Chapter 7. Cultural Resources

Meadow Vista was inhabited by the Nisenan or Southern Maidu at the time of Euro-American contact. The Hill Nisenan, commonly referred to as Maidu, differed from the Valley Nisenan of the Sacramento Valley in dialect, environment, and lifestyle. The Nisenan, together with Maidu and Konkow, are part of a subgroup of the California Penutian linguistic family. Hill Nisenan occupied territory that stretched from the American and Cosumnes Rivers in the south to the Yuba and Bear Rivers in the north. Their villages were located on ridges and large flats along major streams.

The Nisenan Maidu lifestyle was based on hunting and gathering from rich natural resources, including abundant game animals, fish, fowl, fruits, and acorns. The Nisenan Maidu established many villages in the foothills, moving among them in seasonal migrations based on the weather, food gathering, and other necessities.

Grinding stones still exist on the east side of Placer Hills Road in front of the former Meadow Lark Bookstore. Arrowheads have been found throughout the area. The burial grounds were near the Bear River, the west boundary of Meadow Vista. Richard Simpson, a Meadow Vista native from a pioneer family, wrote a book called Ooti that chronicles the process of turning acorns into a food staple. The photographs and text of Simpson's book record Lizzie Enos, a local Nisenan Maidu woman, grinding, leeching, and cooking acorns into the porridge and bread that were dietary staples of the Nisenan Maidu. The blue oak and black oak trees that were such a prominent feature of the landscape of the foothills during that period were revered by the Nisenan Maidu for their majestic appearance and the live-giving nourishment they provided.

The discovery of gold in the area during the middle 19th century resulted in an enormous influx of EuroAmericans and the subsequent near extinction of the Hill Nisenan population, culture, and language.

Previous Cultural Resource Surveys

This section is based on a record search for the Plan area conducted by the North Central Information Center in May 1994 as part of the Meadow Vista Community Plan update. According to the Center's records, seven archeological field surveys have been conducted in portions of the Plan area. Approximately one quarter of the Plan has been previously surveyed at some level. Two of the largest surveys, Lindstrom (1982) and Woodward (1981) are over 10 years old and were not complete or comprehensive field inspections.

Substantially less than one quarter of the Plan area has been surveyed comprehensively according to current standards. The older studies did not always address historic archeological resources or standing structures. In addition, ground visibility conditions can change considerably in 10 years and it is possible that resources hidden by vegetation or buried at the time of the initial survey are visible under current conditions.

Approximately 50 cultural resource sites have been recorded (with completed site records) or reported (noted only in report texts) in or immediately outside the Plan area. Some of these resources are characterized as sites or buildings, while others are isolated artifacts or features. Two of these resources have historic and prehistoric components. Six of the sites have been assigned official state trinomials (CA-Pla-XXXX), but the rest have not yet been formally reviewed and processed.

The prehistoric sites include three former village sites (middens), many with associated surface artifacts and bedrock mortars (grinding rocks) (CA-Pla-540, 541, and 544). Eighteen other sites consist primarily of bedrock mortars, some with scattered artifacts or debris from stone tool manufacturing (subsurface deposits may be present at some of these sites but testing was not done during the survey phase). These include CA-Pla-542 and 543, HN-1, 16898PLCRH, and Lindstrom Site Nos. 1-3 and 5-12. Three isolated prehistoric specimens were also noted by Lindstrom.

Historical Archeological and Architectural Resources

The historic archeological sites or features include four formally recorded historic archeological sites and 19 recorded buildings. The Placer County Cultural Resources Inventory includes historical resources inventory forms for 20 properties in the Plan area. Nineteen of these are buildings, primarily houses, and one is a prehistoric archeological site. The four archeological features include the Bear River and Bowman Feeder Canals (which were recorded on the same record form), one rock wall alignment, and two historic dumps (Lindstrom's Site Nos. 4, 5, and 8).

An unrecorded section of the Boardman Canal also crosses the project. A few miles to the southwest, a section of this canal is recorded (CA-Pla-670-H). Several isolated features were noted by Lindstrom, including a chrome mine, a concrete slab, and a series of 10 possible mining glory holes. A possible historic/ethnographic cemetery, dating to 1857, was reported verbally by archeologist Susan Lindstrom for a location just along the boundary of the Community Plan (these are the burial

grounds referred to earlier near the Bear River that were relocated in the 1930s and called "Sunny View Indian Cemetery"). No further information is available at this time.

Area canals or ditches include the Gold Hill, Bear River, Upper Bowman, Bowman Feeder, and Boardman. Many of these features were first constructed during the Gold Rush or around the turn of the century. In spite of their modernization, they are considered potential historic resources. Original sections still exist, and associated features such as early-day artifacts may be buried alongside the alignments. As noted above, three of these canals have been partially recorded as historic archeological features during the course of archeological field surveys.

No National Register of Historic Properties (NRHP), State Landmarks, or California Points of Interest are located in the Meadow Vista Community Plan area. The nearest such feature is the route of the First Transcontinental Railroad (now the Union Pacific line) located just to the east. This is designated at Landmark 780 with monuments at Auburn and Colfax. Clipper Gap (bordering the Plan area), a station on the railroad and established in 1856, is listed in the California Inventory of Historic Resources. Six of the bridges within or directly adjacent to the Plan area have been evaluated by Caltrans and do not meet the criteria for listing in the NRHP.

Areas of Sensitivity

The use of high, medium, and low sensitivity indicates the relative probability of archeological and historical sites in a given area in comparison to other areas in the same region. The most significant cultural resource could be found in a low-sensitivity area. Based on the information concerning historical resources, and previous investigations, the Plan area appears to reflect the full range of sensitivity values. Zones along the Bear River and adjacent to the several smaller drainages, especially in the valley-like flats, are of the highest sensitivity. Historical sensitivity is high in these same areas and includes other zones, such as the old roadway margins, canal routes, and settlement areas like Meadow Vista and Christian Valley. Ridge tops and moderate slopes are estimated to be of moderate sensitivity, while steeper slopes are likely to be the least sensitive.

Paleontological Resources

Paleontological resources are not included in this section because such resources have not been identified nor are they expected to be found in the Plan area.

IMPACTS

Criteria for Determining Significance

Regulations for dealing with historical properties are outlined in Appendix K of the State CEQA Guidelines and Public Resources Code Section 21083.2. Under CEQA, the impacts on historical and prehistoric resources must be considered. An impact is considered significant if the project will cause damage to an important or unique cultural resource that:

- is associated with an event or person of recognized significance in California or American history or of recognized scientific importance in prehistory (III-A);
- can provide information that is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable or archaeological research questions (III-B);
- has a special or particular quality as oldest, best example, largest, or last surviving example of its kind (III-C);
- is at least 100 years old and possesses substantial stratigraphic integrity (III-D); or
- involves important research questions that historical research has shown can be answered only with archaeological methods (III-E).

Appendix K of the State CEQA Guidelines also states that if avoidance of important archaeological resources is infeasible, the effects of the project on the qualities that make the resource important should be mitigated.

A similar and related set of criteria is that used to determine eligibility for inclusion of a site in the NRHP (36 Code of Federal Regulations 800). The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association and:

1. that are associated with events that have made a significant contribution to the broad patterns of our history;

2. that are associated with the lives of persons significant in our past;

3. that embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

4. that have yielded, or may be likely to yield, information important in prehistory or history.

Relevant Community Plan Goals, Policies, and Implementation Programs

The Community Plan includes various key goals, policies, and implementation programs that call for the protection of cultural resources.

Require Site-Specific Cultural Resources Studies

Require that Historical Sites Be Avoided and Protected from Destruction or Demolition

Impact Analysis

As noted, less than one quarter of the Plan area has been surveyed comprehensively according to current standards, and cultural resources may be evident now that were not visible in previous surveys.

Community Plan goals, policies, and implementation programs require discretionary development projects to identify and protect important cultural resources. Preparation of a site-specific survey and report is required of all projects subject to a PTHP.

Implementation of the Vegetation Management Project could result in the possible disturbance of documented or undocumented cultural resources (archaeological or historical resources). This impact is considered significant because the project could disturb potentially important cultural resources and because the various sites and historical structures contribute to the historical fabric of the area.

California Forest Practice Rules Requirements

All applicable Forest Practice Rules will apply to any PTHP undertaken pursuant to this PTEIR. The following Rules are particularly relevant for cultural resources. As part of the project description, these Rules will reduce many potential impacts to a less than significant level.

1. Regulations for a PTHP contents require a Confidential Archaeological Addendum as defined in 895.1 or a statement by the RPF that the PTHP has been surveyed in accordance with current Forest Practice rules and no additional sites have been found. (1092.9(f))

2. The Confidential Archaeological Addendum (895.1) and its contents (949.1) require that the archaeological survey by a qualified surveyor must discuss resources found and how they will be protected.(949.2, 929.6)

MITIGATION

1. Project areas will be surveyed by a qualified RPF or other qualified professional for potential archaeological and historical resources prior to project implementation.

2. No timber operations may occur on significant archaeological sites.

3. If an archaeological or historical site is discovered during vegetation management operations, work will immediately stop within 100 feet of the site and the CDF Director shall be notified. The significance of the resources shall be determined and necessary protection measures taken. For significant cultural sites that cannot be avoided, site-specific mitigation measures must be approved by the CDF Director.

Level of Significance Following Mitigation

With implementation of proposed mitigation measures, potential impacts to cultural resources will be reduced to a less than significant level.

Chapter 8. Noise

Noise is often defined simply as unwanted sound and thus is a subjective reaction to characteristics of a physical phenomenon. Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold of 20 micropascals as a point of reference, defined as 0 decibels (dB). Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range.

The decibel scale allows a millionfold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness.

Noise in the community has often been cited as being a health problem, not in terms of actual physiological damage such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. When community noise interferes with human activities and contributes to stress, public annoyance with the noise source increases and the acceptability of the environment for people decreases.

To control noise from fixed sources, many communities have adopted noise-control ordinances. Such ordinances abate noise nuisances and control noise from existing sources. They may also be used as performance standards to judge potential nuisances or potential encroachment of sensitive uses on noise producing facilities. Community noise ordinances are generally designed to resolve noise problems on a short-term basis, usually by means of hourly noise-level criteria.

Existing Noise Conditions

The primary existing noise sources are traffic on I-80 and local roads. Fixed noise sources include the Meadow Vista Transfer Station and Chevreaux Quarry, as well as parks and schools that encourage recreational activities. Noise sensitive land uses include residential uses, schools, and churches.

IMPACTS

Criteria for Determining Significance

The State CEQA Guidelines, Appendix G, state that a project will normally have a significant effect on the environment if it will:

- substantially increase the ambient noise levels for adjoining areas.

Professional interpretation of this definition that a project will normally have a significant effect on the environment if it will:

- expose people to severe noise levels
- generate noise that would conflict with local noise standards or ordinances.

An increase in noise of 3 dB or less is typically not noticeable. An increase in noise of 5 dB is distinctly audible and is generally used as the threshold for a significant noise increase. A 10-dB increase is typically perceived as a doubling of loudness. Consideration is given to the perceptibility of changes in noise levels in assessing significance at existing sensitive receptors using a change of 5 dB as the threshold for a significant increase.

Impact Analysis

The proposed project has the potential to generate noise from equipment used in the vegetative management process. This equipment includes chain saws, chippers, and other heavy equipment. Table 8-1 shows typical construction equipment noise levels as could be used in vegetation management.

Actual noise levels experienced at residences would involve several pieces of many kinds of equipment. Since noise from localized sources typically falls off by about 6 dB with each doubling of distance from source to receptor, outdoor receptors within 1,600 feet of construction sites, and which have an uninterrupted view of the construction site would experience noise greater than 60 dBA when noise on the construction site exceeds 90 dBA. Since at this time, the number, type and location of each kind of equipment being used is not known, it is not possible to accurately predict the noise level at the residences. Noise insulation provided by the walls, windows and doors of the buildings would partially abate construction noise. A 20

dBA reduction is typical of most residential structures, provided the windows are closed. Desirable outdoor levels of 60 dBA for residential uses and 45 dBA indoors could be exceeded during the course of vegetation management. This is considered a significant effect.

Table 8-1
Construction Equipment Noise Levels

Equipment Type	Noise Level at 50 Feet
Backhoe	85 dB
Tractor	80 dB
Trucks	91 dB
Chipper	85 dB
Chain Saw	76 dB

Source: "Noise from Construction Equipment and Operations, Building Equipment and Home Appliances," prepared by Bolt, Beranek and Newman for the U.S. EPA, December 31, 1971; Chipper and chain saw measurements by Placer County Resource Conservation District, 1997.

MITIGATION

1. Restrict operation of chainsaws and other power-driven equipment to the hours between 7:00 a.m. and 9:00 p.m.. The operation of all other power equipment, except highway vehicles, within 200 feet of an occupied dwelling shall be restricted to the hours between 7:00 a.m. and 9:00 p.m., and shall be prohibited on Sundays and nationally designated legal holidays.

Level of Significance Following Mitigation

Implementation of the recommended mitigation measure would reduce potential noise impacts to a less than significant level.

Chapter 9. Air Resources

The project area experiences cool, moist winters and hot, dry summers. The prevailing wind direction is from the south, although winds from the northwest are also common. The region experiences temperature inversions that limit atmospheric mixing and trap pollutants, resulting in high pollutant concentrations near the surface. Surface inversions (0-500 feet) are most frequent during winter, while subsidence inversions (1,000 - 2,000 feet) are most common in the summer.

The Placer County Air Pollution Control District (PCAPCD) is responsible for maintaining and improving air quality throughout Placer County. The PCAPCD published its first Air Quality Attainment Plan (AQAP) in 1991. This plan was designed to bring Placer County into compliance with the state ozone standards, which are equal to or more stringent than existing federal ambient standards.

Both the state and federal governments have established ambient air quality standards for several different pollutants. For some pollutants, separate standards have been set for different periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). The pollutants of greatest concern in Placer County are carbon monoxide (CO), ozone, and particulate matter less than 10 microns in size (PM_{10}).

Placer County is divided into the Sacramento Valley, Mountain Counties, and Lake Tahoe Air Basins. Meadow Vista is in the Mountain Counties Air Basin. The Mountain Counties Air Basin is classified as a nonattainment area for the state and federal ozone standards and nonattainment for the state PM_{10} standard. The basin is classified as an attainment area for federal CO standards and is unclassified for state CO standards (unclassified areas have no monitoring stations because it is assumed that standards are not exceeded).

EPA has promulgated new standards for particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). For $PM_{2.5}$, the new standards are an annual average of 15 micrograms per cubic meter (ug/m^3) and a 24-hour average of 65 ug/m^3. Under the regulatory review process, Congress still has an opportunity to review the standards before implementation. Before compliance with these standards could be enforced, each air district would need to establish their attainment status, probably by monitoring. Because this has not been regulated, there is little existing $PM_{2.5}$ data

available. Implementing the measures designed to meet the new standards is expected by EPA to take some time.

IMPACTS

Criteria for Determining Significance

According to the State CEQA Guidelines (Section 15064[e] and Appendix G), a project will normally have a significant impact if it will:

- violate any ambient air quality standard
- expose sensitive receptors to substantial pollutant concentrations
- create objectionable odors

Relevant Community Plan Goals, Policies, and Implementation Programs

The Community Plan includes key goals, policies, and implementation programs that relate to the protection of air quality as it relates to vegetation management:

9.L.4. The County shall discourage open burning of leaves (except leaves still attached to branches).

9.L.5. The County shall encourage reuse or alternative disposal of brush and wood, including use as firewood and chipping followed by the use as mulch, compost or biomass.

9.L.8. The County shall encourage public education programs relative to the use of methods other than outdoor burning for disposal of leaves and vegetative material and use of fuel-efficient wood stoves.

Impact Analysis

Implementation of the Vegetation Management Project would result in air emissions from associated activities. The major sources of air pollution are total and reactive organic gases (TOG and ROG) and oxides of nitrogen (NOx) emissions from heavy equipment exhaust (both precursors to ozone), and wind-blown dust from earth disturbance. In addition, disposal of wood/vegetative waste by open burning

can create substantial emissions of PM_{10} as creating a visual nuisance. These impacts are considered significant because of the potential of PM_{10}, ROG and NOx above the Placer County PCAPCD threshold levels.

Open burning of vegetation and leaves produces emissions of PM_{10}, CO, NOx, ROG, and other compounds. Emissions are highly variable and depend on a number of factors, including fuel dryness and fire type (smoldering or flaming). Dispersion characteristics of emissions depend on weather conditions.

To compare emissions from a catastrophic fire with those from potential fuel burning from the proposed project, Table 9-1 has been prepared by CDF. The table shows that controlled burns under the PTEIR vegetation management project would significantly reduce overall emissions of target pollutants. The PTEIR project will, of course, not happen all at once, but be spread out over several years, further reducing impacts. If the removed fuels were burned at once, however, the total reductions in pollutants compared to a catastrophic fire would be approximately 2,690 tons of TOG; 435 tons of NOx; 4,490 tons of suspended particulates; and 27,985 tons of CO. This significant reduction demonstrates the air quality values of fuel reduction by preventing the catastrophic fire or substantially reducing its range and destructive characteristics.

The Meadow Vista Vegetation Management Project contains an important provision that will significantly reduce air emissions and the nuisance effects of smoke. Burning of slash and harvested debris will be limited when undertaken within the PTEIR process. Burning will be encouraged only if other methods of disposal are unavailable or prove infeasible, or when denial of burning would pose a risk of imminent and substantial economic loss. Limited burning which does take place would be in compliance with burn regulations established by the Placer County PCAPCD.

As vegetation is removed and thinned adjacent to roadways, residents could be exposed to greater levels of traffic related emissions. Vegetation does to some degree filter out pollutants through taking in carbon dioxide and giving off oxygen and water. It is also true that vegetation that remains after thinning will be more efficient in taking up carbon dioxide along the roadway. Effects on air quality are considered minor as only portions of vegetation will be removed. Homeowner's can still elect to leave a vegetative screening adjacent to the house consistent with defensible space standards.

Table 9-1 Meadow Vista Fuels and Emissions Analysis

Scenario 1: Project is Not Implemented; Entire Area Burns in Catastrophic Fire

Fuel Type	Units Burned	TOG	NOx	PM	CO	TOG	NOx	PM	CO
		Pounds/Unit Burned				Total Tons of Emissions			
Vegetation(1)	349,000 tons	25.0	4.0	42.0	260.0	4,362.5	698.0	7,329.0	45,370.0
Homes(2)	3,866 tons	13.9	4.0	10.8	168.0	26.9	7.7	20.9	324.7
Autos(3)	320 autos	7.2	0.7	17.0	21.3	1.2	0.1	2.7	3.4
Total						4,390.6	705.8	7,352.6	45,698.1

(1) Assumes available fuels of 50 dry tons/acre x 6,980 acres.
(2) Assumes 1/3 of houses burn, or 639 homes; average size 1,800 sq. ft., 21.118 tons fuel/house, 85% combustion rate.
(3) Assumes that number of autos burned is 1/2 the number of houses, or 320.

Emission factors based on CARB methodologies, Section 9.3-Wildfires, and Section 7.14-Structural and Automobile fires.

Scenario 2: Project is Fully Implemented All at Once. All Removed Fuels are Piled and Burned

Fuel Type	Units Burned	TOG	NOx	PM	CO	TOG	NOx	PM	CO
		Pounds/Unit Burned				Total Tons of Emissions			
Vegetation(1)	136,250 tons	25.0	4.0	42.0	260.0	1,704.1	272.5	2,861.3	17,712.5

(1) Assumes fuels removed at a rate 40% that of total burn (20 dry tons/ac).

Difference Between Scenarios

Total Reduction in Emissions (tons) (Scenario 1 minus Scenario 2)	2,686.5	433.3	4,491.3	27,985.6

Source: Department of Forestry and Fire Protection, September 2, 1998

California Forest Practice Rules Requirements

All applicable Forest Practice Rules will apply to any PTHP undertaken pursuant to the PTEIR. The following Rules are particularly relevant for air resources. As part of the project description, these Rules will reduce many potential impacts to a less than significant level.

1. During timber operations, road surfaces in the logging area shall be treated for stabilization (rocked, watered, chemically treated, asphalted or oiled) where necessary to prevent excessive loss of road surface materials (943.3(h)

2. Slash to be treated by piling and burning shall be treated not later than April 1 of the year following its creation, or within 30 days following climatic access, or as justified in the plan (937.2)

3. Piles and concentrations shall be sufficiently free of soil and other non-combustible material for effective burning. (937.5 (a))

4. The piles and concentrations shall be burned at a safe time during the first wet fall or winter weather or other safe period following piling and according to laws and regulations. Piles and concentrations that fail to burn sufficiently to remove the fire hazard shall be further treated to eliminate that hazard. All necessary precautions shall be taken to confine such burning to the piled slash (937.5 (a)).

MITIGATION

1. Burn only on designated burn-days stipulated by the Placer County Air Pollution Control District and with all necessary burn permits.

2. Reduce pre-burn fuel loadings by using other treatments.

3. Require material to dry before piling or allow sufficient time after piling for material to dry before burning. Piles that contain little soil and are constructed to allow air movement will result in a burn that consumes significantly more debris and produces less smoke. More efficient burning and greater heat output will lift smoke higher, reducing smoke concentration near the ground.

4. Use mass-ignition techniques that produce a short duration fire thereby increasing combustion efficiency and flow of smoke into the convection column.

5. Prevent stumps from burning and smoldering.

Level of Significance Following Mitigation

With burning restrictions contained within the PTEIR process, and with implementation of the recommended mitigation measures, impacts to air quality will be reduced to a less than significant level.

Chapter 10. Traffic and Circulation

The Plan area is served by a freeway and a network of arterial and collector roadways and local streets (Figure 10-1). Because of the predominance of large-lot, low-density residential development, automobile travel is the most important mode of transportation. I-80 serves Meadow Vista, but would not be affected by the project.

Placer Hills Road is a two-lane north/south oriented roadway that serves the heart of the Plan area. Turn lanes are provided at major intersections along Placer Hills Road, including Sugar Pine Road and Combie Road. The roadway extends from I-80 at the southern extreme of the Plan area, through the downtown area of Meadow Vista, and on north, eventually connecting to the City of Colfax (north of the Plan area). In the Downtown area, Placer Hills Road provides access to numerous adjacent land uses, resulting in reduced speeds and increased turning movement conflicts.

Collector Roadways. Collector roadways serve to "collect" traffic from local roadways and move it to arterial roadways. Speeds are typically lower on collector roadways than on arterial roadways, and an important secondary role for collector roadways is to provide access to adjacent properties. While the PCGP identifies only two collector roadways in the Meadow Vista area (Meadow Vista Road and Sugar Pine Road), Combie Road, Meadow Gate Road, Lake Arthur Road, and Volley Road also exhibit characteristics of collector roadways. All collector roadways in the Plan area are two-lane rural roadways, some with auxiliary turning lanes provided at major intersections.

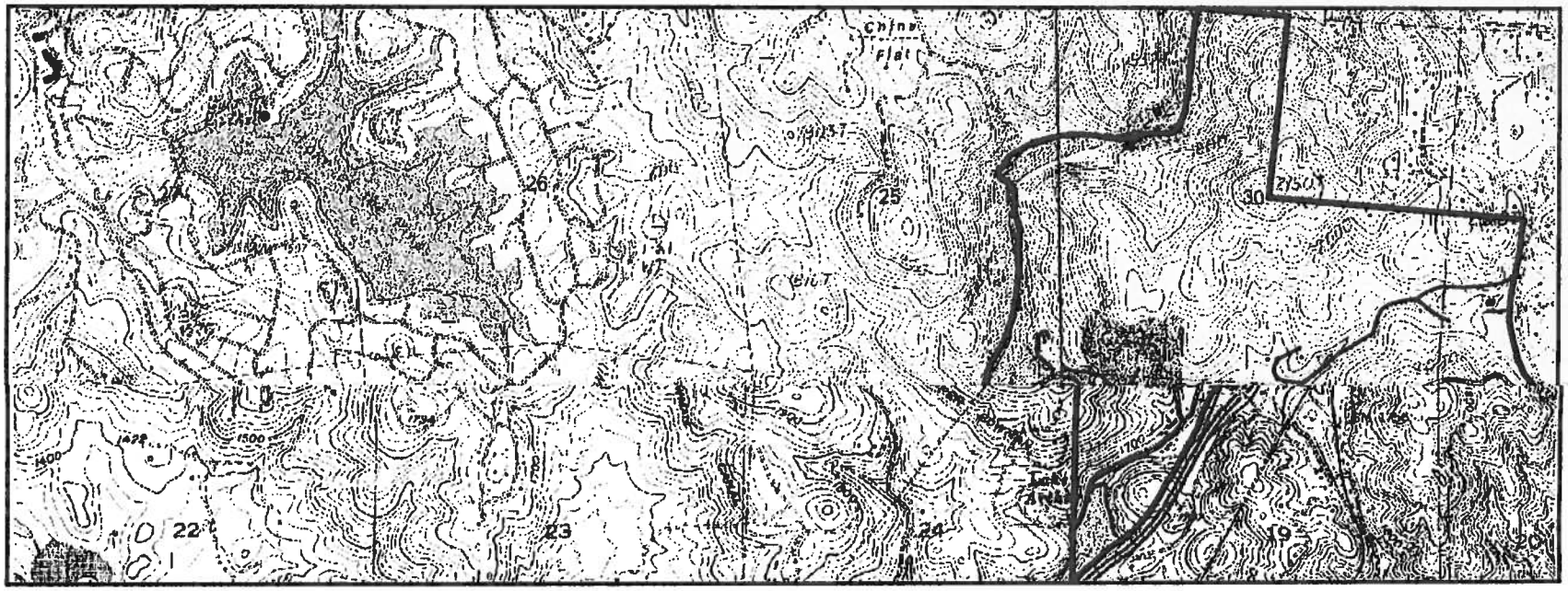
Meadow Vista Road intersects with Placer Hills Road at a "T" intersection just south of the downtown area. Meadow Vista Road extends west from Placer Hills Road, serving primarily residential uses. Immediately west of Placer Hills Road, Meadow Vista Road provides access to Meadow Vista Park.

Sugar Pine Road extends west from Placer Hills Road and serves primarily residential uses. In the future, this roadway will serve as the primary means of access to the Winchester Planned Unit Development, which includes a golf course.

Combie Road extends west from Placer Hills Road serving primarily residential uses, as well as the Chevreaux gravel extraction operation and the Meadow Vista Landfill, now operated as a solid waste transfer site.

Volley Road serves residential land uses west of Combie Road, intersecting Combie Road approximately 0.5 mile west of Placer Hills Road.

Figure 10-1: Road System



Planning Boundary

Roads
- Public Permanent
- Private Permanent
- Private Seasonal

N

0.5 0 0.5 Miles

Scale 1" = 2,500'

Source: Fire and Resource Assessment Program of the California Department of Forestry and Fire Protection

Meadow Gate Road connects Placer Hills Road on the west to Lake Arthur Road on the east. The roadway intersects Placer Hills Road in the downtown area and connects to Lake Arthur Road just south of the Applegate Road interchange on I-80.

Lake Arthur Road is a frontage road paralleling I-80 from the Dry Creek Road interchange to the Applegate Road interchange. In the Plan area, it intersects Placer Hills Road immediately north and west of the Meadow Vista/Clipper Gap interchange with I-80.

In the future, the connection between Bancroft Road and Sugar Pine Road along the old county right-of-way, as well as some roadways internal to the Winchester project, will serve as collector roadways.

All roadways in the Plan area presently operate at an acceptable level of service (LOS). However, certain circulation and traffic operating conditions in the Meadow Vista community warrant special consideration and examination. For example, delays often are experienced on southbound Placer Hills Road due to the grade and the presence of loaded gravel trucks from the quarry operations at the north end of Combie Road. Because of their weight, these trucks cannot maintain highway speeds on the upgrade. This problem also exists to a lesser degree on the uphill grade from I-80 into the community. Typically, gravel trucks traveling in this direction are not loaded and therefore are better able to maintain highway speeds.

Another specific area of concern is Placer Hills Road through the downtown area. In this area, numerous driveways serve adjacent land uses. Delays are caused by turning movements and speed changes when vehicle access these driveways. Placer Hills School also is located in these area, and traffic congestion and delay are experienced when the school is opening and being dismissed.

Future Conditions

The MVCP provides a blueprint for future land development throughout the Plan area. Proposed land use development, as envisioned by the Plan, will occur in a fashion that is consistent with current land use development patterns. Few large land holdings could result in large land development projects, except for the Winchester Planned Unit Development, which was approved recently for the construction of a residential subdivision and golf course that will ultimately contain over 400 new homes. With these exceptions, most anticipated development in the Plan area will be residential infill development in the Clipper Gap area.

IMPACTS

Criteria for Determining Significance

The State CEQA Guidelines, Appendix G, state that a project will normally have a significant effect on the environment if it will:

- increased traffic hazards to motor vehicles, bicyclists, pedestrians, or equestrians.

Impact analysis

The impact to traffic flows on public roads as a result of vegetation management activities includes heavy equipment entering and exiting the road shoulder and adjacent private roads. During shaded fuelbreak activities in particular, road shoulder work may lead to delays and potential safety concerns to traffic. This impact is considered potentially significant as most major roads in the Plan area will have shaded fuelbreaks along their margins with associated work within the public right-of-way. An additional beneficial impact will be increased sight distance at road intersections and improved visibility of roadside wildlife resulting from vegetation thinning.

MITIGATION

1. Measures such as flagmen and directional traffic control shall be provided as determined by the Placer County Public Works Department when heavy equipment ingress and egress is required in the public right-of-way.

2. Encroachment permits shall be retained as needed for work in the Caltrans or County right-of-way.

Level of Significance Following Mitigation

Implementation of the proposed mitigation measures will reduce potential traffic impacts to a less than significant level.

Chapter 11. Fire Protection

Fire services are provided by the Placer Hills Fire Protection District (FPD) and California Department of Forestry and Fire Protection (CDF.) Placer Hills FPD primarily responds to structural fires and provides first-responder medical aid. CDF has primary jurisdiction over all wildland fires. Because there is little or no break in the wildland/structural interface, the two systems are interdependent, particularly during large fire activity, and in summer when fire danger is high.

Placer Hills Fire Protection District

Placer Hills FPD faces several concerns, including establishing adequate vegetation fuel management policies, identifying sources of water supply for fire suppression, recognizing the increased risk of hazardous materials spills, designing shaded fuel breaks and fire breaks, upgrading existing circulation for emergency access, assisting CDF with defensible space around structures, and vegetation management for a healthy fire safe forest. The district encompasses approximately 33 square miles (over 21,000 acres.) In 1997, the district included approximately 9,200 people, 3,200 residential dwellings, and 68 non-residential buildings. Three commercial areas and five schools are within the district.

Natural vegetation types are Ponderosa pine, brush, and oak woodland. The native, living vegetation surrounding the rural residences in the area is flammable because of its dryness, structure, and dense growth. The area has a history of high-intensity fires, especially in riparian areas along river drainages, and the possibility of a conflagration exists each summer. Narrowness, dead-end configuration, lack of road identification, and inadequate sight distances of existing roads are problems for fire service.

Placer Hills FPD operates three fire stations staffed primarily by volunteer firefighters who reside in the various communities served within the district. In the Plan area, Station No. 1 (the district office) is located at Placer Hills Road and Combie Road. The district also has stations at Applegate and Weimar. The weekday, daytime staff includes one fire marshal/captain, one fire apparatus engineer, and two firefighters at two stations. This engine coverage pattern ensures that response is immediate when many volunteer firefighters are working outside the communities that they serve. During evenings, weekends, and holidays, volunteer firefighters and officers respond to emergencies. Placer Hills FPD paid personnel includes six part-paid volunteer fire officers, including the Fire Chief, and one full-time secretary. The district is authorized to collect fees to mitigate the impacts of new development.

California Department of Forestry and Fire Protection

The entire Plan area is served by CDF, which is responsible for the prevention and suppression wildland fires in unincorporated areas of the state. In Placer County, CDF operates stations in Colfax, Lincoln, Auburn, Foresthill, Alta, and Higgins Corner. The Auburn station is the most likely to serve the Plan area, but all the stations could respond to a major wildfire. During summer months, five fire handcrews work throughout Nevada, Placer, and Yuba Counties to provide additional fire protection. CDF has rated most of the plan area as being in a very high fuel hazard severity zone, with small sections of high fuel hazard severity zone between I-80 and the central district and the southwest corner of the plan area.

The state has adopted fire protection regulations to establish minimum wildfire protection standards in conjunction with building, construction, and development in state responsibility areas (SRAs,) which includes all of the Placer Hills FPD service responsibility areas. The regulations do not apply to existing structures, roads, streets and private lanes, or facilities; however, they do apply to the permitting or approval of new parcels after January 1, 1991. The regulations include provisions for emergency access, road width, roadway surface, roadway grades and radius, roadway turnarounds, signage, one-way road designs, gate entrances, and street and road signs names and numbers, in addition to private water supply reserves for emergency fire use and fuel breaks and greenbelts. These requirements reduce the potential for wildland fires, decrease response times, and improve firefighter's chances of extinguishing wildland fires.

In November 1991, the Subdivision Ordinance and Project Development Standards as included in the County's Land Development Manual, were modified to incorporate the State Fire Safe Standards.

Regulatory Setting

Public Resources code 4291 requires at least a 30-foot defensible firebreak to be maintained around structures in the county, which involves removing and clearing away all flammable vegetation or combustible growth. Extra hazardous conditions may warrant additional clearing distances. By County ordinance, new development is required to provide static on site storage of water to be used in the event of fire (e.g., swimming pool or storage tank) if not connected to a water district. Placer Hills FPD has ordinances and regulations for new construction. Ordinance 92-002 (adopted on May 6, 1992,) requires the maintenance of a 30-foot clearance around structures,

with up to 150 feet of clearance required at the discretion of the Fire Chief or Fire Marshal. Ordinance 92-003 addresses disposal of flammable vegetation.

Defensible Space. Because of the potential for high-intensity fires to threaten structures in the Meadow Vista community, the Placer Hills FPD, the Placer County Resource Conservation District, National Resources Conservation Service, and CDF produced a "Defensible Space Handbook" and video tape to educate the residents of Meadow Vista (Placer Hills Fire Protection District, et. al., 1995.) The handbook recognizes that improvements to existing infrastructure are limited because of financial and other constraints. Consequently, the handbook addresses improvements to fuel loading in the Plan Area and states, "The amount of fuels can be reduced, vertical arrangement and horizontal continuity of fuels can be altered, flammable vegetation can be removed or modified, and moisture content can be increased (i.e., replace low-moisture content plants with those of higher moisture."

"Defensible space" is defined as "that area between a house and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and which provides an opportunity for firefighters to safely defend the house." Absence of fire in recent decades has increased fuel loading in the Plan area, contributing to the potential for a high-intensity wildfire to occur. The program focuses on reducing the dead vegetation and mid-level forest vegetation of shrubs and brush and educating and empowering residents to protect their homes.

The fire season is typically mid-May through October, when weather is warm to hot with low humidity. Topography is typical of the Sierra Nevada foothills, characterized by long, narrow valleys with moderate to steep sloping hillsides. Wildfires spread four times more quickly on a 30% slope than on level terrain. South- and southwest-facing slopes are the most hazardous aspects for homes; many homes are situated adjacent to chimneys and along the canyon rim.

IMPACTS

Criteria for Determining Significance

The State CEQA Guidelines, Appendix G, does not provide guidance for determining when a project will normally have a significant impact on fire protection; however, interpretation of the CEQA guidelines indicates that a project will normally have a significant effect on the environment if it will:

- expose people or structures to increased fire hazards

- substantially increase the demand for fire protection personnel or equipment
- result in wildfire regimes outside of the normal range of natural variability

Relevant Community Plan Goals, Policies, and Implementation Programs

The Community Plan includes policies that call for the provision of adequate public facilities and services, including fire protection.

5.H.5. The County shall work with the Placer Hills Fire Protection District to identify key fire loss problems and design appropriate fire safety education programs to reduce fire incidents and losses. [Goal 4.I.4.*]

5.H.6. The County shall work with the Placer Hills Fire Protection District and implement ordinances to control fire losses and fire protection costs through fuel reduction management and the use of automatic fire detection, control, and suppression systems. [Goal 4.I.5., 12/30]

5.H.11. The County shall encourage the modification of vegetation around structures, and developments shall be required to reduce radiant heat along fire escape routes, providing for the safety of residents and fire fighting personnel. Fuel modification will reduce the intensity of a wildfire by reducing the volume and density of flammable vegetation. These areas shall provide (1) increased safety for emergency fire equipment and evacuating civilians; (2) a point of attack or defense from a wildfire; and (3) strategic siting of fuel breaks, fire breaks, and greenbelts.

5.H.12. The County shall require that discretionary permits for new development in fire hazard areas be conditioned to include requirements for a fire safe community, defensible space fire-resistant vegetation, cleared fire breaks and fuel breaks, or a long-term comprehensive fuel management program. Fire hazard reduction measures shall be incorporated into the design of development projects in fire hazard areas of Meadow Vista. [Goal 8.C.2]

5.H.14. The County shall encourage fire protection agencies to continue education programs in schools, service clubs, organized groups, industry, utility companies, government agencies, press, radio, and television in

order to increase public awareness of fire hazards within the county, and to develop high-visibility fire prevention programs, including those offering voluntary home inspections and promoting awareness of home fire prevention measures. [Goal 8.C.6., 8.C.9.*]

5.H.15. The County shall work with the local fire protection agencies, the California Department of Forestry and Fire Protection (CDF,) and the U.S. Forest Service to promote the maintenance of existing fuel breaks and emergency access routes for effective fire suppression. [Goal 8.C.7.]

5.H.17. The County shall continue to work cooperatively with the California Department of Forestry and Fire Protection and local fire protection agencies in managing wildland fire hazards. [Goal 8.C.11.]

Impact Analysis

Fuel loading is a known issue of concern. The MVCP Steering Committee requested the Placer County Planning Department to undertake a woodland/wildlife inventory as a first step in preparing a community forestry master plan to guide long-term management of Meadow Vista's environmental resources. The Steering Committee believes that a Forestry Master Plan is needed because the coexistence of the Ponderosa pine forest, foothill woodland, and brush in the Plan area results in a transition zone of woody species that is unique in the County. Lack of funding has prevented the development of a Forestry Master Plan for the Plan area. The committee is concerned about the extremely high fire danger in the community.

Successful implementation of the Vegetation Management Project would lead to favorable impacts on fire fighting agencies, as well. In the long run, the project would make it safer to fight fires around houses; would slow down the spread of fires between houses; and would lower overall fuel loads found in the forests of Meadow Vista. Overall long-term statistics for houses lost to fires, injuries to residents during fires, and costs of fire suppression are expected to go down. Care must be taken, however, to reduce the threat of wildland fire by adequate clean-up following timber operations, including provisions for controlled burning of slash and debris.

The CDF Fire and Resource Assessment Program (1997) conducted a preliminary benefit-cost analysis for the application of fuel breaks, fire-safe clearance around houses, and prescribe fire in the area of the communities of Applegate and Meadow Vista. While somewhat different in scope and approach than the program proposed by this PTEIR, this study indicated that the examined prefire activities would

produce benefits that were about 14 times the costs of the activities. These study results indicate a very high potential payoff for the kinds of prefire activities proposed in this PTEIR.

The PTEIR process could increase the short-term demand for wildland fire protection services through the use of more prescribed fires. The program can only be effective if the public is informed of its benefits through an education program administered by fire agency personnel, Resource Conservation Districts, and other agencies and organizations. The actual amount of increased demand cannot be determined because the levels of service will vary, depending on the commitment of fire service agencies and public participation.

California Forest Practice Rules Requirements

All applicable Forest Practice Rules will apply to any PTHP undertaken pursuant to the PTEIR. The following Rules are particularly relevant for fire protection. As part of the project description, these Rules will reduce many potential impacts to a less than significant level. Please see *Air Quality* for additional burning restrictions.

1. All woody debris created by timber operations greater than one inch but less than eight inches in diameter within 100 feet of permanently located structures maintained for human habitation shall be removed, chipped, or piled and burned; all slash created between 100-200 feet of permanently located structures maintained for human habitation shall be lopped for fire hazard reduction, removed, chipped or piled and burned; lopping may be required between 200-500 feet where unusual fire risk or hazards exist as determined by the Director or the RPF. (937.2(c))

2. Within 100 feet of the edge of the traveled surface of public roads, and within 50 feet of the edge of the traveled surface of permanent private roads open for public use, slash created and trees knocked down by road construction or timber operations shall be treated by lopping for fire hazard reduction, piling and burning, chipping, burying or removal from the zone. (937.2(b))

MITIGATION

1. Lop all logging slash to less than 20 inches above ground, except in those areas where current rules require other treatment (within 100 feet of residences).

2. Require clean up and disposal of debris on the ground within shaded fuelbreak projects to lower potential fire danger.

3. Require clean up and disposal of all substantial size debris (greater than 1 inch) within defensible space harvests to lower potential fire danger.

4. Require rapid surface drying (spreading of material away from wet areas) for material left on the ground to prevent increase in insect brood material.

5. All clean up and disposal of debris shall be by chipping, removing, or burning. Chipping shall occur no later than 45 days after creation. Piling for burning shall occur no later than 60 days after creation of the debris, with burning no later than April 1 of the year following creation or one year from date of creation, whichever comes first. Removal of debris shall occur no later than 60 days after its creation.

Level of Significance Following Mitigation

Implementation of the proposed mitigation measures will reduce potential fire protection impacts to a less than significant level.

Chapter 12. Environmental Information

12.1 ALTERNATIVES TO THE PROPOSED PROJECT

In accordance with Section 15126 of the CEQA Guidelines, the PTEIR must analyze a range of reasonable alternatives to the proposed project that could feasibly attain the objectives of the project. The CEQA Guidelines provide the following direction for analysis of the alternatives.

- Describe a range of reasonable alternatives to the project, or to the location of the project.
- Evaluate the comparative merits of the alternatives.
- If there is a specific proposed project, as in the case of the Meadow Vista Vegetation Management Project, explain why other alternatives were rejected in favor of the proposal
- Focus on alternatives capable of eliminating significant adverse environmental effects or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

The stated purpose and objective of the Meadow Vista Vegetation Management Project is to reduce wildland fire hazards by implementing shaded fuelbreaks, defensible space, and defensible landscape practices in keeping with objectives of the Meadow Vista Community Plan utilizing the PTEIR/PTHP process.

This section identifies two alternatives to the proposed project including No Project (required by CEQA), and a PTEIR with Reduced Vegetation Management.

No Project Alternative

Under the No Project alternative, the PTEIR/PTHP process would not be used to implement vegetation management projects, including those proposed under the Proposition 204 project. Individual landowners could continue to clear vegetation for defensible space and defensible landscape purposes with little or no assistance or control from local or state agencies. Burning of removed material would be permitted by the air district on designated burn days. Shaded fuel breaks would be implemented by local and state agencies as well as private property owners on a voluntary basis and with funds as they become available. If commercial timber harvesting is proposed as part of the vegetation management process, then the existing THP process as administered by CDF would be pursued on an individual basis.

Impacts

It is likely that vegetation management and fuel load reduction would continue to occur, but at a slower rate than with the PTEIR project. The benefits of the application of Forest Practice Rules and mitigation measures within the PTEIR would be reduced with continued private application of fuel reduction measures.

Land Use and Planning. With the No Project alternative, policies of the Meadow Vista Community Plan advocating a fire safe community would not be as strongly reinforced as with the proposed project. The PTEIR/PTHP program is an implementation tool for general plan policy and provides a formal process supporting Placer County and other agencies in their fire management activities.

Geology and Soils. The Forest Practice Rules and the PTEIR mitigation measures provide a comprehensive approach to reducing soil erosion and sedimentation impacts to an insignificant level. As part of the PTHP, in-field monitoring would also be required by CDF to ensure that mitigation measures are implemented. With the No Project alternative, private fuel management activities would continue to be largely unregulated.

Hydrology and Water Quality. The No Project alternative would lead to largely unregulated fuel management, leading to greater potential for water quality impacts as a result of erosion and sedimentation when compared to the proposed project.

Visual Resources. Private fuel management activities, as well as past public agency brush removal projects, often have not been sensitive visual resource impacts in the Meadow Vista community. The PTEIR/PTHP process requires consideration of visual resources and would result in fewer impacts than the No Project alternative.

Biological Resources. The PTEIR/PTHP process requires a pre-operation field survey to identify specific habitats and species concerns and provides other safeguards to protect biological resources. The No Project alternative has no such mitigation requirements. Where fuel management is undertaken by individual property owners, greater impacts to biological resources could result when compared to the proposed project.

Cultural Resources. The PTEIR/PTHP process requires a pre-operation field survey to identify archaeological resources and provides that all activities must stop if such resources are uncovered during the operation and appropriate mitigation implemented. The No Project alternative has no such mitigation requirements. Where fuel management is undertaken by individual property owners, greater impacts to cultural resources could result when compared to the proposed project.

Noise. Noise impacts from chain saws and heavy equipment will not differ substantially with the No Project alternative, although the PTEIR contains mitigation limiting the hours of operation of such equipment.

Air Quality. The proposed project requires that burning of downed material be used only after all other disposal alternatives have been investigated. In addition, coordination with chipper programs is also encouraged. Under the No Project alternative, and with largely private property owner brush removal, it is likely that burning will continue to be the first disposal option considered, leading to continued air quality impacts from smoke, CO and PM_{10}.

Traffic and Circulation. Impacts to traffic and circulation will not differ significantly with the No Project alternative. Fuel management activities adjacent to roadways will continue to be primarily a public agency responsibility and appropriate traffic control and safety measures will be undertaken.

Fire Protection. Impacts to fire protection agencies will be greater with the No Project alternative compared to the proposed project. This could be especially true if the continued build-up of fuel load contributes to a catastrophic wildfire in the community.

Fuel loads would gradually build up throughout the Meadow Vista Community as vegetation densities increase in the absence of harvesting and/or vegetation management. As a result, risks of damaging wildfires would increase relative to existing conditions which would likely result in higher long term losses of houses to fire, as well as an increased potential for human injury during fires.

Increased Impacts as a Result of the Alternative

Compared to the proposed project, the No Project alternative would increase impacts in several areas.

- increased soil erosion and sedimentation leading to greater potential for water quality impacts
- increased impacts to visual resources
- increased potential for impacts to biological and cultural resources
- increased emissions from burning and associated impacts to air quality
- greater impacts to fire protection agencies resulting from an increased potential for a catastrophic fire

Summary. Because of the fuel management practices and standards specified in the PTEIR, the proposed project would reduce wildfire hazards and well as impacts to environmental resources relative to the No Project alternative.

PTEIR with Reduced Vegetation Management

With the Reduced Vegetation Management alternative, the PTEIR process would permit removal of only 15-40% of ground cover instead of the 40-60% proposed with the existing project. This would be accomplished through restriction on the types of silvicultural practices allowed within any PTHP.

Silvicultural practices from the Forest Practice Rules are defined in the *Introduction and Project Description*, including those to be applied in the various harvesting methods described in the PTEIR. Most of the defined practices are allowed under the PTEIR system. With the Reduced Vegetation Management alternative, only alternative prescriptions would be allowed with provisions similar to the Sanitation/Salvage system. Under Sanitation/Salvage, only those trees that are dead, dying, or that have severe structural problems are removed. The Forest Practice Rules alternative prescription would allow a limited number of green trees to be removed.

Land Use and Planning. With the Reduced Vegetation Management alternative, policies of the Meadow Vista Community Plan advocating a fire safe community

would not be as strongly reinforced as with the proposed project. There would be somewhat fewer conflicts in general plan policy direction, however. For example, while the Meadow Vista Community Plan calls for a system of fuelbreaks, plan policy also advocates wildlife habitat preservation and protection of viewsheds. Although the potential for wildland fires would be greater with the Reduced Vegetation Management alternative, it provides the community with an opportunity to balance environmental objectives.

Geology and Soils. The Reduced Vegetation Management alternative would result in less ground disturbance than the proposed project. The Forest Practice Rules, the PTEIR mitigation measures, and in-field monitoring required by the PTHP process, however, ensure that impacts to soils with the proposed project or with the Reduced Vegetation Management alternative would be insignificant.

Hydrology and Water Quality. The Forest Practice Rules, the PTEIR mitigation measures, and in-field monitoring required by the PTHP process ensure that impacts to water quality as a result of erosion and sedimentation with the proposed project or with the Reduced Vegetation Management alternative would be insignificant.

Visual Resources. Less vegetation would be removed with the Reduced Vegetation Management alternative. The PTEIR/PTHP process requires consideration of visual resources and this aspect would be strongly reinforced with the Reduced Vegetation Management alternative. This emphasis would likely result in fewer visual impacts than with the proposed project.

Biological Resources. Because there would be less vegetation manipulation, there would be relatively fewer potential impacts to wildlife habitat with this alternative. A CWHR run was used to gauge this reduced wildlife impact of lower vegetation removals. As was theorized, species which require more dense vegetation habitats had habitat values increase, while those that prefer more open vegetation had values reduced. The PTEIR/PTHP process requires a pre-operation field survey to identify specific resources and provides other safeguards to protect biological resources.

Cultural Resources. The PTEIR/PTHP process requires a pre-operation field survey to identify archaeological resources and provides that all activities must stop if such resources are uncovered during the operation with appropriate mitigation implemented. This provision would apply to either the proposed project or the Reduced Vegetation Management alternative.

Noise. Noise impacts from chain saws and heavy equipment will not differ substantially with the Reduced Vegetation Management alternative and the PTEIR contains mitigation limiting the hours of operation of such equipment.

Air Quality. The proposed project requires that burning of downed material be used only after all other disposal alternatives have been investigated. In addition, coordination with chipper programs is also encouraged. These same provisions would apply to the Reduced Vegetation Management alternative. Although there is a somewhat greater potential for burning with the proposed project, impacts of either alternative are not expected to be significant.

Traffic and Circulation. Impacts to traffic and circulation will not differ significantly with the Reduced Vegetation Management alternative. Fuel management activities adjacent to roadways will continue to be primarily a public agency responsibility and appropriate traffic control and safety measures will be undertaken.

Fire Protection. Impacts to fire protection agencies will be greater with the Reduced Vegetation Management alternative compared to the proposed project. This could be especially true if the continued build-up of fuel load contributes to a catastrophic wildfire in the community. Although fuel loads would be reduced on the forest floor, areas of vegetation with vertical and horizontal continuity will still exist. As a result, risks of damaging wildfires would increase, likely resulting in higher long term fire losses and injury.

Increased Impacts as a Result of the Alternative

Compared to the proposed project, the Reduced Vegetation Management alternative would increase impacts to fire protection services and could lead to the greater potential for a catastrophic fire in the future.

Summary. With the Reduced Vegetation Management alternative, less vegetation would be removed than with other silvicultural practices. This could result in less land disturbance, fewer impacts to wildlife, reduced visual impacts, and slightly reduced potential for air quality impacts.

Reduced vegetation management practices inherent in this alternative would not meet the objective of the project which is to reduce wildland fire hazards. By only removing 15-40% of ground cover, areas of vegetation with vertical and horizontal continuity will still exist; as a result, long term fire danger would still include a significant risk of destructive crown fires. This alternative would then not meet many policy objectives of the Meadow Vista Community Plan to provide a fire safe community.

It is important to note that as greater limitations are placed on the PTEIR process (i.e. restrictions on vegetation removal, more stringent mitigation requirements), fewer property owners will voluntarily choose this alternative and the potential effectiveness of Forest Practice Rules and mitigation measures in the PTEIR will be reduced.

Environmentally Preferred Alternative

The proposed PTEIR project is the environmentally preferred alternative. No Project would not provide the incentives for vegetation management that the PTEIR project would, nor would environmental protection measures be assured with continued private property owner pursuit of fuel load reduction.

The PTEIR with Reduced Vegetation Management alternative would reduce several potential environmental effects of the project but would not meet the overall objectives of the project to reduce wildfire hazards. This could result in greater potential for a catastrophic wildfire in the Meadow Vista community and resulting significant impacts to water quality, biological, visual, cultural and air quality resources, as well as life and property.

12.2 CUMULATIVE IMPACTS

Cumulative impacts refer to two or more effects that, when combined, are considerable or compound other environmental impacts. A discussion of cumulative impacts is required when such impacts are significant (State CEQA Guidelines Section 15130). Evaluation of cumulative impacts should be based on a list of past, present, and reasonably anticipated projects.

Within the past ten years, there have been a number of projects within the Meadow Vista Community Plan area that had the potential to impact various resources. The area used for cumulative assessment is generally from the Bear River east to the Southern Pacific Railroad tracks east of Interstate 80, and from the Weimar Crossroads exit on the Interstate south to the Dry Creek exit on the freeway. Resources that could have been potentially impacted included the watershed, biological (both plants and animals), soil productivity, visual resources, and air quality.

The cumulative projects include:

<u>Subdivisions</u>:

- Naturewood, in Section 29,30 & 31 of T14N R9E, MDM.

- Winchester, in Sections 11,12,13 & 14, T13N R8E. This is a 409 lot

subdivision with an eighteen hole golf course. Approved plan calls for Nature, Woodland and Wetland Preserves.

Past Timber Harvest Plans:

1988: 2-88-59-PLA(3); 86 acres of alternative prescription located in Sections 5 & 6, T13N R9E, MDM.

1995: 2-95-184-PLA(3); 420 acres of conversion in Sections 11,12,13,14 of T13N R8E, MDM. This was for the Winchester subdivision.

1996: 2-96-014-PLA(3); 16 acres of Alternative prescription in Section 36, T14N R8E, MDM. This was a modified shelterwood, removal step harvest.

1998: 2-98-095-PLA(3): 19 acres of harvesting, including 13 acres of clearcutting in three units, four acres of shelterwood removal step and two acres of sanitation salvage. No new road construction or watercourse crossings involved.

Other Timber Harvests:

There have been various timber harvest plan exemptions and conversion exemptions filed and harvested for dead/dying trees, for removal of vegetation to build houses and other structures, and for firesafe purposes around existing houses, powerlines, and other buildings. These are scattered around the entire community plan area.

Watershed. Vegetation management harvesting has the potential to impact watershed values through direct impacts to watercourses, including removal of shading vegetation, soil erosion into watercourses, and debris falling into watercourses. When added to the effects of overall urbanization, increased housing construction, and the introduction of increased impervious surfaces, these effects are potentially significant.

The PTEIR/PTHP process, however, will reduce the contribution of participating projects to cumulative watershed impacts by providing mitigation measures and the application of Forest Practice Rules to individual properties.

Such measures include the requirement for mapping all watercourses; restricting harvesting and heavy equipment within watercourse zones; prohibiting operations on high or extreme erosion hazard areas; requiring soil stabilization measures on roads and skid trails; and leaving an overstory in all areas to reduce

rainfall impacts. Cumulative impacts will also be reduced by implementation of the Proposition 204 project with specific programs intended to improve water quality in the American River Watershed. With these measures in place, the contribution of the proposed project to cumulative watershed impacts is less than significant.

Soil Erosion/Productivity. The potential for impacts to soil productivity and erosion increases with urbanization and vegetation management activities. To the extent that such activities are regulated by public agencies (subdivision maps, building permits, projects subject to CEQA, CDF regulated projects, etc.) the potential for significant effects is reduced through the application of standards, mitigation measures, and monitoring. It is primarily unregulated activities or those not adequately monitored which contribute most significantly to cumulative soil erosion impacts.

The PTEIR/PTHP process provides soil erosion control measures and limits the contribution to cumulative impacts to a less than significant level. The potential to impact soil productivity and erosion is reduced by Forest Practice Rules and mitigation measures including erosion hazard rating (EHR) mapping down to five acre areas; prohibiting timber operations on high or extreme EHR areas; requiring soil stabilization measures on all skid trails and roads; and prohibiting heavy equipment operations within a watercourse. Cumulative impacts to soils will also be reduced by the Proposition 204 project as its programs are intended to reduce or eliminate non-point sources of pollution, including sedimentation, to area waterways.

Biological Resources. The California Wildlife Habitat Relationships (CWHR) System model run prepared for this PTEIR demonstrates that urbanization in general has a far greater impact on wildlife resources than does vegetative management for fuel reduction (habitat for 47 species lost with urbanization assumptions). As a contributing factor to cumulative biological impacts, however, the PTEIR/PTHP process will result in the selective removal and thinning of vegetation, including a limited number of snags and downed woody debris near roads and around houses as a fire prevention measure.

The CWHR model run indicates that habitat for 72 identified species will be negatively impacted, but for 60 of those species, the decrease in habitat value is less than 5%. This minor decrease in habitat values for some species will be offset by the anticipated increase in habitat value for 102 identified species and by reducing the wildland fire threat for all wildlife and habitat in the area. Watercourse protection measures discussed under "Watershed," above, will also benefit long-term biological resources of the area. With these measures in place, the contribution of the proposed project to cumulative biological impacts will be less than significant.

Visual Resources. Visual resources will change with cumulative urbanization and vegetation management activities. In some cases, particularly with clearcutting for development of homes, parking, and associated areas, visual resources will be negatively impacted and the character of the immediate area will be changed from a rural and forested environment to a largely urban setting. Vegetative management under the PTEIR/PTHP process will add to these cumulative effects, but the overall impacts will be reduced by the types of harvesting practices required. Because the type of treatment would retain a mixture of some of mature tree growth and a portion of existing ground cover on the site, the contribution of the proposed project to cumulative visual impacts is less than significant.

Shaded fuel break and defensible space areas around houses reduce the amount of vegetation on any particular site, but remaining vegetation will be healthier, and less prone to fire. Visual mitigation includes clean-up of logging slash in areas around houses and adjacent to public access roads; and requirements that a minimum amount of vegetation be left immediately after harvest.

Air Quality. Cumulative air quality impacts are considered potentially significant with continued burning of slash and downed material as urbanization and vegetative management activities occur in the Meadow Vista area. Burning is permitted under the THP process, the CDF fire plan, and by individual property owners subject to CDF and PCAPCD permit procedures. Burning, even on designated burn days, can violate air quality standards for carbon monoxide and particulate. Smoke, in particular, is a nuisance and can adversely affect those with breathing problems.

Under the PTEIR/PTHP process, burning is tightly restricted which could benefit overall air quality as an increased number of property owners participate in the program. Other disposal alternatives, such as chipping and/or removal, are strongly favored over burning. Therefore, the contribution of the proposed project to cumulative air quality impacts is considered minor.

Analysis within the PTEIR indicates, however, that even if all downed material from vegetation management activities were burned at one time, the air quality impacts would be significantly less than those anticipated from a single catastrophic fire if the project was not implemented. Therefore, the proposed project offers a significant benefit above the No Project alternative.

12.3 GROWTH-INDUCING IMPACTS

Evaluation of growth-inducing impacts is based on CEQA Guidelines Section 15126 (g), requiring a discussion of the ways in which a proposed project could:

- Foster economic or population growth;
- Encourage, either direct or indirectly, the construction of additional housing;
- Remove obstacles to growth; or
- Encourage or facilitate, individually or cumulatively, other activities that could significantly affect the environment.

The Vegetation Management Project has limited growth inducing impacts. Reduction of fuel loading and creation of healthier forests in the Meadow Vista area will not foster additional population growth, but rather make the community more fire safe for existing residents. Policies of the MVCP and regulations of the Placer Hills Fire Protection District will also make new development more fire-safe.

Heavy fuel loading and high wildland fire potential has not historically proven an obstacle to growth. Residents generally desire dense vegetation and the privacy, scenery, and wildlife that it brings. Information programs and regulations such as defensible space requirements have educated the public concerning the need for vegetation management. In this regard, the proposed project may be viewed by some as creating a less desirable residential environment. Application of Forest Practice Rules and mitigation measures from the PTEIR will reduce such impacts to a less than significant level.

Chapter 13. Mitigation Monitoring Program

State law (Public Resources Code Section 21081.6) requires all public agencies to adopt reporting or monitoring programs when they approve projects subject to environmental documents with mitigation measures. As mandated by this law, a mitigation monitoring program must be implemented by CDF following certification of the Final PTEIR for the Meadow Vista Vegetation Management Project.

A two part monitoring system is proposed. First, the Forest Practice Rules require that a PTEIR checklist be filled out and accompany a PTHP submitted to CDF for their review and approval. The proposed checklist for this PTEIR is contained in Appendix A. Questions contained in the checklist are tied to the mitigation measures included in the PTEIR and ensures that these mitigation measures are incorporated in any resulting PTHP. Lack of consistency with the PTEIR and its relevant mitigation measures will result in denial of the PTHP.

The second portion of monitoring will occur in the field following implementation of mitigation measures. As part of the standard THP administrative process required by law (Public Resources Code Sections 4604, 4585, and 4586), active operations are to be inspected by CDF and a work completion report filed at the end of operations. The Department must then do a follow up inspection for completion of operations to monitor potential adverse impacts to the environment. Should adverse impacts be found, a series of remedies is available to address the problems (Public Resources Code Sections 4601 - 4612).

This two-step monitoring process will ensure that mitigation measures are properly incorporated within any PTHP undertaken pursuant to this PTEIR, and that mitigation measures are properly implemented in the field. The following table lists the PTEIR mitigation measures and their relationship to the checklist questions.

Mitigation Measures (No.)	Checklist Question No. (subsections of Item No.10)
Geology and Soils	
1	Aa
2	Ak
3	Ah
4	Al
5	Al
6	Id
7	Bj, Bi
8	Bk
9	Am

Mitigation Measures (continued)	Checklist Question No. (continued)
Geology and Soils (continued)	
10	Ad
11	An
12	Cc, Be, Ai
13	Bl, Bk
Hydrology and Water Quality	
1	Ba - Bg
2	Bk, Bj
3	Bj, Cc
4	Cb
Visual Resources	
1	Cb, Cf, Bi
2	Cb
3	Cb
Biological Resources	
1	Da
2	Dd
3	Da, Dc, Dd
4	J4
5	Db
6	Bi
7	Cb
Cultural Resources	
1	Ea, Eb
2	Ec, Ed, Ee
3	J2
Noise	
1	Fb, Fc, Fd
Air Quality	
1	Gd
2	Ga
3	Gf, Ge
4	Gf
5	Gg
Traffic and Circulation	
1	Hb
2	Hc
Fire Protection	
1	Id
2	Ib
3	Ic
4	Id

Chapter 14. Sources Consulted

California Department of Forestry & Fire Protection

Personnel contacted at Sacramento Headquarters Office

- Wayne Mitchell, Fire Plan Chief
- Allen Robertson, Environmental Coordinator
- Pete Cafferata, Watershed Specialist
- Dan Foster, Archaeologist
- Marty Berbach, Wildlife Biologist

Personnel contacted at Sacramento Fire and Resource Assessment Program

- Dave Sapsis, Fire Science Consultant
- Russ Henly, Policy Analyst
- Bob Motroni, Wildlife Biologist
- Clay Brandow, Watershed Specialist
- Dean Cromwell, Natural Resource Policy Specialist

Personnel contacted at Nevada-Yuba-Placer Ranger Unit Headquarters in Auburn

- Kelly Keenan, Unit Forester
- Ken Nielson, Unit Forester (Former)
- Sean Griffis, Unit Prefire Engineer

Literature

- "Benefit/Cost Analysis for Prefire Management Projects (Draft)," October 16, 1997, Fire and Resource Assessment Program, California Department of Forestry and Fire Protection.
- "California Fire Plan, A Framework for Minimizing Costs and Losses from Wildland Fires", March 1996, California Department of Forestry & Fire Protection.
- Draft of 8/97: "Nevada-Yuba-Placer Prefire Management Plan 1996", Nevada/Yuba/Placer Ranger Unit, CDF.
- Summary of Notice of Intents for Timber Harvest Plans, 1987-1997.

- CalFed Watershed assessment maps
- September 1998 Draft "Program Environmental Impact Report For Vegetation Management Program", prepared by Jones & Stokes Associates, Inc.
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- Monitoring Study Group of the State Board of Forestry. 1993. Assessing the effectiveness of California's Forest Practice Rules in protecting water quality. Sacramento, CA.

Placer County Planning Department

- Dean Prigmore, Assistant County Planning Director
- Larry Clevenger, Senior GIS Technician

Literature

- Meadow Vista Community Plan, 1996
- Meadow Vista Community Plan, Final and Draft Environmental Impact Report, 1996, Jones & Stokes Associates, Inc.
- Placer County General Plan, August 1994
- Placer County Zoning Ordinance, November 14, 1996
- Placer County Tree Ordinance, October 1991

Placer County Air Pollution Control District, Auburn Office

- Ann Hobbs, Associate Air Quality
- Dace Vintze, Associate Air Quality Planner

Natural Resource Conservation Service, Auburn Office

- Soil Survey of Placer County, California, Western Part, 1980, USDA/SCS.
- Cliff Heitz, District Conservationist
- Conservation Practice Standards for Firebreak, 1998. Fuel-Break, 1998. Tree/Shrub Pruning, 1996. Brush Management, 1996. Forest Stand Improvement, 1996.
- Ronald Schultze, State Biologist out of Davis Office

California Department of Fish & Game

- Wildlife Habitat Relationship System
- Blue Canyon Deer Management Plan, 1982
- Jeff Finn, Biologist for Nevada/Placer Counties
- Jennings, M.R. and M.P. Hayes. 1994. Amphibian and reptile species of special concern in California. Final Report. California Department of Fish and Game, Inland Fisheries Division. Rancho Cordova, CA.
- Remsen,J.V.,Jr. 1978. Bird species of special concern in California. (Nongame Wildlife Investigations Wildlife Management Branch Administrative Report No. 78-1). California Department of Fish and Game. Sacramento, CA.
- Williams,D.F. 1986 mammalian species of special concern in California (Wildlife Management Division Administrative Report 86-1). California Department of Fish and Game, Wildlife Management Division. Sacramento, CA.
- Zeiner,D.C., W.F. Laudenslayer,Jr, K.E. Mayer, and M.White. 1990. California's wildlife. Volume III: Mammals. California Statewide Wildlife Habitat Relationships System. California Department of Fish and Game. Sacramento, CA.

Central Valley District, Water Resources Control Board, Sacramento office.

- Basin Plan, 1990, 1994

Other Literature reviewed:

- University of California, Davis. 1996. Sierra Nevada ecosystem project: final report to Congress. status of the Sierra Nevada. Centers for Water and Wildland Resources, University of California, Davis. Davis, CA.
- Skinner,M.W. and B.M. Pavlik, (eds.). 1994. California Native Plant Society's inventory of rare and endangered vascular plants of California. 5th edition. (Special Publication No.1). California Native Plant Society. Sacramento, CA.
- Timber Harvest Plan files for Meadow Vista Area THPs done by Douglas Ferrier, RPF.
- California Public Resources Codes 4290 & 4291.

- Draft Program Timberland Environmental Impact Report for Hearst Forests, 1997, prepared by Jones & Stokes Associates, Inc.
- Anderson, Hal E. 1982. Aids to determining fuel models for estimating fire behavior. U.S.D.A. Forest Service General technical report INT-122). Intermountain Forestry and Range Experiment Station, Ogden, UT.
- Placer County Resource Conservation District. 1997. The Defensible Space and Healthy Forest Handbook a guide to reducing the wildfire treat. Placer County RCD. Auburn, CA.
- 1988 & 1992 black and white aerial photography of Meadow Vista Community Plan area. WAC Corporation. Eugene, OR.

Other Contacts:

- Meadow Vista Municipal Advisory Council
- Placer Hills Fire Protection District
- Stan MacDonald, Registered Professional Forester

Appendix A
PTEIR Checklist

MEADOW VISTA COMMUNITY PLAN AREA
PTEIR/PTHP CHECKLIST

1. Timber Owner:

Name _____

Address _____

City _____ State _____ Zip Code _____

Phone _____

2. Timberland Owner:

Name _____

Address _____

City _____ State _____ Zip Code _____

Phone _____

3. Licensed Timber Operator:

Name _____ License # _____

Address _____

City _____ State _____ Zip Code _____

Phone _____

3A. On-site Contact Person (If different from Licensed Timber Operator):

Name _____

Address _____

City _____ State _____ Zip Code _____

Phone _____

4. PTHP Submitter:

Name _____

Address _____

City _____ State _____ Zip Code _____

Phone _____

5. RPF Preparing PTHP:

Name _____ License # _____

Address _____

City _____ State _____ Zip Code _____

Phone _____

6. Location of Timber Operations:

Section	Township	Range	Base & Meridian	Acreage	Assessor's Parcel Number

Total Acreage _____

a. Are timber operations entirely within Meadow Vista Community Plan Area?
_____ Yes _____ No

b. Number of PTEIR that this PTHP is associated with: _____

7. Silvicultural System(s):

Shelterwood, Prepatory Step ____ ac. Shelterwood, Seed Step ____ ac.,

Shelterwood, Removal step ____ ac.

Seed Tree, Seed Step ____ ac., Seed Tree, Removal Step ____ ac.

Selection ____ ac., Group Selection ____ ac.

Commercial Thin ____ ac.

Transition ____ ac., Sanitation-Salvage ____ ac.

Special Treatment Areas ____ ac., Rehabilitation ____ ac.

Fuelbreak/Defensible Space ____ ac.

Alternative Prescription ___ ac. (similar to: _____)

Total Acreage = _____ acres

Defensible Space Area	=	_____ acres
Shaded Fuelbreak Area	=	_____ acres
Defensible Landscape Area	=	_____ acres

a. MSP will be met by: ___ Option (c) ___ Not applicable

b. Harvest Trees Marked by RPF: ___ Yes ___ No

Leave Trees Marked by RPF: ___ Yes ___ No

c. Stocking standards to be met and timetable in meeting them:

_____

_____

_____

_____

_____

8. Yarding Systems:

Ground Based: ___ Tractor ___ Rubber Tired Skidder, Forwarder

___ Feller-Buncher, Processor

Cable: ___ Ground Lead ___ High Lead ___ Skyline

Special: ___ Animal ___ Helicopter ___ Other: _____

9. Proposed timber operating area has been personally inspected by the RPF and/or their designee: ___ Yes ___ No

10. Checklist and Mitigation Measures (responses in shaded areas indicate conflict with PTEIR mitigation measures)

A. Geology & Soils:

YES	NO	
___	___	a. Is proposed timber operating area shown on current topographic map as part of this PTHP?
___	___	b. Are there any unstable areas or slide prone areas within timber operating area?
___	___	c. Has Erosion Hazard Rating been calculated for operating area?
___	___	d. Will heavy equipment be operated on any unstable or slide prone areas?
___	___	e. Is any new road construction proposed on slopes over 20%?
___	___	f. Will any new road construction need substantial cuts and/or fills?
___	___	g. Are any exceptions, alternatives or in-lieu practices proposed for this harvest?
___	___	h. Are timber operations proposed for any high or extreme EHR areas?
___	___	i. Will heavy equipment operate on slopes over 45%?
___	___	j. Will new road construction or reconstruction be over 100' in length?
___	___	k. Will maximum waterbar spacing be at intervals greater than those allowed for moderate EHR rated slopes?
___	___	l. Have all areas of Defensible Space harvesting been evaluated for need to retain some organic ground cover for soil stability?
___	___	m. Will heavy equipment operations occur when soils are saturated or near saturation?
___	___	n. Will mechanical clearing treatments on moderate to high EHR soils be on contours?

B. Hydrology and Water Quality

YES	NO	
___	___	a. Are there any watercourses on or immediately adjacent to the proposed timber operating area? If no, answers to the remaining questions in this section are not required.
___	___	b. Are all watercourses found on or immediately adjacent to the proposed timber operating area classified and shown on the PTHP map?
___	___	c. For class I & II watercourses, are WLPZs flagged by RPF or RPF's designee?
___	___	d. Are EEZs proposed for class III Watercourses?
___	___	1. If yes, have they been flagged by an RPF or RPF's designee?
___	___	e. Are EEZs proposed for class IV watercourses?
		f. If any EEZs are proposed, show where on PTHP map, and state width of zone and what protection measures are proposed: _____ _____ _____ _____
___	___	g. Will the widths of any WLPZ be less than those found in table 1 of 14 CCR 936.5?
___	___	h. Will any commercial harvesting occur within any WLPZ or EEZ?
___	___	i. Will harvesting within any WLPZ be other than a sanitation-salvage harvest?
___	___	j. Is any new road construction proposed within any WLPZ?
___	___	k. Are any exceptions, alternatives (other than increases in zone width) or in-lieu practices (other than winter operating plans) to standard Board of Forestry watercourse protection operating rules proposed for this timber harvest?
___	___	l. Will winter harvest operations occur within any WLPZ?
___	___	m. Are timber operations to occur in any wet areas not classified as watercourses?
___	___	n. Are there any downstream landowners within 1000' of proposed timber operations that may take water for domestic water use?
___	___	1. If yes, have they been notified by letter and/or newspaper notice of proposed timber operations and request for domestic water use information? Attach copy of notices and any response letters.
___	___	2. Show on PTHP map where any domestic water use withdrawals occur.

C. Visual Resources:

YES	NO	
___	___	a. Are any green trees, other than public safety hazard trees, to be removed from any watercourse protection zone?
___	___	b. Is clearcutting, or group selection harvesting methods proposed for use in this PTHP?
___	___	c. Will any new road construction be over 100' in length, or contain any substantial cuts and fills?
___	___	d. Will logging slash be left in areas of shaded fuelbreaks or within 100' of any residence?
___	___	e. Will lopping be to a standard greater than 20" above ground?
___	___	f. Will at least 40% of vegetation cover over ground be retained after harvest operations?

D. Biological Resources:

YES	NO	
___	___	a. Was proposed operating area inspected by a qualified professional for presence of listed species?
___	___	1. Are any listed species present within the proposed operating area?
___	___	2. Are any listed species present within the general area of operations?
		3. If answer to #2 is "yes:"
___	___	i. will timber operations potentially impact any nesting or buffer areas of nest sites of any listed species?
___	___	ii. will timber operations potentially impact any migration routes of listed species?
___	___	b. Are Valley Oaks present on site?
___	___	1. If yes, are any proposed for harvest?
___	___	2. If yes, is there any alternative to their harvest, while still achieving landowner's objectives?
___	___	c. Are any wetlands present on site?
___	___	1. If yes, are any timber operations proposed within any wetlands boundary?
___	___	2. Is boundary of wetlands flagged for protection?
___	___	d. Will timber operations occur within the buffer zone of any sensitive species?

E. Cultural Resources:

YES	NO	
___	___	a. Has an archaeological survey by a qualified professional been made on the proposed timber operating area?
___	___	b. Is a confidential archaeological addendum attached to the PTHP submission, if it covers over 3 acres?
___	___	c. Are there any potentially significant archaeological sites found within the proposed timber operating area?
___	___	d. Are timber operations proposed within any potentially significant archaeological sites?
___	___	e. If present, are sites flagged for protection?

F. Noise:

YES	NO	
___	___	a. Is there more than one residence within 1000' of proposed timber operations?
___	___	b. Will commercial timber operations involve the use of power driven saw equipment at times other than 7:00 a.m. to 9:00 p.m., Monday through Saturday?
___	___	c. Will commercial timber operations involve the use of heavy equipment at times other than 7:00 a.m. to 9:00 p.m., Monday through Saturday?
___	___	d. Will any commercial timber operations occur on National Holidays?

G. Air Quality:

YES	NO	
___	___	a. Has feasibility of slash treatments other than by burning been reviewed?
___	___	b. Are other methods feasible?
___	___	c. If vegetation debris treatment is to involve burning, will all necessary permits be obtained from CDF and the local air pollution control district?
___	___	d. Will burning occur on days other than permissible burn days?
___	___	e. Will consideration be given to potential impacts of smoke to neighbors, and efforts made to minimize potential smoke impacts to them?
___	___	f. If burning, will mass-ignition techniques be used?
___	___	g. If burning, will efforts be made to avoid the burning or smoldering of stumps?

H. Transportation:

YES	NO	
___	___	a. Will log hauling occur at times other than dry rainless periods when soils are not saturated?
___	___	b. Do roads needed for log hauling have sufficient sight distance for safe log truck use?
___	___	1. If no, will use of flagger, pilot cars, etc. be needed to safely use roads?
___	___	c. Are encroachment permits needed for operations?

I. Fire Protection:

YES	NO	
___	___	a. Are Defensible Space, Shaded Fuelbreak, and Defensible Landscape areas shown on PTHP map?
___	___	b. Will all logging slash be chipped, removed, burned or buried within all shaded fuelbreak areas?
___	___	c. Will all logging slash be chipped, removed, burned or buried within 100' of all residences, whether on property or adjacent to it?
___	___	d. Will all other areas having logging slash be lopped to 20" or less above ground?
___	___	e. Will an adequate amount and type of vegetation be removed to achieve effective fire hazard reduction goals?
___	___	f. If there is a shaded fuel break in the proposed project, was it designated by CDF or a local fire protection agency?

J. Additional General Mitigation Measures:

1. The LTO shall harvest only those trees designated for cutting by the RPF.
2. Should any potential archaeological site be discovered during operations, operations in the immediate area shall cease, the CDF archaeologist notified, and operations not resumed until any needed mitigation measures are agreed to by plan submitter and CDF.
3. The LTO shall keep all heavy equipment out of flagged watercourse protection zones (WLPZ), equipment exclusion zones (EEZ) and special treatment areas.
4. In order to reduce the spread of noxious weeds, all equipment used in timber operations will be inspected prior to entering the Meadow Vista Community plan area and again when equipment is moved out of the area. Equipment will be washed prior to entering if there is potential to bring in seeds or other material that might spread noxious weeds.

5. Heavy equipment operations will not occur when soils are saturated or near saturation.

Signatures:

Registered Professional Forester: _____ License No._____

Date _____

Timberland Owner: _____ Date _____

Timber Owner: _____ Date _____

Plan Submitter: _____ Date _____

Licensed Timber Operator: _____ License No._____

Date _____

Appendix B
Initial Study

California Resources Agency
Department of Forestry and Fire Protection

INITIAL STUDY

Meadow Vista Fuel Reduction Program PTEIR

Related Project Files and Documents may be reviewed at:

Placer County Resource Conservation District
251 Auburn Ravine Road, Suite 201
Auburn, CA 95603

Telephone (530) 885-3046

April 1998

I. OVERVIEW

This Initial Study has been prepared for the Meadow Vista Fuel Reduction Program. The purpose of this document is to provide an assessment of the environmental impacts associated with the project and has been prepared in accordance with State and Placer County environmental review requirements. The Initial Study discussion is based on the attached Environmental Checklist.

The Meadow Vista Community is located in Placer County about seven miles northeast of the City of Auburn. In 1996, the Placer County Board of Supervisors adopted the Meadow Vista Community Plan that establishes a policy framework for reducing wildland fire hazards through fuel reduction measures. The California Department of Forestry and Fire Protection (CDF) regulates commercial timber harvesting on private lands in California. The proposed fuel reduction program will involve removal of surface fuels, brush removal in the understory, and the harvesting of trees that pose a hazard for fire protection, dead or dying trees, or trees suffering from insect/disease problems. Fuel reduction activities may include limited commercial harvesting of merchantable trees, thus generating revenue for forest fuels management and other purposes. An approved program Timber Harvesting Plan would be required for any commercial timber removal conducted under the proposed fuel reduction program.

Timber harvesting plans (THPs) for proposed timber operations must be prepared, evaluated, and approved as specified in the Forest Practice Act and the California Forest Practice Rules. This process has been certified as exempt from certain CEQA EIR preparation requirements (Public Resources Code Sec. 21080.5, CEQA Guidelines Sec. 15251). The California Board of Forestry has adopted a new type of THP (the program THP or PTHP) to be used in conjunction with a certified Program Timberland EIR (PTEIR).

Although the PTEIR/PTHP provisions of the Forest Practice Rules were devised to simplify timber harvesting environmental review processes for large parcels under single ownership, the Meadow Vista PTEIR is intended to provide most of the environmental review informational requirements in an "umbrella" document covering multiple ownerships in the Meadow Vista plan area. Shaded fuelbreaks, defensible space around houses, and defensible landscape forest treatments with commercial harvesting can be undertaken in conformance with the PTEIR mitigation measures. The PTEIR process will reduce additional paperwork and costs to individual landowners while achieving fire protection goals.

Placer County and CDF will rely primarily on individual private property owners to implement fuel reduction measures. Such measures will include, but not be limited to, brush and grass removal, limb trimming, canopy thinning, and removal of small to mature trees. If the homeowner is selling or bartering trees as a timber "product" to offset the costs of fuel reduction or to otherwise generate revenues, such harvesting falls under the California Forest Practice Rules and within the purview of the PTHP and the PTEIR process. Fuel loads (tons per acre of flammable biomass) and their vertical and horizontal continuity are gradually building up throughout the Meadow Vista Community. As understory and tree densities increase in the absence of vegetation management, risks of damage due to wildfires increase relative to existing conditions.

II. ENVIRONMENTAL CHECKLIST

Project Name: Meadow Vista Fuel Reduction Program PTEIR

Address: Placer County Resource Conservation District
251 Auburn Ravine Road, Suite 201, Auburn, CA 95603
530/885-3046

Location: Meadow Vista Community of Placer County

Environmental Analysis
(Explanation of all categories except "no impact" are required on attached sheets.)

1. Land Use and Planning. *Would the proposal:*	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Conflict with general plan designation or zoning?				X
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdictions over the project?			X	
c) Be incompatible with existing land use in the vicinity?				X
d) Affect agricultural resources or operations?				X
e) Disrupt the physical arrangement of an established community?				X
2. POPULATION AND HOUSING. *Would the proposal:*				
a) Cumulatively exceed official regional or local population projections?				X
b) Induce substantial growth in an area either directly or indirectly?				X
c) Displace existing housing, especially affordable housing?				X
3. GEOLOGIC PROBLEMS. *Would the proposal result in or expose people to potential impacts involving:*				
a) Fault rupture?				X
b) Seismic ground shaking?				X
c) Seismic ground failure, including liquefaction?				X
d) Seiche, tsunami, or volcanic hazard?				X
e) Landslides or mudflows?		X		
f) Erosion, changes in topography or unstable soil conditions?		X		
g) Subsidence of land?				X
h) Expansive soils?				X
i) Unique geologic or physical features?				X

4. Water. *Would the proposal result in:*	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?		X		
b) Exposure of people or property to water related hazards such as flooding?				X
c) Discharge into surface waters or other alteration of surface water quality?		X		
d) Changes in the amount of surface water in any water body?			X	
e) Changes in currents, or the course or direction of water movements?				X
f) Changes in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?				X
g) Altered direction or rate of flow of groundwater?				X
h) Impacts to groundwater quality?				X
i) Substantial reduction in the amount of groundwater otherwise available for public water supplies?				X
5. AIR QUALITY. *Would the proposal:*				
a) Violate any air quality standard or contribute to an existing or projected air quality violation?	X			
b) Expose sensitive receptors to pollutants?		X		
c) Alter air movement, moisture, or temperature, or cause any change in climate?				X
d) Create objectionable odors?		X		
6. TRANSPORTATION/CIRCULATION. *Would the proposal result in:*				
a) Increased vehicle trips or traffic congestion?			X	
b) Hazards to safety from design features?				X
c) Inadequate emergency access or access to nearby uses?				X
d) Insufficient parking capacity onsite or offsite?				X
e) Hazards or barriers for pedestrians or bicyclists?				X
f) Conflicts with policies supporting alternative transportation?				X
g) Rail, waterborne or air traffic impacts?				X

7. BIOLOGICAL RESOURCES. *Would the proposal result in impacts to:*	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Endangered, threatened or rare species or their habitats?		X		
b) Locally designated species (i.e. heritage trees)?		X		
c) Locally designated natural communities (i.e. oak forest, coastal habitat)?			X	
d) Wetland habitat (marsh, riparian, vernal pool)?		X		
e) Wildlife dispersal or migration corridors?		X		
8. ENERGY AND MINERAL RESOURCES. *Would the proposal:*				
a) Conflict with adopted energy conservation plans?				X
b) Use nonrenewable resources in a inefficient manner?				X
c) Result in the loss of availability of a mineral resource that would be of future value to the region?				X
9. HAZARDS. *Would the proposal involve:*				
a) A risk of accidental explosion or release of hazardous substances (oil, pesticides, chemicals, radiation)?				X
b) Possible interference with an emergency response plan?				X
c) The creation of any health hazard or potential health hazard?		X		
d) Exposure of people to existing health hazards?				X
e) Increased fire hazard in areas with flammable brush, grass or trees?		X		
10. NOISE. *Would the proposal result in:*				
a) Increases in existing noise levels?		X		
b) Exposure of people to severe noise levels?				X
11. PUBLIC SERVICES. *Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:*				
a) Fire protection?		X		
b) Police protection?				X
c) Schools?				X
d) Maintenance of public facilities, including roads?		X		
e) Other government services?				X

12. UTILITIES AND SERVICE SYSTEMS. *Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:*	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
a) Power or natural gas?				X
b) Communications systems?				X
c) Local or regional water treatment or distribution facilities?			X	
d) Sewer or septic tanks?				X
e) Storm water drainage?		X		
f) Solid waste disposal?			X	
g) Local or regional water supplies?			X	
13. AESTHETICS. *Would the proposal:*				
a) Affect a scenic vista or scenic vista or scenic highway?		X		
b) Have a demonstrable negative aesthetic effect?			X	
c) Create light or glare?			X	
14. CULTURAL RESOURCES. *Would the proposal:*				
a) Disturb paleontological resources?				X
b) Disturb archaeological resources?		X		
c) Have the potential to cause a physical change which would affect unique ethnic cultural values?				X
d) Restrict existing religious or sacred uses within the potential impact area?				X
15. RECREATION. *Would the proposal:*				
a) Increase the demand for neighborhood or regional parks or other recreational facilities?				X
b) Affect existing recreational opportunities?			X	
MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the environment, substantially reduce the habitat or population of a plant or animal species, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of California history or prehistory?		X		
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?				X
c) Does the project have impacts that are individually limited, but cumulatively considerable?		X		
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

III. EXPLANATION OF THE ENVIRONMENTAL CHECKLIST

1. Land Use and Planning. *Would the proposal:*

a) Conflict with general plan designation or zoning?

No changes are proposed to the general plan land use element or zoning. The planned fuel management programs could be applied in any zone district.

b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?

The Placer County Board of Supervisors adopted the Meadow Vista Community Plan and certified the Final EIR on the plan in 1996. The plan contains numerous objectives and policies encouraging the construction of shaded fuel breaks, sustaining defensible space around structures, and maintaining a healthy forest. The Final EIR mitigation measures provide for the implementation of these objectives and policies as the principle means to reduce wildfire hazards. The degree to which the actions proposed in the Meadow Vista fuel management project conflict with or reinforce adopted land use policies of Placer County should be detailed in the PTEIR. Such analysis could lead to modification of mitigation measures contained in the Meadow Vista Community Plan Final EIR or changes in the mitigation monitoring program.

The Land Use and Planning section should also contain analysis of the consistency of the project with the requirements of the California Forest Practice Rules, the Forest Practice Act, the California Fire Plan, and other relevant requirements.

c) Be incompatible with existing land use in the vicinity?

The fuel management program could be applied in any land use district and is intended to reduce hazards from wildland fire. Implementation of the project is not expected to result in any significant impacts to existing land use.

d) Affect agricultural resources or operations?

According to the Meadow Vista Community Plan, about 624 acres of the Meadow Vista area is designated for agricultural use. For the most part, these areas are intensively managed and fuel load is minimized. Only limited fuel management programs would take place in these agricultural areas and impacts to agriculture are not anticipated.

e) Disrupt the physical arrangement of an established community?

No impacts are anticipated. See responses to items a) and c), above.

2. **Population and Housing.** *Would the proposal:*

a) Cumulatively exceed official regional or local population projections?
b) Induce substantial growth in an area either directly or indirectly?
c) Displace existing housing, especially affordable housing?

The project would not result in population growth in the Meadow Vista Community. The project is consistent with land use designations and zoning as applied by Placer County and is generally consistent with implementation policy of the Meadow Vista Community Plan. No growth would be induced by the project and no housing would be displaced.

3. **Geologic Problems.** *Would the proposal result in or expose people to potential impacts involving:*

a) Fault rupture?

The Meadow Vista Community Plan EIR states that the area is in a Seismic Risk Zone 2 (Section 11). Within this zone, no impacts to structures are expected with construction according to Uniform Building Code standards. Ground shaking from an earthquake could be moderate but would be mitigated by building code requirements. Some soils in the plan area have moderate shrink-swell potential but the requirement for a pre-construction geologic study and identification of any special construction measures will mitigate such potential impacts. Other than erosion hazards (see items e) and f), below) no other seismic/geologic issues are present in the Meadow Vista plan area.

No structures are proposed as part of the project. No workers carrying out fuel management measures will be exposed to seismic/geologic hazards to an extent greater than the general population. As a result, no significant impacts are anticipated.

b) Seismic ground shaking?

See response to item a), above.

c) Seismic ground failure, including liquefaction?

See response to item a), above.

d) Seiche, tsunami, or volcanic hazard?

See response to item a), above.

e) Landslides or mudflows?

Soils are primarily moderately deep and well drained with poor to fair ratings for crop and range land. Less than 1/2 of the soils have slopes greater than 15%. Soils (some with steep slopes and loose texture) exhibit moderate erosion potential and are may erode when exposed on embankment faces and slopes. The Plan area contains soils with moderate shrink-swell potential. Development on such soils could lead to ground failure, causing structural or roadway damage or personal injury.

f) Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill?

The effects of erosion range from nuisance problems to extreme cases where watercourses are downcut and gullies develop that can eventually undermine adjacent structures, vegetation, or roadways. Clearing and vegetation

removal could disrupt normal soil conditions, increasing the potential for wind and water erosion on cleared areas and could increase the potential for sedimentation of local watercourses.

g) Subsidence of land?

See response to item a), above.

h) Expansive soils?

See response to item a), above.

i) Unique geologic or physical features?

See response to item a), above.

4. Water. *Would the proposal result in:*

a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?

Vegetation removal could cause short-term impacts on drainage patterns and water quality because of increased sediment loading and turbidity. Pollutants associated with sediment also can be released into receiving waters. The degree to which these activities affect water quality is determined largely by the timing of vegetation removal, revegetation, and rainfall, but are considered potentially significant.

b) Exposure of people or property to water related hazards such as flooding?

Areas adjacent to the Bear River and Wooley Creek are within the 100-year flood plain. Other water courses not shown as within a flood plain could also pose a flooding hazard during heavy storms. Vegetation removal within the watershed could increase the total volume of runoff, but such runoff will remain within the established floodplains of rivers and streams. There is limited potential for increased flooding adjacent to streams, canals, and reservoirs as a result of vegetation removal programs and increased runoff.

The Meadow Vista Community Plan recognizes the potential for increased flooding and contains policies to require an evaluation of potential flood hazards before development is approved in a floodplain.

c) Discharge into surface waters in any water body?

The Plan area is within two watersheds. One drains north to Lake Combie and the Bear River, either directly or via Wooley Creek or unnamed intermittent streams. The other drains west to Dry Creek. The Plan area is also crossed by the Bowman and Bear River Canals. The NRCS has characterized local soils as exhibiting moderate to high runoff potential and slow infiltration when thoroughly wet. Little water quality data exists, but the surface water quality of stream and canal water is generally high. Vegetation removal could result in increased runoff into surface waters, including streams and canals, resulting in possible decreased water quality. This is a potentially significant impact such supplies are used for irrigation and domestic purposes.

d) Changes in the amount of surface water in any water body?

See response to item b), above.

e) Changes in currents, or the course or direction of water movements?

Although some limited increases in runoff volumes could occur (see response to item b), above) no significant changes in current or direction of water movements would result from the project.

f) Changes in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?

Any project disturbance would be on the ground surface with no extensive cuts or excavations. Some limited amounts of water may be required for dust reduction or brush burning control. The project, however, will have no significant effects on groundwater. Some limited benefits to recharge could result with vegetation removal.

g) Altered direction or rate of flow of groundwater?

See response to item f), above.

h) Impacts to groundwater quality?

See response to item f), above.

i) Substantial reduction in the amount of groundwater otherwise available for public water supplies?

See response to item f), above.

5. **Air Quality.** *Would the proposal:*

a) Violate any air quality standard or contribute to an existing or projected air quality violation?
b) Expose sensitive receptors to pollutants?
d) Create objectionable odors?

A key component of the shaded fuel break, defensible space, and defensible landscape forest programs is the removal of low-lying brush and accumulated fuel load on the forest floor. This is material which, under natural conditions and in remote areas, would be removed by periodic fire. With the proposed project, controlled burns would be used to eliminate this fuel load where feasible. In highly settled areas, the fuel load will be reduced through mechanical means, stacked, and either chipped or burned. This controlled and/or slash burning has the potential to violate air quality standards and could expose local residents to smoke, particulate matter, and carbon monoxide (CO), nitrogen oxides (NOx), and reactive organic gases (ROG) emissions, as well as creating objectionable odors from smoke.

The Placer County Air Pollution Control District and CDF have permit requirements and other restrictions on open burning which should be detailed in the PTEIR.

c) Alter air movement, moisture, or temperature, or cause any change in climate?

Vegetation removal could alter air movement and increase the temperature in unshaded areas. Removal of vegetation to an extent that would cause significant impacts to climate or micro-climates in not anticipated, however.

6. **Transportation/Circulation.** *Would the proposal result in:*

a) Increased vehicle trips or traffic congestion?

A typical brush clearing, tree trimming, or tree removal project performed by a commercial operator on private property will involve only a small crew and one or two vehicles. Impacts to traffic flow and traffic safety are clearly insignificant. For larger projects, however, such as a shaded fuel break along a major roadway encompassing several properties, larger crews and heavier equipment working in or near the right-of-way could cause some traffic delays and safety concerns.

The PTEIR should identify problem roadways (narrow rights-of-way, poor site distance, heavier traffic, multiple driveways and access, etc.) and propose temporary traffic mitigation measures where necessary to reduce traffic and safety concerns during project implementation.

b) Hazards to safety from design features?

Work crews could create minor safety hazards if working next to the roadway. See response to item a), above.

c) Inadequate emergency access or access to nearby uses?

Work crews would not be expected to interfere with emergency response vehicles. See response to item a), above.

d) Insufficient parking capacity onsite or offsite?

The temporary nature of the project will not result in the need for additional parking.

e) Hazards or barriers for pedestrians or bicyclists?

See response to item a), above.

f) Conflicts with policies supporting alternative transportation?

The temporary nature of the project will not require alternative transportation measures or conflict with policies supporting such alternative transportation.

g) Rail, waterborne or air traffic impacts?

The temporary nature of the project will not impact nor otherwise conflict with policies for rail, waterborne, or air traffic impacts.

7. **Biological Resources.** *Would the proposal result in impacts to:*

a) Endangered, threatened, or rare species or their habitats?

Based on review of existing environmental documents and DFG's Natural Diversity Data Base, one special status plant population (Sanborn's onion) has been reported in the Meadow Vista area. This plant is considered rare but not endangered. According to the California Native Plant Society, 22 special status plants have a low to high potential to occur in the Plan area.

The Natural Diversity Data Base lists no special status wildlife species in the Plan area, although up to five special status species could occur (valley elderberry longhorn beetle, northwestern pond turtle, California horned lizard, Cooper's hawk, and yellow warbler).

b) Locally designated species?

Valley oak woodland is dominated by large valley oaks and sometimes contains interspersed interior live oak. This habitat occurs as narrow bands along drainages and as clusters in drainage floodplains. It is considered a sensitive natural community because is locally and regionally uncommon. Individual valley oaks may be 200-300 years old and can not be replaced in the short term.

Riparian communities develop in areas with high water tables or areas that support seasonal or perennial surface water. Mixed riparian forest is the dominant riparian community in the Plan area and is characterized by intermixing layers of tree, shrub, and herbaceous plants. The diverse plants and multilayered vegetation in the riparian and stream communities provide the highest quality habitats for wildlife in the Plan area.

c) Locally designated natural communities (i.e. oak forest, coastal habitat)?

Locally designated communities include the Valley oak woodland and riparian communities. The analysis prepared for locally designated species in item b), above, including mitigation measures, would also address concerns with locally designated natural communities.

d) Wetland habitat (marsh, riparian, vernal pool)?

Wetlands include a variety of communities characterized by hydrophytic vegetation, hydric soils, and wetland hydrology. Most wetlands qualify as "waters of the United States" and are regulated under Section 404 of the Clean Water Act.

e) Wildlife dispersal or migration corridors?

Wildlife species of special interest are species that have high value to the public but are not threatened or endangered. Mule deer, California quail, and wild turkey are species of special interest known to occur in the Plan area.

8. Energy and Mineral Resources. *Would the proposal:*

a) Conflict with adopted energy conservation plans?

The project does not conflict with energy conservation policy of the Meadow Vista Community Plan (Community Design Element) which promotes energy and water conservation measures. Vegetation removal could promote passive solar uses on residential properties. If removed brush is chipped, the chips could be used in bio-mass plants to generate electricity.

b) Use nonrenewable resources in an inefficient manner?

Gasoline-powered equipment will be used in the vegetation management program. Although oil is considered a nonrenewable resource, its use will not be inefficient and will be in keeping with standard brush removal practices.

c) Result in the loss of availability of a mineral resource that would be of future value to the region?

The Chevreaux Quarry is the primary mineral resource area in the Meadow Vista Community. No impacts to the quarry are anticipated.

9. Hazards. *Would the proposal involve:*

a) A risk of accidental explosion or release of hazardous substances (oil, pesticides, chemicals, radiation)?

No unusual hazardous materials will be used by work crews or homeowners carrying out the vegetation management programs. Several types of gasoline-powered equipment will be used, including chain saws, string-trimmers, front-loaders, and chippers. Herbicides may be used to maintain the fuel breaks once constructed. These substances will be used in accordance with normal safety practices and no significant impacts are anticipated.

b) Possible interference with an emergency response plan?

See response to item 6.c), above.

c) The creation of any health hazard or potential health hazard?

Burning of brush could result in smoke which is a health hazard to many, including the elderly and those with respiratory problems. See response to item 5.a), b) and d), above.

d) Exposure of people to existing health hazards?

There are no known existing health hazards within the Meadow Vista community.

e) Increased fire hazard in areas with flammable brush, grass or trees?

Controlled burns and burning of slash have the potential to increase fire hazards unless undertaken with proper safeguards. This is a potentially significant effect and could also adversely impact fire protection agencies.

10. Noise. *Would the proposal result in:*

a) Increases in existing noise levels?

The Meadow Vista area is characterized by low noise levels typical of large-lot residential uses in a rural foothill setting. Vegetation removal can involve use of chain saws and heavy equipment, increasing noise levels in residential areas. While these noise levels could be short-term, they have the potential to surpass standards established by the Placer County General Plan. and are considered potentially significant.

b) Exposure of people to severe noise levels?

Severe noise levels are those which could cause hearing damage or other long-term problems and are usually associated with major facilities such as airports, highways, factories, or sports stadiums. Noise associated with the project will be short-term and would not be expected to result long-term hearing loss of other severe problems.

11. Public Services. *Would the proposal have an effect upon, or result in the need for new or altered government services in any of the following areas?*

a) Fire protection?

Fire services are provided by the Placer Hills Fire Protection District and CDF. The District primarily responds to structural fires while CDF has primary jurisdiction over wildland fires. Because there is little or no break in the wildland/structural interface, the two systems are interdependent, particularly during high fire danger periods. As growth continues in the Meadow Vista Community (an estimated 840 additional dwellings by the year 2010), the

potential for losses to wildland fire will also increase. This will place greater emphasis on education programs and implementation of the shaded fuel break and defensible space programs. An additional concern is maintenance of the regulated areas over time. Without such maintenance, the original clearing and thinning programs will have reduced value. This combination of increased emphasis on education, implementation, and maintenance could increase the need for personnel and limit the ability of fire protection agencies to provide needed services.

b) Police protection?

Police protection is provided by the Placer County Sheriff's Department. Some additional service calls may result from noise or other nuisances caused by work crews, but such impacts are not expected to be significant.

c) Schools?

The project will generate no additional students and will have no impacts on schools.

d) Maintenance of public facilities, including roads?

The project could effect road maintenance by leaving debris in the roadway from equipment used in vegetation removal. Mitigation measures will be required to ensure that roadways are swept or otherwise maintained.

e) Other government services?

There are no known other government services which would be adversely impacted by the project.

12. **Utilities and Service Systems.** *Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:*

a) Power or natural gas?

The project will not alter the need for these services. There could be minor beneficial effects for power distribution systems by removing vegetation around power poles and lines.

b) Communication systems?

The project will not alter the need for communication systems. There could be minor beneficial effects for telephone lines by removing vegetation around distribution poles and lines.

c) Local or regional water treatment or distribution facilities?

The project could have negative effects on water quality in distribution ditches. See response to item 4.c), above.

d) Sewer or septic tanks?

The project will create no additional demand on sewer systems or septic tanks.

e) Storm water drainage?

Vegetation removal could increase runoff. See response to item 4.a), above.

f) Solid waste disposal?

Some increase in solid waste volumes could result from the project as brush and other material is brought to the Meadow Vista transfer station. It is proposed that such brush be burned or chipped, however, and the increased volume at the transfer station is not anticipated to be significant.

g) Local or regional water supplies?

Some limited amounts of water may be required for dust reduction or brush burning control. The project, however, will have no significant effects on local or regional water supplies. Some limited benefits to recharge could result with vegetation removal.

13. Aesthetics. *Would the proposal:*

a) Affect a scenic vista or scenic vista or scenic highway?
b) Have a demonstrable negative aesthetic effect?
c) Create light or glare?

The removal of vegetation can have a significant effect on visual resources. Much of the plan area consists of rural residential development. Low profile homes and out-buildings are typically set back from the roadway and are often partially concealed by surrounding foothill vegetation. Wooden signs, mail boxes and driveways are sometimes the only evidence of residences. Although no roadway is designated as a "scenic corridor," most roads are scenic and contribute to the rural atmosphere. Dense vegetation along many roads screens existing development and contributes to the perception of undeveloped, natural views. Light and glare to neighboring properties as well as travelers on roadways can also be increased by vegetation removal.

14. Cultural Resources. *Would the proposal:*

a) Disturb paleontological resources?

There are no known paleontological resources in the Meadow Vista Community Plan area.

b) Disturb archaeological resources?

Approximately 50 cultural resource sites have been recorded or reported in or immediately outside Meadow Vista. Some of these resources are sites or buildings, while others are isolated artifacts or features. According to the North Central Information Center, seven archaeological field surveys have been conducted in the Plan area. Approximately 1/4 of the Plan area has been previously surveyed at some level, although not all of the surveys were performed to current standards. In addition, due to ground visibility restrictions, resources could be hidden by vegetation or buried and are not visible under current conditions. Impacts from vegetation removal programs to cultural resources are considered potentially significant.

c) Have the potential to cause a physical change which would affect unique ethnic cultural values?

There will be no significant physical changes brought about by the vegetation management program. To the extent that cultural resources of Native Americans could be disturbed by the project, however, ethnic cultural values could be impacted. See response to item b), above.

d) Restrict existing religious or sacred uses within the potential impact area?

Existing churches, cemeteries, and other sacred sites will not be impacted by the project.

15. Recreation. *Would the proposal:*

a) Increase the demand for neighborhood or regional parks or other recreational facilities?

The project will not increase the population of the study area and thus will not result in the need for additional recreational facilities.

b) Affect existing recreational opportunities?

Vegetation management activities could have short-term impacts on recreation availability by temporarily closing facilities, including trails or future park areas. Such impacts are not anticipated to be significant. Vegetation removal may also enhance recreation activities by facilitating trail construction or opening up areas for public access.

IV. ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

___ I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.

___ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described herein have been added to the project. A NEGATIVE DECLARATION IS APPROPRIATE.

X **I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT IS REQUIRED.**

Dated: April 10, 1998

The Department of Forestry and Fire Protection:

William Stewart

William C Stewart, Chief, Fire and Resource Assessment Program

Appendix C
NOP Responses

Placer County Resource Conservation District
251 Auburn Ravine Rd., Suite 201 - Auburn, CA 95603-3719 - Phone (916) 885-3046 / FAX (916) 823-5504

Mr. Russ Henly, Policy Analyst
Resources Agency
Department of Forestry and Fire Protection
1920 20th Street
Sacramento, CA 95814

SUBJECT: Comments on Notice of Preparation of a Draft Program Timberland Environmental Impact Report (PTEIR)

RE: Project Title: Program Timberland Environmental Impact Report for the Meadow Vista Fuel Reduction Program

Dear Mr. Henly:

I submit these comments on behalf of the public in attendance at the May 7, 1998 Meadow Vista Municipal Advisory Committee (MAC), which served as a Public Scoping Meeting for the above referenced PTEIR. The following citizens made comments:

- Citizen - Requested clarification regarding the voluntary nature of fuel load reduction activities. Rich Gresham (PCRCD) clarified for the public that landowner involvement in fuel load reduction activities is entirely voluntary.

- Donna Ford - Requested clarification regarding the removal of underbrush and ladder fuels as well as tree removal if crowded. Rich Gresham clarified that this was the case in fuel load reduction work.

- Gil Jaramillo - Requested clarification regarding the cost of fuel load removal. Rich Gresham clarified that the PTEIR would provide for a faster and less expensive review process in order to encourage landowners to be proactive in regards to creating a fire-safe environment for the community of Meadow Vista by actively being involved in fuel load reduction as a private landowner. In addition it will help to defray the cost of fuel load reduction work by providing a simpler review process for selling or bartering timber removed in fuel load reduction activities.

- Celia Broadwell - Requested clarification as to the goals of the PTEIR. Doug Ferrier (Private Forester) clarified that the PTEIR would provide the private landowner with a simpler review process to help the landowner with their fuel load reduction and defensible space efforts. She also requested clarification regarding the cost to the landowner for fuel load reduction work. He indicated that the PTEIR helps reduce costly red tape and will assist the landowner in accomplishing fuel load reduction and defensible space work in a cost effective manner by allowing the sale of trees needing

removal thereby creating a source of funds for the landowner to defray the cost of fuel load reduction efforts.

- Donna Ford - Indicated that she was not comfortable with encouraging people to remove trees in order to defray fuel load reduction costs. Rich Gresham clarified that the goal was not to remove trees per se, but to create defensible space in order to save lives and property from wildfire.

- Citizen - Requested clarification regarding Meadow Vista's fire hazard rating. Kelly Keenan (CDF) clarified that Meadow Vista was in the top ten in terms of danger from wildfire conflagration.

- Patrice Taylor - Commented that she is submitting seven pages of formal comments regarding the PTEIR, including concerns with the removal of screening (visual and noise) barriers, burning and air quality, erosion and loss of topsoil. Patrice Taylor's comments dated May 12, 1998 have already been submitted in the formal review process. Please refer to the formal comments for details.

- Wes Cotton - Commented that his acreage in Meadow Vista was burdened with an immense fuel load (manzinita fields). He indicated that a Program Timber Harvest Plan was is not a simple or inexpensive plan to record. . He indicated that a qualified Forester marks any trees to be removed. He indicated that with the canopy opened up more sunlight penetrated to the smaller trees.

- Roberta Cotton - Commented that the fears of clear cutting trees is unfounded. She indicated that their acreage was now a healthy and park like setting.

The address to forward further comments was recorded on the blackboard as well as being included on the copies of the Notice of Preparation of a Draft PTEIR available to the public.

Respectfully,

Katie Maloney

Katie Maloney
Placer County Resource Conservation District

cc: Stanley MacDonald, President, Placer County Resource Conservation District
cc: Rich Gresham, Manager Placer County Resource Conservation District

Placer County Water Agency

Business Center: 144 Ferguson Rd. • Mail: P.O. Box 6570 • Auburn, California 95604
(916) 823-4850 800-464-0030 TDD (916) 823-4966

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May 7, 1998
File No. May98.WA

Russ Henly, Policy Analyst
California Department of Forestry and Fire Protection
1920 20th Street
Sacramento, CA 95814

SUBJECT: NOP of a Draft Program Timberland EIR for the Meadow Vista Fuel Reduction Program

Dear Mr. Henly:

I am writing in response to your Notice of Preparation and Initial Study for the Meadow Vista Fuel Reduction Program.

The Agency's open canal facilities traversing the plan area include the Boardman Canal, Bowman Feeder Canal, Upper Bowman Canal, Bowman Canal, Ragsdale Canal and Lake Arthur. The water in PG&E's Bear River/Wise Canal also feeds other Agency canals down stream of the plan area.

The Agency serves water from these canals directly to some of its customers and also utilizes the canal system to transport raw water downstream to its Bowman, Auburn, Foothill and Sunset Water Treatment Plants.

The loss of any canal due to a landslide or mudflow could be disastrous and any degradation of water quality could have a significant impact to the Agency and its customers.

The Agency agrees with your conclusion that an Environmental Impact Report is required and we are looking forward to reviewing your Draft EIR and the proposed mitigation measures to ensure the stability of the canal systems and the quality of the existing surface water supplies.

Should you wish to meet, review our map files or have any questions please call me at (530) 823-4886.

Sincerely,

Dave Campbell
Engineering Technician

DPC:bb
c:\may98.wa

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 3, SACRAMENTO AREA OFFICE - MS 41
BOX 942874
SACRAMENTO, CA 94274-0001
TDD Telephone (916) 741-4509
FAX (916) 323-7669
Telephone (916) 324-6642

May 7, 1998

JPLA055
03-PLA-80 P.M. Various
Draft Program Timberland
Notice of Preparation

Mr. Russ Henly, Policy Analyst
Resources Agency
Department of Forestry and Fire Protection
1920 20th Street
Sacramento, CA 95814

Dear Mr. Henly:

Thank you for the opportunity to review and comment on the Notice of Preparation for the Draft Program Timberland Environmental Impact Report. Please provide our office with the "Transportation Element" of the Draft Timberland EIR for our response. To contact our office, please call Ken Champion of my staff at (916) 324-6642.

Sincerely,

JEFFREY PULVERMAN, Chief
Office of Transportation
Planning - Metropolitan

PLACER COUNTY PLANNING DEPARTMENT

11414 B Avenue / Auburn, California 95603 / Telephone (530) 889-7470 / FAX (530) 889-7499
www.placer.ca.gov

Post-it® Fax Note 7671	Date 5/14	# of pages ▶ 1
To RUSS HENLY	From BILL COMBS	
Co./Dept.	Co.	
Phone #	Phone #	
Fax # 227-2672	Fax #	

May 14, 1998

Russ Henly
Policy Analyst
California Department of Forestry
and Fire Protection
1920 20th St.
Sacramento, Ca. 95814
by mail, and copy by fax

Subject: Notice of Preparation of Draft EIR--Meadow Vista Fuel Reduction Program

Dear Mr. Henly:

Thank you for the opportunity to review the preliminary documents prepared for this program, and for the invitation to comment. Our Department would like to continue to be on the mailing list for the EIR, and any related materials.

We believe that your agency has identified a number of issues to be addressed in the EIR, and we would concur that the list should include, but not necessarily be limited to: effects on wildlife habitat, visual impacts, exposure of soils to erosion (and associated water quality), wildfire risk from prescribed burning, air pollution impacts of prescribed burning, disposal methods of fuels not removed by means of burning, and enforcement and monitoring of vegetation removal practices.

Sincerely,

Bill Combs

Bill Combs,
Senior Planner

cc: Fred Yeager, Planning Director
Dean Prigmore, Assistant Director
Charlene Daniels, Senior Planner

BC\bc
ref. F:\PTEIRMV

3223 Sugar Ridge Road
Meadow Vista, CA 95722

May 12, 1998

Russ Henly, Policy Analyst
The Resources Agency
Department of Forestry and Fire Protection
1920 20th Street
Sacramento, CA 95814

SUBJECT: Comments on Notice of Preparation of a Draft Program Timberland Environmental Impact Report

RE: PROJECT TITLE: Program Timberland Environmental Impact Report for the Meadow Vista Fuel Reduction Program

Dear Mr. Henly:

As Rich Gresham indicated at the Meadow Vista MAC meeting on May 7, 1998, the time frame for receiving comments on the above noted NOP has been extended to May 15, 1998.

Within the limited time allocated by the MAC chairperson, much information was presented about the proposed Program Timberland EIR. emphasizing that "the PTEIR process will reduce additional paperwork and costs to individual landowners while achieving fire protection goals." For those landowners wishing to sell or barter trees as a "timber product", the PTEIR provisions will provide the basis of the checklist of mitigation measures for the "streamlined" timber harvest plans. With this very abbreviated overview, I would like to comment on the NOP.

Re: PART III, 1.b) What is the mitigation monitoring program? Is it referred to in the PTEIR? What is the process by which "modification of mitigation measures contained in the Meadow Vista Community Plan Final EIR" would be accomplished? Is a public hearing a part of the process? Who oversees any compliance with the stated mitigations and the PTEIR? My concern comes from a personal experience with a neighbor at the time of implementing his fuel reduction Conservation Plan who had fuels removed on neighboring properties without the owners' permissions, as well as doing it in a manner that was contrary to the advise we had all received from CDF.

Re: 3.e) and f) Living near the ridge top of Sugar Pine Mountain, the southern border of the current program area and scheduled for "shaded fuelbreak" treatment, this item on the checklist warrants attention. This proposal could impact roadways as well as structures, as well as vegetation. Our experience within a twenty acre "neighborhood" that has undergone fuel reduction by various plans and means—men + chainsaws, mechanical masticator and front-loaders uprooting brush—has given us a first hand look at the processes, and the results. Disturbed soils have led to lost topsoil and clouding the increased water run-off after non-tree vegetation removal both along road cut banks and on broad slopes. Soils saturated with water and "shut tight" with shrink-swell potential maxed out have allowed French drains to backup and flood ground-level rooms as well as affected well-water quality due to hydrostatic pressures. With only the thin layer of topsoil over granite just down slope from the ridge top's deeper soils,

subterranean water courses find their way down hill in the most curious of routes along and under rocks to fountain and bubble out midway in cut banks. Collapsed and eroded soil on embankments and slopes is not just from the attack of "surface" elements like wind and rain, but from uprooted vegetation. Changes in drainage due to new driveways and culvert placements aside (we lost a large, older pondersoa pine when a neighbor focused a driveway drainage to a single culvert), the mountain side has lost smaller trees, toyon and manzanita bushes due to changes in amounts of surface and subterranean water, redirected watercourses, and to more rapid drainage amounts that undermine root holds as well as the destruction of the root networks between bushes when neighboring bushes were removed. "Landslides and mudflows" types of concern increase with every rainstorm as rapid and often high run-offs increase the mountain's intermittent streams, and can easily close culvert crossings, and potentially undermine these and the banks along routes used for "health and safety" passage as well as every day events. Water quality is also of concern. What are the possible mitigations?

Re: 3.i) Sugar Pine Mountain is granodiorite pluton unique to this region of the Sierra Foothills. From the lichen and moss specific to its granitic composition to those outcroppings providing panoramic views, the ridge is based on a unique treasure. "Please do not disturb" is the sign that equipment and operators need to heed, and not scar these beauties that are already fire-safe barriers. (See comments re: Cultural Resources re: possible bedrock mortars on Wooley Creek.)

Re: 4. Water. As noted in the NOP, there are considerable concerns about this element.

See Comments Re: 3.e) and f)
Re: 4.a) An appropriate place for "public awareness" and education is the Shaded Fuelbreak being created along Placer Hills Road near the I-80 interchange. Areas where fuel was removed in June, 1997 (scary in that the debris piles stayed along the roadway most of the summer) had grasses return and have not shown very much erosion and minimal sediment in the run off during this endless El Nino rainy winter. Areas nearer the freeway that were cleared this winter and the brush has been burned this month and last exhibit many more "debris-slides" into the new paved gutters exposing wet channels down the face of these old cut banks.

Re: 4.c) The sediment levels in many streams and creeks leaving the Winchester subdivision currently under construction have risen to the point of "red-orange" alerts. Granted, the timing of these major openings in the soils and the lack of implementing methods to minimize soil erosion have contributed to the degradation of water quality. How will the PTEIR and the checklist THP prevent such lapses--supervise and minimize extensive cuts or excavations? What measures will be put in place to monitor and correct the run-off of pesticides, herbicides and fertilizers that will be used in any maintenance and revegetation measures?

Re: 4.f) and h) Will the change in quantity of ground waters adversely affect local septic systems? Those already in place in low-lying areas are a concern of the Environmental Health Department. When soils are supersaturated from increases in runoff, septic system failures could affect the quality of ground water, and well water. Also, too much ground water recharge can threaten the health of native black oaks, for example.

Re: 4.i) As Maureen Gilmer in California Wildfire Landscaping emphasizes, water to the plants is critical for any fire resistance. Increases in irrigation will affect demand on public water supplies as well as private wells. With the increase in sun exposure as the tree canopies are opened and the loss of cooling transpiration from the removal of all levels of vegetation, soils themselves are now exposed to higher temperatures and will dry out, pulling out ground water. Encouraging the use of mulches, naturally available and applied, and amending soils with

moisture-holding compost should definitely be a "mitigation". Any plans to create a bio-mass collection and/or composting operation at the transfer station for the non-lumber debris that is removed from the plan site? Making the decomposed materials available to local residents would save on transport costs, reduce use of fossil fuels and landfills. And help Air Quality--see below.

Re: 5. a, b, d) Disturbed soil problems discussed above apply to areas that have experienced burns--controlled or otherwise. In addition, most invasive natives like poison oak and non-native plant populations like annual European grasses and star thistle prefer such conditions of reduced competition, so you open up the landscape to competition from less desirable sorts. What agency can help anticipate and head them off? The poison oak has flourished especially in our fuel reduction/vegetation clearings. I would hate to be exposed to the oils in the smoke when any type fire occurs. Or cut a fire line or horse trail through star thistle! Do the firefighters have any suggestions?

Presettlement emissions in Meadow Vista were probably minimal from smoke from campfires, fires started by lightening, or even set by resident Nisenan after they had protected the trunks of ponderosa pines with wet sand at the bases or cleared the tall grasses under the acorn-bearing oaks. Such is not the case today with the network of roads for this bedroom community. The more odiferous automobile emissions are detectable at the MV park when the wind is right or when you are walking along one of the trails along our roads. Residents are still burning on "no burn" days. Removing fuels will prevent the major and widespread occurrence of air pollution that usually accompanies a wildfire. But what will filter and help to purify our local atmosphere daily as it is subjected to our pollutants and those of the Sacramento valley? TIME, May 4, 1998: "60,000 sq. mi. Expanse of forest destroyed around the globe each year." "Think globally, act locally." And trees are not the only plants that filter the air, produce the oxygen we depend on or fix the minerals and soils.

Re: 5.c) Removal of vegetation has affected our micro-climate and that of the neighbors. The "cool evening breezes" of summer are not as cool. As the air tumbles down slope to the river from the ridge, it crosses the superheated rock mass now less shaded since the tree-sized manzanita and toyon were removed uphill. The thermal mass heats and cools now in a "shallower" cycle, but our energy usage to cool the house in the summer is increasing markedly. More and more, we have had to use the central air conditioning and not the "open windows" method. More smoke from burning debris would have the same affect on A/C usage, I would guess. Reduced transpiration and moisture loss from fuel reduction measures should be offset with increased irrigation with increased landscape management practices. We have not had success fending off the rabbits, deer, and noisy skunks, so we have not had much luck introducing higher moisture landscaping. So, we just manage the native communities that are adapted to no or low water. Not as fire smart, but watering would kill them and create a greater hazard.

Re: 7.a) – c) "Wildland/rural intermix" is the description that the Meadow Vista area has received in the Fuel Reduction Program's The Defensible Space and Healthy Forest Handbook. This handbook also lists and maps MV's multiple vegetation classifications, based upon the California Department of Fish and Game's Wildlife Habitat Relationships System (WHRS). See Handbook pages 103-104. Multiple agencies worked to on this survey. The PTEIR cites valley oak woodlands and riparian communities as those most impacted by the program. Please explain what are the specific mitigations that will protect oaks of all species? And what is being done to reestablish oaks? The initial removal of browse for the resident deer has them eating wildflowers, the new leaves on the resprouting toyon, and young oak trees. If only they would

gorge themselves on the prolific poison oak. Will any effort be made to collect seeds from the trees to be removed from the shaded fuelbreaks to provide for species diversity when these nursery and mother trees die and few of their youngest offspring will have survived in the fuel removal process that is altering their habitat? In the February, 1990 snow storm, over 30" of cold, wet, heavy snow fell in less than a day at our 2,000' elevation. Almost an entire generation of middle-aged pondersoa pine trees in the 20 acre area surrounding our house were wiped out when they snapped off half way up. As other area pines have succumbed to bark beetle infestations and mechanical damage, we appreciate the need for "resistant" strains to be protected and perpetuated.

Re: 7.d) So the PTEIR will defer to Section 404 of the Clean Water Act? See comment re 9.e).

Re: 7.e) Along Placer Hills Road, we should start our own version of the Calaveras County Jumping Frog Jubilee--only with squirrels. To leap from treetop to treetop in a Shaded Fuel Break will be no mean feat. I am afraid there will be even more "sail" (read squashed) squirrels along Meadow Vista Road if the border of trees that exists is further thinned and opened (25' of roadway + shoulders + cleared canopy). Worse will be the typical wild gyrations and multiple changes in directions a squirrel can go through just to cross the road. Cars usually win—if deer are not contestants, too. Fuel reduction is removing the wildlife safety zones along the "edges" where open space meets the forest. Meadows will be visited by those insect and seed foraging birds that can find cover quickly from overhead predators in shrubs and trees. Stand-alone trees whose lower 9-19 feet of branches have been removed just do not present the same safe haven. As the Plan is to protect the environment from wildfires, recognize that removal of a plant species from an area will relocate its inhabitants. A beetle that lived in the manzanita now lives in and on our house; the quail have only one corridor up and down our mountain left that provides them the shrub coverage and snacks in the leaf litter. Ants nesting in the dead wood and hollows of trees head for your house and hose water when the water source in the hollow is removed with their "unhealthy" tree. Termites are everywhere so supersaturated soils send them into a house's wood. Out come the pesticides and sprays that will wipe out even the beneficial pollinators your vegetable garden needs, or contaminate your watershed. Addressing the problems in the PTEIR is to help "look before you leap" and avoid creating a more unmanageable set of problems, and have to spend more money than a harvested tree(s) will "earn" for you at a lumber mill to correct the new problem.

Re: 8.a) Who will pay for transport of brush chips to a bio-mass plant? Will more trees be cut/marketed just to cover costs? To help reduce costs and pollution from transport vehicles, could the chips be safely stored and loaded in big batches? What became of the idea to have a chipper "visit" neighborhoods to help reduce transportation off-site? Any sales to nurseries and landscapers as mulch? Investigate those possibilities! Would the CCC aid those with older residences that are not designed to take advantage of the "increase in passive solar potential" from more open defensible space, or at least help insulate their homes to be cooler in the summer? Unfortunately, there will be a potential for water shortages if we all get busy irrigating our new fires safe landscaping. Will the Meadow Vista Water Agency have sufficient summer storage for both the increase in population at Winchester and its golf course and the Plan implementation?

Re: 8.c) I have come to regard topsoil as a mineral resource. Secure what we have. A hundred years of passive decomposition in our climate to create about an inch of soil makes it a valuable resource. The removal of the "future" nutrient sources and their burning seems counterproductive to the health of the forest. Pine branches contain 60% of the tree's nitrogen (see Handbook). How can we best make this available on site from the "slash"?

Re: 9.a) The use of pesticides and herbicides during the initial phase and during the maintenance phase of the Plan has to be addressed. This will be difficult as the affects and accumulations of these chemicals in soils, in the food web and in the watershed are still under study. Chemicals will be used to treat tree stumps to stop resprouting—herbicide use is less labor intensive and erosive than grubbing them out. Foliar applications are even easier though not recommended as overspray can create more dead matter.

Re: 9.c) See comment Re 9.a). With fewer plants along our roadways to filter and process pollutants, will the oil-laden water spray from the roadway then become a greater bio-hazard as it will enter the watershed directly? Any continued chemical treatment or burning for the maintenance of the Plan will also present health hazards--increased number of exposures, cumulative affects, and new exposures to old and new threats. Poison oak lurks in all three forms and its herbicidal controls need to be reapplied over the years. You are exposing yourself to possible contact with its oils while trying to eradicate it as well as to possible inhalation of the toxic chemicals of a spray or skin contact with the solution. Allergens abound. Inviting in the non-native grasses and opening up our "air routes" with less plant material to trap pollens may see an increase in reactions, unless the sources are removed in the process. Residents along the Shaded Fuelbreak routes may be exposed to greater levels of traffic-related pollutants (combustion emissions, noise and light) after the initial phase. See NOP item 13 as "peace of mind" and "sense of security" will be altered.

Re: 11.a) Increase in actual local fire suppression teams may be needed. See CDF logs for late June, 1997. Two wildland fires stemming from two MV residents conducting fuel reduction debris burning—one rekindled from a legal burn and one direct from an illegal burn—required full CDF ground crews and borate bombers to extinguish them. Luckily, the outbreaks were within hours of each other so the crews and heavy equipment where still in the area. The illegal one less than a quarter of a mile downslope from our house sent me packing, and showed how ineffective our roof and downslope sprinklers are against the quantities of smoke. Cringe at the mere thought of flames approaching. And just how terrific it is to have accurate borate bombers and great hardworking ground support when you need them. ☺

Re: 11.e) The phones and code enforcers of Air Quality will be busy monitoring the effects of all the burning--both legal and illegal.

Re: 12.a) Do the 20'+ brush-free swathes that PGE now maintain either side of their lines count as "Unshaded Fuelbreaks" any where in the Plan?

Re: 12.c) Increased demand from existing water customers to irrigate initial replanting of vegetative screening along roads and maintain all fire-safe landscaping. Even to reestablish native species requires 2-3 years of drip irrigation.

Re: 12.f) See comment Re: 8.a) above

Re: 12.g) See comment Re: 12.c) above for well water use

Re: 13.a,b,c) The NOP PTEIR response says it well. For most of the residents and visitors to our community, the most far-reaching and greatest area of impact of the Plan is probably on "aesthetics". Already noticeable is the glow of the Auburn lights at night, silhouetting the trees on the ridgeline. That may the only redeeming merit of night lights—to silhouette the trees. It does not help star gazing. You would be amazed at the number of yard lights near and far whose

beams penetrate the rural nights. But remove trees and brush, and you may go into a fit of remorse when you see your neighbor's lights as bright as your own. You may even be surprised that the driver of the car in your front yard is there when he came around the corner and was blinded by your neighbor's lights. So much for a sense of security from well-lit places. And it sounded like he was driving into your bedroom with the sound waves now able to travel uninterrupted from the road to your house. I will not dwell on the screening of "yard art" as there are ways to impound added vehicles and measures already in place to screen assorted rural collections over a certain proportion. Good fences build good neighbors, but not after you have to report them to the County to get cooperation. Any landscaping to recreate visual barriers costs money and resources—irrigation systems and water, deer and rabbit deterrents, replacement plants, labor for installation and maintenance including poison oak eradication. While participation in the Plan is voluntary, who oversees plan development, implementation, and follow up so that we do not have a subdivision street-view of just homes? The "conditions of approval of the master plan use permit" for the Winchester subdivision states that along roads such Meadow Vista and Sugar Pine, there is to be a buffer of 75' of natural vegetation, with a landscape plan to recreate such a buffer if any vegetation is removed. How will this dovetail with Shaded Fuelbreaks along routes and ridges? Compliance has been an issue in the past with the project and hopefully the PTEIR will not undermine the County and community's directives. What will the rest of Meadow Vista look like? Hopefully we will be able to retain our Bird Sanctuary status for many years to come. But when many have expressed concerns and displeasure at the work along Placer Hills Road, and queried "Are they getting ready to widen the road?," the desired "Welcome to Meadow Vista" falls short of "inviting".

Re: 14.b & c) Increasing the visibility of archaeological resources such as possible Nisenan bedrock mortars along Wooley Creek and the granite outcroppings on Sugar Pine Mountain could cause increased vandalism, if not trespassing. Who could assist in a more thorough survey of the cultural resources? Let us respect and manage ethically sensitive sites and not desecrate them.

Re: 15.b) "Beware the unschooled public gaining access to fire-sensitive areas."—Smokey Bear☺

Thank you for your time and responses to my inquiries about the safety and conservation elements of the NOP PTEIR and the ever-evolving fuel reduction program for our area. Hopefully, we can pattern our stewardship of the environment after the Nisenan who did not "own" trees, but tended them.

Sincerely,

Patrice Taylor

Patrice Taylor

STATE OF CALIFORNIA - THE RESOURCES AGENCY

PETE WILSON, Governor

DEPARTMENT OF FISH AND GAME
REGI
1701 I JS ROAD, SUITE A
RANCHO CORDOVA, CALIFORNIA 95670
Telephone (916) 358-2900

May 4, 1998

Mr. Russ Henly
Department of Forestry and Fire Protection
1920 20th Street
Sacramento, California 95814

Dear Mr. Henly:

The Department of Fish and Game (DFG) has reviewed the Notice of Preparation of a Draft Environmental Impact Report (DEIR) for the Meadow Vista Fuel Reduction Program PTEIR. The proposal is designed to facilitate the removal of commercial timber as part of landowner participation in an overall fuels reduction program within about 6,980 acres of the Meadow Vista Community, (current population about 5,000), Placer County.

The DFG recommends the following be included within the DEIR as appropriate mitigation designed to reduce impacts to fish, wildlife and water resources to levels below significance:

1. Numerous stream, pond and wetland habitats occur within the plan area including Orr and Wooley Creeks. These environments may provide suitable habitat for the federally threatened california red-legged frog (*Rana aurora aurora*) and the federal and california special concern species foothill yellow-legged frog (*Rana boylii*). We know of no standardized or organized survey effort that has been conducted for these species within the community plan area. Treatment areas and treatment methods must consider potential impacts to these species.

   Activity setbacks from the stream or wetland environment would most easily avoid potential direct and indirect impacts and are recommended. Setbacks are additionally recommended to assure the continued ecological integrity of the stream environment for fish and riparian dependent and related species and to assure the riparian zone continues to serve as a movement corridor for many wildlife species.

   Setbacks should only be breached (except for removal of hazard trees) to allow for the minimal removal of understory vegetation under a carefully defined plan and only subsequent to completion of an approved survey protocol designed to determine presence of listed amphibians conducted by a qualified biologist.

2. Extensive understory openings created within a brief time period can cause disruption of the local wildlife community. We suggest that projects be spaced throughout the

community in any given year or period of years. A system should be designed to assure that projects are spaced in time and place.

3. Configuration of any larger treatment project (those not adjacent to structures) should consider variations in opening size, retention of shrub islands and peninsulas and incorporation of irregular borders.

4. Literature is incomplete to allow for the determination of impacts to the native plant community as a result of the various treatment methods that may be employed to reduce fuels. Treatment methodology (e.g. mastication, pile and burn, fall burning, spring burning, etc) and frequency (periods between treatments of the same site) can have profound impacts to native plant communities and species. We recommend that a monitoring system be implemented to develop a data base that will allow for the determination of plant response to various treatment methods and treatment frequencies.

Thank you for the opportunity to review this project. If the DFG can be of further assistance, please contact Mr. Jeff Finn, Associate Wildlife Biologist, at (530)477-0308, or Ms. Edna Maita, Environmental Specialist III, at (916) 358-2921.

Sincerely,

David S. Zezulak

David S. Zezulak, Ph.D.
Environmental Specialist IV, Supervisor

cc: Mr. John Hiscox
Mr. Jeff Finn
Ms. Edna Maita
Department of Fish and Game
Rancho Cordova, California

Draft Final

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
3310 El Camino Avenue, Suite 130
Sacramento, California 95821-6340

IN REPLY REFER TO:
1-1-98-SP-1210

April 24, 1998

Mr. William C. Stewart
The Resources Agency
Department of Forestry and Fire Protection
1920 20th Street
Sacramento, CA 95814

Subject: Species List for the Program Timberland Environmental Impact Report for the Meadow Vista Fuela Reduction Program, Meadow Vista, California

Dear Mr.Stewart:

We are sending the enclosed list in response to your April 20, 1998, request for information about endangered and threatened species (Enclosure A). The list covers Lake Combie, in Placer County, California.

Please read *Important Information About Your Species List* (enclosed). It explains how we made the list and describes your responsibilities under the Endangered Species Act. If you have questions that are not answered by the enclosure, please call Ken Sanchez, (916) 979-2749. For the fastest response to species list requests, address them to the attention of the section 7 office assistant at this address.

Sincerely,

Carl C. Wenal

Wayne S. White
Field Supervisor

Enclosures

Important Information
About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by US Geological Survey 7½ minute *quads*. The United States is divided into these quads, which are about the size of San Francisco. If you requested your list by quad name or number, that is what we used. Otherwise, we used the information you sent us to determine which quad or quads to use.

Animals

The animals on your species list are ones that occur within, *or may be affected by projects within*, the quads covered by the list. Fish and other aquatic species appear on your list if they are downstream from your quad or if water use in your quad might affect them.

Plants

Any plants on your list are ones *that have actually been observed* in the quad or quads covered by the list. We have also included either a county list or lists for the surrounding quads. We recommend that you check your project area for these plants. Plants may exist in an area without ever having been detected there.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. For plant surveys, we recommend using the enclosed *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Species* (Enclosure C). The results of your surveys should be published in any environmental documents prepared for your project.

State-Listed Species

Species listed as threatened or endangered by the California Department of Fish and Game do not appear on your species list unless they have also been listed by us or by the National Marine Fisheries Service. Call (916) 322-2493 or write Marketing Manager, California Department of Fish and Game, Natural Diversity Data Base, 1416 Ninth Street, Sacramento, California 95814 for information about state-listed species.

Your Responsibilities Under the Endangered Species Act

All plants and animals identified as *listed* on Enclosure A are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the *take* of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal. Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

> If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a *formal consultation* with the Service. Such consultation would result in a *biological opinion* addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.
>
> If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an *incidental take permit*. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project. Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that mitigates for the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the mitigation plan in any environmentals documents you file.

Candidate Species

We recommend that you address impacts to *candidate* species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Your list may contain a section called *Species of Concern*. This term includes former *category 2 candidate species* and other plants and animals of concern to the Service and other Federal, State, and private conservation agencies and organizations. Some of these species may become candidate species in the future.

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section

404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 979-2113.

ATTACHMENT A

Endangered and Threatened Species that May Occur in
or be Affected by Projects in the Following Selected Quads

April 24, 1998

QUAD : 542D LAKE COMBIE

Listed Species

Birds

American peregrine falcon, *Falco peregrinus anatum* (E)

bald eagle, *Haliaeetus leucocephalus* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Central Valley steelhead, *Oncorhynchus mykiss* (T)

Invertebrates

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

Plants

Stebbins' morning-glory, *Calystegia stebbinsii* (E)

Proposed Species

Fish

Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (PE)

Central Valley fall-run chinook salmon, *Oncorhynchus tshawytscha* (PT)

Sacramento splittail, *Pogonichthys macrolepidotus* (PT)

Species of Concern

Mammals

spotted bat, *Euderma maculatum* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

QUAD : 542D LAKE COMBIE

Species of Concern

Mammals

Yuma myotis bat, *Myotis yumanensis* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

Reptiles

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylii* (SC)

western spadefoot toad, *Scaphiopus hammondii* (SC)

Invertebrates

Sagehen Creek goracean caddisfly, *Goeracea oregona* (SC)

KEY:

(E)	*Endangered*	Listed (in the Federal Register) as being in danger of extinction.
(T)	*Threatened*	Listed as likely to become endangered within the foreseeable future.
(P)	*Proposed*	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(C)	*Candidate*	Candidate to become a *proposed* species.
(SC)	*Species of Concern*	May be endangered or threatened. Not enough biological information has been gathered to support listing at this time.
(*)		Possibly extinct.
	Critical Habitat	Area essential to the conservation of a species.

Appendix D
CWHR Model Results

Note: Only a brief summary of results is presented here. For the complete reports of the two CWHR model runs done for this report, contact Russ Henly at the California Department of Forestry and Fire Protection (916-227-2659; russ_henly@fire.ca.gov).

CALIFORNIA WILDLIFE HABI RELATIONSHIPS SYSTEM
Supported by the
CALIFORNIA INTERAGENCY WILDLIFE TASK GROUP
and maintained by the
CALIFORNIA DEPARMENT OF FISH AND GAME
Database Version: 5.3
This copy of the database is owned by: Calif Dept of Forestry & Fire

WEIGHTED HABITAT VALUE COMPARISON REPORT

FIRST SITUATION
SELECTION CRITERIA:

Locations:
PLACER COUNTY

Habitats:

						Weight
1	BLUE OAK WOODLAND	SMALL TREE	OPEN	25-39%	(4P)	55
2	BLUE OAK WOODLAND	SMALL TREE	MODRTE	40-59%	(4M)	153
3	BLUE OAK WOODLAND	SMALL TREE	DENSE	60-100%	(4D)	24
4	VALLEY OAK WOODLAND	SMALL TREE	MODRTE	40-59%	(4M)	58
5	VALLEY OAK WOODLAND	MED/LARGE TREE	OPEN	25-39%	(5P)	26
6	VALLEY OAK WOODLAND	MED/LARGE TREE	MODRTE	40-59%	(5M)	73
7	BLUE OAK-DIGGER PINE	POLE TREE	MODRTE	40-59%	(3M)	26
8	BLUE OAK-DIGGER PINE	SMALL TREE	MODRTE	40-59%	(4M)	971
9	PONDEROSA PINE	POLE TREE	DENSE	60-100%	(3D)	11
10	PONDEROSA PINE	SMALL TREE	OPEN	25-39%	(4P)	9
11	PONDEROSA PINE	SMALL TREE	MODRTE	40-59%	(4M)	2099
12	PONDEROSA PINE	SMALL TREE	DENSE	60-100%	(4D)	1184
13	PONDEROSA PINE	MED/LARGE TREE	MODRTE	40-59%	(5M)	49
14	PONDEROSA PINE	MED/LARGE TREE	DENSE	60-100%	(5D)	33
15	MONTANE HARDWOOD-CONIFER	SMALL TREE	MODRTE	40-59%	(4M)	524
16	MONTANE HARDWOOD-CONIFER	SMALL TREE	DENSE	60-100%	(4D)	548

Elements Excluded:
ALGAE
AQUATICS, EMERGENT
AQUATICS, SUBMERGED
BOGS
CAMPGROUND
JETTY
KELP
SALT PONDS
SAND DUNE
SOIL, SALINE
SPRINGS, HOT
TIDEPOOLS
VERNAL POOLS
WHARF

Element reproduction level required: E
Element feeding level required: E
Element cover level required: E

CALIFORNIA WILDLIFE HABI RELATIONSHIPS SYSTEM
Supported by the
CALIFORNIA INTERAGENCY WILDLIFE TASK GROUP
and maintained by the
CALIFORNIA DEPARMENT OF FISH AND GAME
Database Version: 5.3
This copy of the database is owned by: Calif Dept of Forestry & Fire

WEIGHTED HABITAT VALUE COMPARISON REPORT

SECOND SITUATION
SELECTION CRITERIA:

Locations:
PLACER COUNTY

Habitats:

					Weight
17 BLUE OAK WOODLAND	SMALL TREE	OPEN	25-39%	(4P)	70
18 BLUE OAK WOODLAND	SMALL TREE	MODRTE	40-59%	(4M)	162
19 VALLEY OAK WOODLAND	SMALL TREE	OPEN	25-39%	(4P)	6
20 VALLEY OAK WOODLAND	SMALL TREE	MODRTE	40-59%	(4M)	52
21 VALLEY OAK WOODLAND	MED/LARGE TREE	OPEN	25-39%	(5P)	34
22 VALLEY OAK WOODLAND	MED/LARGE TREE	MODRTE	40-59%	(5M)	65
23 BLUE OAK-DIGGER PINE	POLE TREE	OPEN	25-39%	(3P)	2
24 BLUE OAK-DIGGER PINE	POLE TREE	MODRTE	40-59%	(3M)	24
25 BLUE OAK-DIGGER PINE	SMALL TREE	OPEN	25-39%	(4P)	94
26 BLUE OAK-DIGGER PINE	SMALL TREE	MODRTE	40-59%	(4M)	877
27 PONDEROSA PINE	POLE TREE	MODRTE	40-59%	(3M)	11
28 PONDEROSA PINE	SMALL TREE	OPEN	25-39%	(4P)	212
29 PONDEROSA PINE	SMALL TREE	MODRTE	40-59%	(4M)	3080
30 PONDEROSA PINE	MED/LARGE TREE	OPEN	25-39%	(5P)	4
31 PONDEROSA PINE	MED/LARGE TREE	MODRTE	40-59%	(5M)	78
32 MONTANE HARDWOOD-CONIFER	SMALL TREE	OPEN	25-39%	(4P)	51
33 MONTANE HARDWOOD-CONIFER	SMALL TREE	MODRTE	40-59%	(4M)	1021

Elements Excluded:
ALGAE
AQUATICS, EMERGENT
AQUATICS, SUBMERGED
BOGS
CAMPGROUND
JETTY
KELP
SALT PONDS
SAND DUNE
SOIL, SALINE
SPRINGS, HOT
TIDEPOOLS
VERNAL POOLS
WHARF

Element reproduction level required: E
Element feeding level required: E
Element cover level required: E

CALIFORNIA WILDLIFE HABITAT [illegible]TIONSHIPS SYSTEM
Supported by the
CALIFORNIA INTERAGENCY WILDLIFE TASK GROUP
and maintained by the
CALIFORNIA DEPARMENT OF FISH AND GAME
Database Version: 5.3
This copy of the database is owned by: Calif Dept of Forestry & Fire

WEIGHTED HABITAT VALUE COMPARISON REPORT

Number of Species Affected:

	Amphibians	Birds	Mammals	Reptiles	Total
Habitat Created:	0	0	0	0	0
Value Increased:	1	78	32	14	125
Value Unchanged:	3	16	7	7	33
Value Decreased:	2	23	8	0	33
Habitat Lost:	0	0	0	0	0
Total:	6	117	47	21	191

Percentage of Species Affected:

	Amphibians	Birds	Mammals	Reptiles	Total
Habitat Created:	0	0	0	0	0
Value Increased:	0	41	17	7	65
Value Unchanged:	2	8	4	4	18
Value Decreased:	0	12	5	0	17
Habitat Lost:	0	0	0	0	0
Total:	2	61	26	11	100

Percentage of Species Affected by Taxonomic Class:

	Amphibians	Birds	Mammals	Reptiles
Habitat Created:	0	0	0	0
Value Increased:	17	67	68	67
Value Unchanged:	50	13	15	33
Value Decreased:	33	20	17	0
Habitat Lost:	0	0	0	0
Total:	100	100	100	100

Due to an error in the CWHR System the Long-eared Owl and Northern Pygmy Owl were not included in this report or the summary tables above. The CWHR query was re-run for neighboring Nevada County as the location descriptor with the following result for these species.

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*10*10* 7*10*10*10* 7*10* 5*10*10* 7*10* 7*10* 7*10*10*10*10*10*10* 7* 7*10*10* 7*10*10*10*10*10*10
* 7* 9* 8* 9* 7* 9* 9* 9* 5* 4* 5* 5* 5* 5* 5* 5* 7* 9* 7* 9* 7* 9* 7* 9* 7* 9* 5* 4* 5* 4* 5* 4* 5
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5221	5831	610	NORTHERN PYGMY OWL
3658	3604	-54	LONG-EARED OWL

Species not likely to occur in the project area, based on review of CWHR Species Notes and Range Maps, and deleted from this report are as follows: (negative effect birds)-NORTHERN GOSHAWK, HAMMOND'S FLYCATCHER, PILEATED WOODPECKER, SWAINSON'S THRUSH, TOWNSEND'S WARBLER, PYGMY NUTHATCH, COMMON RAVEN, BLUE GROUSE, CLARKS NUTCRACKER (no effect birds)- RING-NECKED PHEASANT, GREATER ROADRUNNER, YELLOW-BILLED MAGPIE, (positive effect birds)-RED CROSSBILL, WHITE-TAILED KITE, FERRUGINOUS HAWK, ROUGH-LEGGED HAWK, LESSER NIGHTHAWK, PRAIRIE FALCON, COMMON YELLOWTHROAT, MOUNTAIN QUAIL, SWAINSON'S HAWK, MOUNTAIN BLUEBIRD, ALLEN'S HUMMINGBIRD, RED-NAPED SAPSUCKER, GOLDEN EAGLE, WILLIAMSON'S SAPSUCKER, CASSIN'S FINCH, DUSKY FLYCATCHER, RUFOUS HUMMINGBIRD, WHITE-HEADED WOODPECKER, CALLIOPE HUMMINGBIRD, (negative effect mammals)- DOUGLAS' SQUIRREL, NORTHERN FLYING SQUIRREL, FISHER, ERMINE, AMERICAN MARTEN, VAGRANT SHREW, WATER SHREW, MONTANE VOLE (neutral effect mammals)-BUSHY-TAILED WOODRAT, WOLVERINE, (positive effect mammals)-CALIFORNIA POCKET MOUSE, SAN JOAQUIN POCKET MOUSE, CALIFORNIA KANGAROO RAT, AMERICAN BADGER, AMERICAN PIKA, LONG-TAILED VOLE, MOUNTAIN POCKET GOPHER, RED FOX, HEATHER VOLE, LITTLE BROWN MYOTIS, MOUNTAIN BEAVER, WILD PIG, LONG-EARED CHIPMUNK, ALLEN'S CHIPMUNK, GOLDEN-MANTLED GROUND SQUIRREL, YELLOW-PINE CHIPMUNK (positive effect reptiles)- LONG-NOSED SNAKE, COAST HORNED LIZARD, SAGEBRUSH LIZARD

MEADOW VISTA PTEIR
SUPPLAMENTAL WILDLIFE AFFECTS EVALUATION
USING CDFG WILDLIFE HABITAT RELATIONSHIPS DATABASE

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July 27, 1998

In follow-up to the field review of the Meadow Vista Community Plan Area I generated a few additional Wildlife Habitat Relationship Database (WHR) reports to look at some different scenarios for proposed actions. The scenarios included: 1) only looking at the habitats where the fuel break activities are proposed, and assuming 20% of that area is urban habitat (see attachment 1), 2) the affects of converting ponderosa pine and montane hardwood-conifer types if they would be converted to urban habitat (see Attachment 2), and 3) what species would use riparian inclusions within the ponderosa pine, montane hardwood-conifer and urban habitats (see Attachment 3). The acreage utilized was the same as that used by Douglas C. Ferrier in his previous report. In addition, Attachment 4 shows the importance of the habitats for Reproduction, Cover, and Feeding (R, C, & F). The importance is rated as High, Medium or Low (H, M, or L).

FUEL BREAKS IN PONDEROSA PINE AND MONTANE HARDWWOD-CONIFER HABITATS

After field review of the Meadow Vista area it was observed that the ponderosa pine and montane hardwood-conifer habitats were not pure stands. Much of the area has been and is being urbanized. In making the present evaluation it was assumed that at least 20% of the area designated as ponderosa pine and montane hardwood-confer types was urbanized. This fact has a significant affect on the wildlife habitat of the project area, compared to creating fuel breaks in more pure ponderosa pine and montane hardwood-conifer habitats.

This evaluation utilized the acreage projected by Mr. Ferrier from the existing successional stages to what they will be after fuel breaks are constructed. In addition, as mentioned above, these acreage's were adjusted to reflect the presence of urbanization in these habitats. It was estimated that at least 20% of the area designated as ponderosa pine or montane hardwood-conifer included urbanized habitat. A second WHR run was made to see what the projected affects of converting ponderosa pine and montane hardwood-conifer habitats to urban habitat would be. The following tables illustrate the number of species affected by these activities.

Table 1. Number of species affected by habitat changes 1) from existing to that after fuel breaks are installed and 2) from ponderosa pine (PPN) and montane hardwood-conifer (MHC) to urban (URB).

	NUMBER OF SPECIES AFFECTED	
	1) PPN, MHC, & URB CHANGED (+ FUEL BREAK)	2) PPN and MHC CHANGED TO URB
Habitat Created:	0	35
Value Increased:	102	123
Value Unchanged:	34	0
Value Decreased:	72	1
Habitat Lost:	0	47
TOTAL	208	206

Table 2. Number of species grouped by percent of changes in habitat values from existing condition to that with fuel breaks included.

	NUMBER OF SPECIES BY PERCENT OF CHANGE FROM EXISTING TO "INCLUDE FUEL BREAKS"					
	<5%	5-10%	11-15%	16-29%	>20%	TOTAL
Value Decreased:	60	7	3	2		72
Value Increased:	22	29	10	10	31	102
Value Unchanged:						34
TOTAL						208

It has been proposed that the Shaded Fuel Breaks will be primarily installed in the ponderosa pine and montane hardwood-conifer habitats (including urbanized inclusions) in the Meadow Vista area. In Table 1, the WHR database predicts that the habitat value for 72 species will be negatively affected. In Table 2, the decrease in habitat value will be less then 5 percent for 60 out of the 72 species negatively affected. On the other hand, WHR predicts that 102 species will have habitat values increased. However, the positive changes are much greater.

To illustrate the affects of converting ponderosa pine and montante hardwood-conifer to urban habitat refer to Attachment 2. It is interesting to note that

many species (123) have an increase in habitat values and only one species shows a decrease in habitat value, but there is still habitat for it. Habitat is created for an additional 35 species. However, the conversion from the forested habitats to urban results in the complete loss of habitat for 47 species. That is the most significant impact of this conversion. Although, it is not proposed that the forested habitats would be converted to urban habitat, these species would most likely be the most adversely impacted by any conversions to urbanization. The purpose of this evaluation is to show that urbanization has a much greater impact on wildlife in the area then would installation of fuel breaks that impact only a very small percentage of the area. It is estimated that less then 2 percent of the area will ultimately be converted to fuel breaks.

The concern was raised in the field review that the riparian habitat is so small that it can not be evaluated. In WHR, small Riparian Inclusions are treated as a habitat element. A run of WHR was made to show which species utilize these riparian inclusions within the three habitats utilized in this discussion (ponderosa pine, montane hardwood-conifer, and urban). Refer to Attachment 3 for a list of species that may utilize riparian inclusions in the area. It is proposed that these small riparian habitats will not have fuel breaks installed as will be in the forested/urban habitats.