c. Implementation

Although the quality of waters in the Plan area appear to be "holding their own," residents have registered concern about visible degradation of the area's creeks and streams. Where these waterways were visibly clean and riparian life was abundant at the inception of the 1970's, the waters now appear to bear heavier loadings of pollutants and have become greener and more stagnant looking during low flow warm weather periods, and sometimes exhibit some oil sheens and excessive foaming after early rainfalls. Although some of these phenomena may occur in waters remote from human activities, there is little doubt that the encroachment of civilization into the Plan area's watersheds has adversely affected water quality.

Since septic systems largely rely upon dilution for the removal of nutrients which adversely affect water quality, and since other sources of such nutrients are only mitigated by dilution (e.g. unregulated barnyard runoff), rural building sites should be kept fairly large. In the Plan area, since the inception of the Loomis Basin General Plan in the mid 1970's, the minimum parcel size for new developments has been 2.3 acres. Ideally, this parcel size should be maintained unless it can be demonstrated by a comprehensive study of groundwater, surface water, onsite sewage system nutrient fates, and other appropriate pollutant studies that a greater development density can be tolerated. Such study would, at least in part, have to rely upon those databases and mapping system(s) (described elsewhere in this document) to monitor and model the quality of surface waterways and groundwater.

Absent refuting studies, there is little basis for deciding where to stop if reduction of development densities below one unit per 2.3 acres were to occur. One can be fairly assured, however, that the rate at which pollutants are making their way from septic systems into the groundwater and surface waterways will not accelerate if the current lot sizes are maintained.

If lot sizes were to be reduced below current zoning, however, the prudent water quality protection strategy would be to seriously plan for export of wastewaters outside the area to a central sewage treatment plant. Of course, this eventually might seriously compromise the rural character of the Plan area, and the effects upon other goals and objectives of the Plan would have to be seriously weighed.

In order to assure long-term acceptability of septic systems in the area, help insure overall integrity of the Community Plan, and to protect the health of the residents, the following implementation measures must be taken:

(1) Require that all land subdivisions of 100 or more lots utilizing onsite sewage systems be included in a CSA Zone of Benefit which provides for the inspection of septic system maintenance, operation and pumping, and which provides monitoring for impacts of such systems upon ground waters.

**Responsible Agency/Department:** Division of Environmental Health  
**Time Frame:** On-going  
**Funding:** Impact Fees

(2) On-site sewage treatment and disposal shall only be permitted on parcels where all current regulations can be met and where parcels have the area, soils, and other characteristics that permit such disposal facilities without threatening surface or groundwater quality or posing any other health hazards.

**Responsible Agency/Department:** Division of Environmental Health  
**Time Frame:** On-going  
**Funding:** General Fund/Permit Fees
(3) Require that as part of the Environmental Review process, each new development proposing to use on site sewage disposal systems be required to provide appropriate soils testing and study, and be required to provide acceptable preliminary onsite sewage disposal system designs.

**Responsible Agency/Department:** Division of Environmental Health  
**Time Frame:** On-going  
**Funding:** Permit Fees

(4) Where testing cannot establish acceptable on site sewage system designs, require reduced density by elimination of lots which cannot sustain on site sewage disposal systems.

**Responsible Agency/Department:** Division of Environmental Health  
**Time Frame:** On-going  
**Funding:** Permit Fees

(5) Where the conditions in (4) above cannot be satisfied, require public sewers to be extended to serve new development as appropriate, considering other requirements of this Plan.

**Responsible Agency/Department:** Division of Environmental Health  
**Time Frame:** On-going  
**Funding:** Impact Fees

(6) Require will-serve letters for new development.

**Responsible Agency/Department:** Land Development Departments  
**Time Frame:** On-going  
**Funding:** None required

### 4. Water Supply

**a. Policies**

1. Encourage, through allowable densities and distribution of land uses, the maximum feasible usage of treated surface water supplies rather than groundwater supplies as a basis for land development.

2. Encourage continuing cooperation between water supply agencies in order to minimize costs of service and increase reliability of supply and treatment.

3. Encourage elimination of existing individual residential canal water supplies and their replacement with safe water sources.

**b. Discussion**

Public water service in the Plan area is provided by the Placer County Water Agency (PCWA). Water lines and open canals extend throughout the Plan area providing water for irrigation and some domestic use.
In addition, due to the rural nature of the Plan area, domestic water supply is also provided by private individual wells utilizing pumped groundwater. Wherever logical expansions of the PCW A domestic water supply system can be effected, this water supply should be preferentially utilized in order that the demands placed upon the groundwater system are minimized. The groundwater system's safe yield may be reduced by the long-standing drought and by existing, ongoing extraction through wells. Until a safe yield of groundwater within the Plan area can be studied and confirmed, existing groundwater users should be protected from overdrafting resulting from new development.

Where groundwater is to be the source of water supply to serve new developments, the suitability of its quality and quantity is of concern. The groundwater in the Plan area is derived mainly from fractures in the bedrock. This system is difficult to predict, and may be subject to both depletion and pollution. In some areas pollution, as yet undetected, may already have occurred.

Hardrock groundwater recharge rates are often difficult to impossible to establish, but it is suspected that overdrafting of hard rock groundwaters will cause long-term groundwater supply inadequacies. The basis for this suspicion is the Folsom Lake Mutual Water Company, where numerous wells had pumped heavily for a few years from a hardrock well field. After the drought of the mid 1970's this well field suddenly dropped off dramatically in production, despite the resumption of relatively normal rainfall patterns. The subdivision served had to be "retrofitted" with treated surface water, and meanwhile considerable hardship and expense were incurred.

c. Implementation

In order to assure that new development proposing use of groundwater are adequately served and that they do not have adverse effects upon future residents or existing residents already dependent upon groundwater, the following shall be implemented:

(1) Wherever a PCW A treated water main exists nearby, each new land development project shall be required to extend treated PCW A water into said development as a condition of approval.

Responsible Agency/Department: Division of Environmental Health
Time Frame: On-going
Funding: Impact Fees

(2) Enforce the provisions of Placer County Code Section 19.100e requiring the extensions of treated water to new subdivisions.

Responsible Agency/Department: Division of Environmental Health
Time Frame: On-going
Funding: General Fund

(3) Before allowing individual wells to be the domestic water source in new land developments require, as part of the environmental review process, demonstration through test wells, water quality analyses, and where appropriate through groundwater pumping and modeling, that the groundwater be a reliable and adequate source of wholesome and potable water to each user.

Responsible Agency/Department: Division of Environmental Health
Time Frame: On-going
Funding: Permit Fees
Wherever groundwater quality fails to meet any of the primary or secondary public drinking water standards, or where groundwater depletion may occur as a result of proposed uses, treated domestic water shall be required as a condition of approval of new projects.

**Responsible Agency/Department:** Division of Environmental Health  
**Time Frame:** On-going  
**Funding:** Permit Fees

Where study shows that groundwater quality and/or quantity may be adversely affected by "harvesting," extension of PCW A treated water shall be required into the development.

**Responsible Agency/Department:** Division of Environmental Health  
**Time Frame:** On-going  
**Funding:** Impact Fees

As part of the groundwater monitoring and modeling program employed by the Environmental Health Division, the locations where polluted ground waters are discovered shall be reported to the PCWA.

**Responsible Agency/Department:** Division of Environmental Health  
**Time Frame:** On-going  
**Funding:** General Fund

Where study shows that groundwater can likely be used without adversely affecting quality or quantity, require that appropriate monitoring programs be established.

**Responsible Agency/Department:** Division of Environmental Health  
**Time Frame:** On-going  
**Funding:** Impact Fees

Where PCW A treated water is not available, require that surface irrigation water from a canal system be provided to each new development utilizing individual wells wherever possible to minimize impacts of groundwater drafting.

**Responsible Agency/Department:** Division of Environmental Health  
**Time Frame:** On-going  
**Funding:** Impact Fees

Require will-serve letters for new development.

**Responsible Agency/Department:** Land Development Departments  
**Time Frame:** On-going  
**Funding:** None Required
5. **Fire Protection**

a. **Policies**

1. Identify key fire loss problems and design appropriate fire safety education programs to reduce fire incidents and losses.

2. Control fire losses and fire protection costs through continued emphasis upon automatic fire detection, control and suppression systems. For development on mesas, ridgelines, and hilltops, appropriate setbacks from slopes are a preferred mitigation measure for fire hazards.

3. Continue and strengthen automatic fire aid agreements to take maximum advantage of cost savings and improved services available through the joint use of existing public resources.

4. Maintain a pre-fire planning program with selected high risk occupancies reviewed at least annually.

5. Establish a program whereby new development pays the cost of new capital improvements necessary to provide the fire district with new fire stations, equipment and apparatus necessary to achieve the desired level of service for new development in the Plan area.


7. Ensure that all new developments comply with the California Department of Forestry fire safe regulations, County development standards, and other local fire agency standards regarding the adequate provision of water supply and emergency vehicle accessibility.

b. **Discussion**

Four fire districts serve the Plan area: Penryn Fire District, Loomis Fire District, South Placer Fire District, and Newcastle Fire District (see Exhibit C). These fire districts are primarily responsible for responding to structural fires and providing medical aid. The California Department of Forestry and Fire Protection (CDF) also provides fire protection for the entire Plan area and has primary jurisdiction over all wildland fires. The four fire districts and CDF cooperate on fire calls, through mutual aid, continuous aid, and automatic aid agreements, to effectively increase the level of fire protection service one district can provide.

Three fire stations are located in the Plan area and three are located 18 adjacent to the Plan area. Response times to the northern Horseshoe Bar area are typically the longest because of the lack of nearby fire stations.
c. **Implementation**

Buildout of the Horseshoe Bar/Penryn Community Plan will increase demands for structural and wildland fire protection.

The following implementation measures will ensure that an adequate level of service is maintained within the Plan area.

1. **Implement the preceding fire protection policies of the Community Plan.**
   
   **Responsible Agency/Department:** Land Development Departments, Servicing Fire District, CDF  
   **Time Frame:** On-going  
   **Funding:** Permit Fees/Fire Districts/CDF

2. **Require new development plans be submitted to the local fire district for review and approval prior to final map approval and/or issuance of certificates of occupancy, as appropriate.**
   
   **Responsible Agency/Department:** Land Development Departments  
   **Time Frame:** On-going  
   **Funding:** Permit Fees

3. **Require land developers to pay in lieu fees, dedicate land, or purchase equipment as necessary to ensure adequate fire protection facilities are available as the Plan area builds out.**
   
   **Responsible Agency/Department:** Servicing Fire Districts  
   **Time Frame:** On-going  
   **Funding:** Impact Fees

4. **Require new development plans be submitted to the CDF for review and approval prior to final map approval and/or issuance of certificates of occupancy, as appropriate. CDF will review the project plans for compliance with the SRA fire safe regulations.**
   
   **Responsible Agency/Department:** Land Development Departments/CDF  
   **Time Frame:** On-going  
   **Funding:** Permit Fees

5. **Require will serve letters from the appropriate fire district as part of approving new development projects.**
   
   **Responsible Agency/Department:** Land Development Departments  
   **Time Frame:** On-going  
   **Funding:** No Cost
6. **Law Enforcement**

   a. **Policies**

      1) Identify a means by which new development in the area can be charged with the increasing criminal justice services costs which they generate.

      2) Attempt to reduce response time and increase service levels through circulation system improvements.

      3) Seek to maintain Sheriffs Department staff levels at an acceptable level as determined by the Board of Supervisors and County Executive Officer.

      4) Consider public safety issues in all aspects of commercial, industrial and residential project design.

   b. **Discussion**

      The Placer County Sheriff's Department provides law enforcement for the County by operating three stations, in Auburn, Loomis, and Tahoe City. The Plan area is served by two of the three stations, the main office in Auburn and a substation in Loomis.

      The offices serving the Plan area are staffed 24 hours per day. Approximately 35 officers regularly staff the Auburn office and 14 officers regularly staff the Loomis office. The sheriff's department total staff includes approximately 200 sworn officers and 50 support staff. In addition, the California Highway Patrol also provides traffic enforcement and accident investigations as needed within the Plan area.

   c. **Implementation**

      Crime in the Plan area is generally low and law enforcement efforts are usually directed at protection of property rather than response to emergency incidents. Community involvement in the form of programs such as neighborhood watch are effective in assisting limited sheriff's patrols.

      Buildout of the Community Plan will result in an increased demand for additional law enforcement officers based on the projected population increase.

      The following implementation measures will ensure that an adequate level of service is maintained within the Plan area.

      (1) Implement the preceding law enforcement policies designed to reduce response time and maintain Sheriff's Department staff levels at an acceptable level.

**Redevelopment Agency/Department:** County Sheriffs Department/Board of Supervisors/Land Development Departments  
**Time Frame:** On-going  
**Funding:** General Fund
(7) Support efforts to acquire land or obtain easements for drainage and other public uses of floodplains where it is desirable to maintain drainage channels in a natural state.

(8) Require new development to adequately mitigate increases in storm water peak flows and/or volume.

(9) Consider recreational opportunities and aesthetics in the design of storm water ponds and conveyance facilities.

(10) Continue to work closely with the U.S. Army Corps of Engineers, the Resource Conservation District, the Federal Emergency Management Agency, the State Department of Water Resources, and the Placer County Flood Control District, in defining existing and potential flood problem areas.

(11) Continue to implement and enforce the Grading Ordinance and Flood Damage Prevention Ordinance.

(12) Ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District's Storm Water Management Manual and the County Land Development Manual.

d. Discussion

The Horseshoe Bar/Penryn Community Plan (HBPCP) area is served by several creek systems. Antelope Creek, Secret Ravine, and Miners Ravine receive runoff from the north of the Community Plan area and discharge into Dry Creek and, ultimately, the American River near Sacramento. Morman Ravine and a number of smaller creeks drain the eastern part of the Community Plan area directly into the American River in the upper reaches of Folsom Lake. Seasonal rainfall averaged about 27 inches per year, with most precipitation occurring during the months of October through May.

Flooding occurs when heavy rains cause streams to overflow their banks, flooding property and structures located adjacent to the stream. Streams - also backup and overtop at culverts and bridges, blocking roads or making them unsafe. Emergency services can also be restricted by the flooded roads. In addition there are several open canals in the study area which can intercept flow from one part of the study area and spill it into another.

c. Implementation

Each of these creeks with the exception of those that drain directly into Folsom Lake, were studied as part of the Dry Creek Watershed Flood Control Plan, April, 1992, by James M. Montgomery Engineers (JMM). This is the most recent and up-to-date hydrology study of the Community Plan area. The study calculated stream flows under present land use conditions as well as under the Community Plan at buildout.

The JMM report makes several recommendations to control flooding. In addition to on-site local detention within the Community Plan area, regional detention, selected bridge and culvert replacement and floodplain mapping, the report recommends restricting the removal of riparian vegetation from the channels and creeks through floodplain management.

(1) Local, on-site detention. Local, on-site detention facilities can mitigate the increases in peak flow due to development directly downstream of the local basin. In many cases, suitable sites to collect...
Responsible Agency/Department: Department of Public Works in cooperation with Flood Control Water Conservation District
Time Frame: On-going
Funding: Undetermined

General Plan policies and the ordinances regarding floodplain management are implemented in review processes at various levels. Plan review and site inspection are routine processes which effect regulation of individual projects. Similarly, plan review under County Land Development Criteria of the Flood Damage Prevention Ordinance and the Stormwater Management Manual effects floodplain management at the subdivision and Countywide level. At all levels, requirements for approval require identification of flood hazard areas and appropriate setbacks.

8. **Vector Control**

   a. **Policies**

   (1) Wherever artificial means are utilized in wetlands management, ensure that appropriate biota-oriented vector control management strategies are incorporated (e.g. through the use of minnows predatory upon mosquitoes).

   (2) Require appropriate private mosquito control measures to be implemented in all new developments of land.

   (3) Require that the Environmental Review process address the propagation of mosquitoes as a result of project improvements AND the exposure of future project residents to excessive mosquito densities, and assure that appropriate mitigations are implemented at the project approval stage.

   b. **Implementation**

   Vectors are creatures which transmit diseases to humans. The most obvious and annoying of these in the Plan area is the mosquito (actually a number of different species with widely differing habits and habitat requirements).

   Wherever water is artificially impounded or otherwise altered, the risk of increasing potentially dangerous mosquito populations occurs. Since planned growth within the area will result in such changes and will also bring more people close to the mosquito vector, the following measures should be implemented to reduce potential adverse health effects:

   (1) Require land development projects to include provisions for insecticide-free vector control in wetland management plans and programs.

   Responsible Agency/Department: Division of Environmental Health
Time Frame: On-going
Funding: Impact Fees
(2) Require land development projects to include in CC&Rs or other appropriate vehicles, provisions for mosquito control by property owners.

**Responsible Agency/Department:** Division of Environmental Health
**Time Frame:** On-going
**Funding:** Permit Fees

(3) Routinely require evaluation and mitigation of vector control impacts during the Environmental Review process.

**Responsible Agency/Department:** Division of Environmental Health
**Time Frame:** On-going
**Funding:** Permit Fees

9. **Utilities**

Utility service to the area is provided by the following companies:

- Telephone -- Pacific Telephone
- Electricity -- Pacific Gas & Electric
- Natural Gas -- Pacific Gas & Electric
- Cable Television -- Sonic Cable Television
- Trash Disposal -- Auburn Placer Disposal Service

Each of the above utility companies were contacted during the planning process. Providing future service for buildout of the Plan area was not indicated as a problem for any of the companies.

(1) Require will-serve letter for new development.

**Responsible Agency/Department:** Land Development Departments
**Time Frame:** On-going
**Funding:** No Cost

10. **Other County Services**

Local governmental services within the Plan area are provided by Placer County. These additional services include library facilities, health and welfare services, public cemetery districts provide for burial services, judicial services, land development services, and a variety of fiscal, administrative and other services. Auburn as the County seat, is the location of many of these facilities. The County offices are located at the Administration Center, within the City of Auburn, and the Dewitt Center in the north Auburn area. A new County Facilities Master Plan is currently being prepared to address the County's long-term needs for new facilities. This Plan will address the preferred location for various County operations. The proposed plan anticipates that a large portion of the County's operations will remain based in Auburn. Reference is made to this Facilities Master Plan for additional information regarding County Facility needs.

**Responsible Agency/Department:** Board of Supervisors/Servicing Districts
**Time Frame:** On-going
**Funding:** General Fund
11. **Schools**

**a. Policies**

(1) County, developer, and school district personnel should continue to work closely together to monitor population increases in the area and to insure that new school facilities are provided as needed. Adequate school facilities must be shown to be available, in a timely manner, before approval will be granted to new residential development.

(2) New development in the area must, along with the State of California, continue to provide the funding necessary to meet the demand for new school facilities.

(3) Before a residential development, which includes a proposed general plan amendment, rezoning or other legislative review can be approved by the Planning Commission or Board of Supervisors, it shall be demonstrated to the satisfaction of the hearing body that adequate school facilities shall be provided concurrently with the need generated by the proposed development.

(4) New school sites should be sited as close as possible to areas of the highest population densities, and where roads, bicycle and pedestrian paths provide the safest access to the sites.

(5) Designate any needed future school sites on the plan area map based upon general location, Size requirements, and likelihood of development.

(6) Public school facilities should be designed for community recreation cultural and civic use, and should be available for use during non-school hours. When new schools are considered, sites should be adequate to accommodate local public recreational activities, in addition to school uses.

**b. Discussion**

Public education is served in the Horseshoe Bar/Penryn Community Plan area through three elementary school districts, one high school district, and one community college district. In all cases, the school district boundaries expand beyond the Community Plan's boundaries.

The following table indicates the number of schools in each district and within the Plan area.

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th># of Schools in District</th>
<th># of Schools in Plan Area</th>
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<tbody>
<tr>
<td>Auburn Union (K-8)</td>
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</tr>
<tr>
<td>Loomis Union (K-8)</td>
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<tr>
<td>Penryn (K-8)</td>
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<tr>
<td>Placer Union High School (9-12)</td>
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<tr>
<td>Sierra Community College</td>
<td>3</td>
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