 9, cont.

3. HIGHWAY 50/89 - EL DORADO COUNTY

This section of highway is from the intersection of Highway 50 and 89 (mile marker 70.62) to the South Lake Tahoe "Y" (mile marker 75.45) for an estimated length of 4.83 miles. TRPA has rated this highway segment medium in its ability to deliver nutrients and sediments to the Lake and has placed it in priority Category 2.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$280,000.
- B. Mechanical slope stabilization at an estimated cost of \$320,000.
- C. Roadside drainage improvements at an estimated cost of \$1,440,000.
- D. Design, administration, inspection, and implementation needs at an estimated cost of \$560,000.

For a total estimated cost of \$2,600,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Mile Marker 74.6/ 75.3 north of airport to the "Y"	Infiltration, paving, revegetation	1986	\$645,000

Table 9, cont.

4. HIGHWAY 50 - EL DORADO COUNTY, CITY OF SOUTH LAKE TAHOE

This section of highway is from the South Lake Tahoe "Y" (mile marker 75.45) to the southern California/Nevada stateline (mile marker 80.44) for an estimated length of 4.99 miles. TRPA has rated this highway segment low in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 3.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Roadside drainage improvements at an estimated cost of \$440,000.
- B. Storm drainage improvements at an estimated cost of \$280,000.
- C. Design, administration, inspection, and implementation needs at an estimated cost of \$240,000.

For a total estimated cost of \$960,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Mile Marker 78.4 Rufus Allen	Shore protection	1982	\$834,000
Mile Marker 75.5/ 80.4 from the "Y" to Stateline	Paving, drainage, slotted drains, filter boxes	1976	\$560,000

Table 9, cont.

5. HIGHWAY 89 - EL DORADO COUNTY

This section of highway is from the South Lake Tahoe "Y" (mile marker 8.56) to the El Dorado/Placer county line (mile marker 27.41) for an estimated length of 18.85 miles. TRPA has rated this highway segment medium in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 2.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$1,360,000.
- B. Mechanical slope stabilization at an estimated cost of \$2,040,000.
- C. Roadside drainage improvements at an estimated cost of \$2,560,000.
- D. Storm drainage improvements at an estimated cost of \$600,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$2,080,000.

For a total estimated cost of \$8,640,000 for this section.

Since 1977, the following projects have been completed or are proposed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Mile Marker 9.9/17.2 South of Camp Richardson to Emerald Bay	Paving, drainage, slope stabiliza- tion, rock and revegetation	1984	\$1,400,000
Mile Marker 17.7 Emerald Bay slip out	slope stabiliza- tion-wall, reveg- etation, drainage	1981	\$744,000
Mile Marker 20.1/20.2 Bliss #1	Slope stabiliza- tion, revegetation	1980	\$160,000

Table 9, cont.

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Mile Marker 20.0 Bliss #2	Slope stabiliza- tion-wall, rock, revegetation	1984	\$290,000
Mile Marker 19.3/20.7 Bliss #3	Slope stabiliza- tion walls, rock, sedimentation basins, revegeta- tion	1985	\$748,000
Mile Marker 21.8/22.6 Rubicon #1	Slope stabiliza- tion, revegetation	1987	\$606,000
Mile Marker 22.7/23.5 Rubicon #2	Slope stabiliza- tion, revegetation	1987	\$593,000

Table 9, cont.

6. HIGHWAY 89 - PLACER COUNTY

This section of highway is from the El Dorado/Placer County line (mile marker 0.00) to the Lake Tahoe Regional boundary northwest of Tahoe City (mile marker 12.14) for an estimated length of 12.14 miles. TRPA has rated this highway segment high in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 1.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$40,000.
- B. Mechanical slope stabilization at an estimated cost of \$420,000.
- C. Roadside drainage improvements at an estimated cost of \$1,540,000.
- D. Storm drainage improvements at an estimated cost of \$570,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$800,000.

For a total estimated cost of \$3,370,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Mile Marker 4.5/4.7 Tahoe Pines-Elizabeth Drive	Curve improvement, slope stabilization	1987	\$300,000
Mile Marker 6.3/6.9 Sunnyside	Curve widening, revegetation	1983	\$46,000
Mile Marker 8.5 Fanny Bridge	Drainage, filter manholes	1975	\$214,000

Table 9, cont.

7. HIGHWAY 28 - PLACER COUNTY

This section of highway is from Tahoe City (mile marker 0.09) to the northern California/Nevada stateline (mile marker 10.94) for an estimated length of 10.94 miles. TRPA has rated this highway segment medium in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 2.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$120,000.
- B. Mechanical slope stabilization at an estimated cost of \$900,000.
- C. Roadside drainage improvements at an estimated cost of \$1,620,000.
- D. Storm drainage improvements at an estimated cost of \$150,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$840,000.

For a total estimated cost of \$3,630,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Mile Marker 3.5 Old County Road	Slope stabiliza- tion	1984	\$16,000
Mile Marker 4.8 Cedar Flat-Terrace Drive	Drainage, rock- lined ditch	1985	\$22,000
Mile Marker 8.0 Tahoe Vista- Beesley's Cabins	Drainage, infil- tration	1985	\$77,000
Mile Marker 9.4 Kings Beach- Griff Creek	Drainage, rock- lined ditch	1985	\$113,000
Mile Marker 9.6 Kings Beach- Deer Street	Drainage, infil- tration	1982	\$80,000

Table 9, cont.

8. HIGHWAY 267 - PLACER COUNTY

This section of highway is from Brockway Summit (mile marker 6.67) to the junction with Highway 28 (mile marker 9.90) for an estimated length of 3.23 miles. TRPA has rated this highway segment low in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 3.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$120,000.
- B. Mechanical slope stabilization at an estimated cost of \$600,000.
- C. Roadside drainage improvements at an estimated cost of \$200,000.
- D. Storm drainage improvements at an estimated cost of \$120,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$320,000.

For a total estimated cost of \$1,360,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Mile Marker 8.5/9.1 Kings Beach-Brockway	Slope Stabiliza- tion, revegetation	1982	\$160,000

TABLE 10

State Departments of Transportation
Capital Improvement Projects
for Erosion and Runoff Control
(by highway segment)

NDOT

1. HIGHWAY 28 - WASHOE COUNTY

This section of highway is from the Nevada/California stateline to the southeast junction with Lakeshore Boulevard for an estimated length of 5.46 miles. TRPA has rated this highway segment medium in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 2.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$280,000.
- B. Mechanical slope stabilization at an estimated cost of \$1,280,000.
- C. Roadside drainage improvements at an estimated cost of \$1,560,000.
- D. Storm drainage improvements at an estimated cost of \$1,400,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$1,460,000.

For a total estimated cost of \$5,980,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
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Table 10, cont.

2. HIGHWAY 28 - WASHOE, CARSON CITY, AND DOUGLAS COUNTIES

This section of highway is from the southeast junction with Lakeshore Boulevard to the junction with Highway 50 for an estimated length of 9.71 miles. This section is within three counties: Washoe, Carson City, and Douglas. TRPA has rated this highway segment medium in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 2.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

For the Washoe County section:

- A. Slope revegetation at an estimated cost of \$160,000.
- B. Mechanical slope stabilization at an estimated cost of \$1,480,000.
- C. Roadside drainage improvements at an estimated cost of \$280,000.
- D. Design, administration, inspection, and implementation needs at an estimated cost of \$60,000.

For a total estimated cost of \$2,520,000 for this section.

For the Carson City county section:

- A. Slope revegetation at an estimated cost of \$400,000.
- B. Mechanical slope stabilization at an estimated cost of \$2,400,000.
- C. Roadside drainage improvements at an estimated cost of \$240,000.
- D. Storm drainage improvements at an estimated cost of \$40,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$960,000.

For a total estimated cost of \$4,040,000 for this section.

Table 10, cont.

For the Douglas county section:

- A. Slope revegetation at an estimated cost of \$140,000.
- B. Mechanical slope stabilization at an estimated cost of \$160,000.
- C. Roadside drainage improvements at an estimated cost of \$60,000.
- D. Storm drainage improvements at an estimated cost of \$80,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$140,000.

For a total estimated cost of \$580,000 for this section.

For the entire section of highway, the total estimated costs were:

- A. Slope revegetation at an estimated cost of \$700,000.
- B. Mechanical slope stabilization at an estimated cost of \$4,040,000.
- C. Roadside drainage improvements at an estimated cost of \$580,000.
- D. Storm drainage improvements at an estimated cost of \$120,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$1,700,000.

For a total estimated cost of \$7,140,000 for the entire section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Highway 28	Repaving, drop inlets, drainage	1985	\$198,000

Table 10, cont.

3. HIGHWAY 431 - WASHOE COUNTY

This section of highway is from the Mount Rose Summit to the junction with highway 28 for an estimated length of 7.10 miles. TRPA has rated this highway segment high in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 1.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$120,000.
- B. Mechanical slope stabilization at an estimated cost of \$520,000.
- C. Roadside drainage improvements at an estimated cost of \$640,000.
- D. Storm drainage improvements at an estimated cost of \$240,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$460,000.

For a total estimated cost of \$1,980,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Highway 431/Mount Rose Highway	Slope stabiliza- tion, drainage, revegetation	1979	\$3,781,000

Table 10, cont.

4. HIGHWAY 50 - DOUGLAS COUNTY

This section of highway is from Spooner Summit to the southern Nevada/California stateline for an estimated length of 13.02 miles. TRPA has rated this highway segment medium in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 2.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$90,000.
- B. Mechanical slope stabilization at an estimated cost of \$4,340,000.
- C. Roadside drainage improvements at an estimated cost of \$1,740,000.
- D. Storm drainage improvements at an estimated cost of \$840,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$2,420,000.

For a total estimated cost of \$10,240,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Highway 50		1984	\$192,000
Spooner Maintenance Yard		1987	\$151,000

Table 10, cont.

5. HIGHWAY 207 - DOUGLAS COUNTY

This section of highway is from Daggett Pass to the junction with highway 50 for an estimated length of 3.31 miles. TRPA has rated this highway segment medium in its ability to deliver nutrients and sediments to the Lake and has placed it in priority category 2.

In the 1977, TRPA Lake Tahoe Basin Water Quality Management Plan document, this section of highway was identified as needing the following erosion control/water quality improvements:

- A. Slope revegetation at an estimated cost of \$120,000.
- B. Mechanical slope stabilization at an estimated cost of \$900,000.
- C. Roadside drainage improvements at an estimated cost of \$600,000.
- D. Storm drainage improvements at an estimated cost of \$400,000.
- E. Design, administration, inspection, and implementation needs at an estimated cost of \$640,000.

For a total estimated cost of \$2,660,000 for this section.

Since 1977, the following projects have been completed in this section:

<u>Project Location</u>	<u>Description</u>	<u>Date</u>	<u>Cost</u>
Lower Kingsbury Phase I	Slope stabilization, drainage, revegetation, rock-lined ditches	1984	\$198,128*
Lower Kingsbury Phase II	Slope stabilization, drainage, revegetation, rock-lined ditches	1984	\$289,816*

* Douglas County was responsible for maintaining this section of highway until 1984 when NDOT took over the responsibility.

Table 11

Summary List of CIP Priorities and Costs
For The City of South Lake Tahoe

Plan Area	Name	Priority/Cost		
		1	2	3
085	Lakeview Heights			
089B	California South Stateline Resort Area		\$6,000,000	\$4,057,000
090	Tahoe Meadows	x (089B)		
091	Ski Run		\$5,828,000	
092	Pioneer/Ski Run			x (091)
093	Bijou		\$7,278,000	
094	Glenwood		\$1,795,000	
096	Pioneer Village		\$ 715,000	
097	Bijou Pines		\$2,982,000	
098	Bijou/Al Tahoe		x (096,097)	
099	Al Tahoe			\$6,462,000
101	Bijou Meadow	x (094,096)		
103	Sierra Tract-Commercial			\$5,748,000
104	Highland Woods			x (103)
105	Sierra Tract		\$2,842,000	
108	Winnemucca			\$4,788,000
110	South "Y"		x (111,108)	
111	Tahoe Island		\$5,439,000	
112	Gardner Mountain			\$4,357,000
114	Bonanza		\$ 642,000	

Total estimated cost for the City of South Lake Tahoe is \$58,933,000

x - Indicates CIP needs within this PA.

() - Indicates the PA that contains the CIP description and estimated cost.

Table 12

Summary List of CIP Priorities and Costs
For El Dorado County

<u>Plan Area</u>	<u>Name</u>	1	2	3
106	Montgomery Estates			
107	Black Bart		\$2,599,000	
115	Golden Bear		\$1,540,000	\$1,430,000
117	Tahoe Paradise (T.P.) Washoan			
120	Tahoe Paradise (T.P.) Meadowvale		\$12,025,000	\$3,752,000
122	Tahoe Paradise - Mandan			
124	Meyers/Residential		\$7,231,000	
125	Meyers Commercial		\$3,734,000	
129	Fallen Leaf North		x (122)	
131	Angora Highlands		\$ 141,000	
132	Mountain View			\$3,280,000
133	Tahoe Paradise-Upper Truckee		\$2,624,000	
134	Echo View		\$5,762,000	
135	Tahoe Paradise Chiapa			\$3,272,000
137	Christmas Valley	\$978,000		\$ 429,000
138	Tahoe Paradise Nahane			
151	Glenridge		\$ 840,000	\$ 135,000

Total estimated cost for El Dorado County is \$49,772,000

x - Indicates CIP needs within this PA.

() - Indicates the PA that contains the CIP description and estimated cost.

Table 13

Summary List of CIP Priorities and Costs
For Placer County

Plan Area	Name	Priority/Cost		
		1	2	3
001A	Tahoe City			
002	Fairway Tract		\$4,778,000	\$2,404,000
003	Lower Truckee			\$ 560,000
005	Rocky Ridge			\$ 560,000
006	Fish Hatchery			\$2,806,000
007	Lake Forest Glen			x (006)
008	Lake Forest			x (006)
009A	Lake Forest Commercial			x (006)
009B	Dollar Hill			\$2,414,000
010	Dollar Point			\$1,350,000
011	Highlands			x (009B)
014	Cedar Flat			\$8,406,000
016A	Carnelian Woods			x (018)
016B	Carnelian Bay Subdivision			x (018)
017	Carnelian Bay			x (018)
018	Flick Point/Agate Bay			\$7,197,000
020	Kingswood West			\$1,639,000
021	Tahoe Estates			\$4,615,000
022	Tahoe Vista Commercial			x (021)
023	Tahoe Vista Subdivision			x (021)
025	Kingswood East		\$6,532,000	
026	Kings Beach Industrial			\$5,609,000
027	Woodvista		x (025)	
028	Kings Beach Residential			\$1,907,000
029	Kings Beach Commercial		x (028,026)	
031	Brockway			\$ 982,000

x - Indicates CIP needs within this PA.

() - Indicates the PA that contains the CIP description and estimated cost.

Table 13, cont.

Summary List of CIP Priorities and Costs
For Placer County

Plan Area	Name	Priority/Cost		
		1	2	3
156	Chambers Landing			
158	McKinney Tract	\$ 284,000	\$3,182,000	
159	Homewood/Commercial		x (158)	
160	Homewood/Residential		\$ 865,000	
161	Tahoe Pines			
163	Lower Ward Valley	\$3,653,000		
164	Sunnyside/Skyland	\$5,983,000	\$4,951,000	
165	Timberland			
167	Alpine Peaks			\$1,632,000
168	Talmon		x (163)	
169	Sunnyside			x (164)
170	Tahoe Park/Pineland	x (164)		
171	Tavern Heights	x (164)		
172	Mark Twain Tract			\$5,740,000
173	Granlibakken			x (001A)
				x (171)

Total estimated cost for Placer County is \$78,049,000

x - Indicates CIP needs within this PA.

() - Indicates the PA that contains the CIP description and estimated cost.

Table 14

Summary List of CIP Priorities and Costs
For Washoe County

Plan Area	Name	Priority/Cost		
		1	2	3
032	North Stateline Casino Core			
033	Stateline Point			\$ 646,000
034	Crystal Bay		x(032)	
035	Crystal Bay Condominiums	\$1,650,000	\$ 745,000	
036	Incline Village #4/Ponderosa	\$3,929,000		
037	Lakeview	\$2,090,000		
038	Wood Creek		x(036)	
039	Incline Village #2			\$ 692,000
040	Incline Village #1		\$ 669,000	
041	Incline Village #3		\$1,976,000	
042	Incline Village #5	\$ 251,000		
043	Chateau/Country Club	\$1,060,000		
044	Fairway	\$1,273,000		
045	Incline Village Commercial		\$ 817,000	
046	Incline Village Residential		x(036, 037, 045)	
048	Incline Village Tourist			
049	Mill Creek	x(045)	\$2,766,000	
050	Mt. Shadows			x(049)
051	Tyrolian Village			\$ 83,000
053	Incline Lake			
054	Incline Village Industrial	\$ 319,000	x(049)	
055	East Shore			\$ 319,000

Total estimated cost for Washoe County is \$19,285,000

x - Indicates CIP needs within this PA.

() - Indicates the PA that contains the CIP description and
* estimated cost.

Table 15
 Summary List of CIP Priorities and Costs
 For Carson City County

<u>Plan Area</u>	<u>Name</u>	Priority/Cost		
		1	2	3
057	Spooner Lake		\$690,000	

Table 16

Summary List of CIP Priorities and Costs
For Douglas County

Plan Area	Name	Priority/Cost		
		1	2	3
059	Shakespeare Point			
061	Logan Creek		x (057) *	\$ 72,000
062	Cave Rock			\$ 966,000
063	Lincoln	\$1,097,000		
064	Lakeridge	x (062)		
065	Skyland			\$ 531,000
067	Marla Bay/Zephyr Heights			\$ 104,000
069	Elks Point			\$ 193,000
073	Lake Village		\$ 228,000	
074	Round Hill Residential			\$ 607,000
077	Oliver Park			\$ 135,000
078	Middle Kingsbury	\$1,139,000		
079	Chimney Rock			
081	Kingsbury Village		\$2,608,000	
082	Upper Kingsbury		\$1,165,000	
083	Kingsbury Heights		\$2,222,000	
084	Palisades		\$1,835,000	
			\$ 773,000	\$ 966,000

Total estimated cost for Douglas County is \$14,641,000

x - Indicates CIP needs within this PA.

() - Indicates the PA that contains the CIP description and estimated cost.

* - See PA 057 in the Carson City CIP List.

Table 17

Summary List of CIP Priorities and Costs
For Caltrans

Highway Segment	Priority/Cost		
	1	2	3
1. Highway 50 - El Dorado County Echo Summit to the Jct. w/89			\$3,193,000
2. Highway 89 - El Dorado County Luther Pass to the Jct. w/50		\$1,556,000	
3. Highway 50/89 - El Dorado County Jct. of 50/89 to the South Tahoe "Y"		\$1,955,000	
4. Highway 50 - El Dorado County, City of South Lake Tahoe South Tahoe "Y" to South Stateline			\$ 250,000*
5. Highway 89 - El Dorado County South Tahoe "Y" to the El Dorado/ Placer County Line		\$4,099,000	
6. Highway 89 - Placer County El Dorado/Placer County Line to the Lake Tahoe Regional Boundary Northwest of Tahoe City	\$2,810,000		
7. Highway 28 - Placer County Tahoe City to North Stateline		\$3,322,000	
8. Highway 267 - Placer County Brockway Summit to the Jct. w/28			\$1,200,000

Total estimated cost for Caltrans is \$18,385,000

* TRPA has identified CIP needs in these highway segments even though Caltrans has expended more money than originally estimated (see Table 9).

Table 18

Summary List of CIP Priorities and Costs
For NDOT

Highway Segment	Priority/Cost		
	1	2	3
1. Highway 28 - Washoe County North Stateline to the Southwest Jct. w/Tahoe Boulevard		\$5,980,000	
2. Highway 28 - Washoe, Carson City, and Douglas Counties Southeast Jct. w/Tahoe Boulevard to the Jct. w/50		\$6,942,000	
3. Highway 431 - Washoe County Mount Rose Summit to the Jct. w/28	\$250,000*		
4. Highway 50 - Douglas County Spoonier Summit to South Stateline		\$9,897,000	
5. Highway 207 - Douglas County Daggett Pass to Jct. w/50		\$2,172,000	

Total estimated cost for NDOT is \$25,241,000

* TRPA has identified CIP needs in this highway segment even though NDOT has expended more money than originally estimated (see Table 10).