

upon conclusion of use of tractor roads, tractor skid trails and all other roads and landings used during the conduct of the timber operation which do not have permanent and adequate drainage facilities. All waterbreaks shall be installed no later than November 15th of the current year of timber operations. The Erosion Hazard Rating shall be the average for the setting where the setting is the area from which logs are removed to a given landing.

(a) Distances between waterbreaks as measured along the surface of the ground shall be as follows:

MAXIMUM DISTANCE BETWEEN WATERBREAKS IN FEET

Estimated Hazard Rating	Road or Trail Gradient Percent			
	10 or less	11 - 25	26 - 50	Over 50
Extreme	100	75	50	50
High	150	100	75	50
Moderate	200	150	100	75
Low	300	200	150	100

(b) Effective waterbreaks shall be constructed at all natural water courses regardless of the above quoted distances, except where culverts or bridges are provided.

(c) Waterbreaks shall be cut diagonally a minimum of 6 inches into the firm roadbed, skid trail or firebreak surface and shall have a continuous firm embankment of at least 6 inches in height immediately adjacent to the lower edge of the waterbreak cut.

(d) Waterbreaks shall provide for unrestricted discharge at the lower end of the waterbreak so that the water will be discharged and spread into the adjacent area in such a manner that erosion in the discharge area shall be minimized.

(e) Water shall be discharged into some form of vegetative cover or duff whenever possible.

ARTICLE 6. STREAM AND LAKE PROTECTION

916. Stream and Lake protection. The purpose of this article is to insure the protection of beneficial uses that are

derived from the physical form, water quality, and biological capacity of streams and lakes. It is the further purpose of this article to prevent unnatural erosion of stream and lake banks resulting from timber operations and to prevent such timber operations from causing excessive deepening of stream channels and undercutting of stream and lake banks and beds during the conduct of timber operations, and shall avoid unreasonable effects on beneficial uses of water.

916.1. Stream and Lake Protection - Timber Operations.  
During timber operations, except as necessary for road crossings, all streams and lakes below the stream and lake transition line shall be kept substantially free of slash, debris and other material resulting from such operations. If accidental depositions of such material take place, the removal of such material shall be accomplished as soon as possible. Trees cut within 50 feet of a stream or lake shall be felled as nearly as possible at right angles away from the stream or lake by pulling if necessary, or in such other manner as to minimize erosion and maintain water quality.

916.2. Stream Crossings. The number of places for stream crossings shall be kept to a minimum. When logging skid trails must cross a flowing stream, except as provided through the Fish and Game Code, a prepared crossing utilizing either a bridge or culvert will be used.

916.3. Cutting and Logging Methods - Stream and Lake Protection Zone. For protection of fish, wildlife and water quality, and to minimize erosion, the practices specified in this section shall be adhered to within the Stream and Lake Protection Zone.

Within the Stream and Lake Protection Zone in each harvesting plan area enough trees or shrubs of any species shall be left so that 50% or more of the shade-producing canopy present before timber operations remains after timber operations are completed. Notwithstanding the provisions of this section, diseased or otherwise damaged trees may be removed. Nonmerchantable riparian vegetation shall be protected from unreasonable damage. When explained and justified, the Timber Harvesting Plan may provide for a lesser percentage of remaining shade-producing canopy where it is necessary to achieve stocking standards or if it can reasonably be expected that there will not be substantial adverse effects on soil erosion, wildlife, aquatic life, or unreasonable effects on the beneficial uses of water because of one or more of the following conditions:

(a) The remaining canopy or streamside shrubs will still provide adequate protection;

(b) A stream is oriented with a northerly or easterly facing slope such that the aspect substantially reduces the amount of solar radiation;

(c) The depth and narrowness of the canyon at stream level is such that removal of additional percentage of canopy does not adversely affect water temperature;

(d) The combination of inherent temperature, depth, rate of flow and volume of water is such as to prevent significant heating or temperatures higher than normally required for the survival of trout or anadromous fish;

(e) The length of stream affected by canopy decrease is less than 200 feet;

(f) the Registered Professional Forester who prepared the plan explains a high probability of windthrow or sufficient cooling effect of fog in the timber Harvest Plan and the Plan specifies restocking the Stream and Lake Protection Zone within the first planting season following completion of timber operations.

Only sanitation-salvage cutting may be done in future harvests within the Stream and Lake Protection Zone until such time that the canopy has been sufficiently reestablished to prevent substantial adverse effects on soil erosion, wildlife aquatic life, or the beneficial use of water.

There shall be no other disturbance within the Stream and Lake protection Zone except for necessary road grades to approach stream crossings, stream crossing construction, tree felling including layouts required to assure full utilization of timber, skidding of logs, site preparation for restocking purposes, and construction of roads and landings consistent with the other provisions of this article.

Tractor operations shall be prohibited within 50 feet of the stream and lake transition line except for stream crossings or on existing roads, or where less damage will result from the use of such equipment within 50 feet of the stream and lake transition line as explained and justified in the Timber Harvesting Plan.

In the event the State Forester disagrees with the judgement exercised by the Registered Professional Forester

under this section following an on-the-ground inspection, if requested by either party, and rejects the plan, the person who submitted the plan may appeal to the Board of Forestry as provided in regulations adopted by the Board.

916.4. Soil Treatment - Stream and Lake Protection Zone. Areas within 150 feet of a stream or lake, as measured along the surface of the ground, with high or extreme Erosion Hazard Ratings, where mineral soil is exposed by timber operations exceeding 800 continuous square feet in size, shall be seeded, planted, or otherwise treated for reduction of soil erosion prior to November 15th of the year of disturbance.

916.5. Stream Crossing Facilities. Permanent stream crossings shall be designed to accommodate the estimated 25-year maximum frequency storm, and shall be designated in the Timber Harvesting Plan.

(a) Culverts used as permanent stream crossing structures in streams that support fish at any time of the year shall be installed in compacted fill, and placed at or below stream grade to allow for unrestricted passage of fish and water.

(b) Culverts used as permanent stream crossings in streams that do not support fish at any time of the year, may be placed above stream grade at the inlet to provide for a stilling pond and must be placed in compacted fill.

Exceptions may be provided through the Fish and Game Code.

916.6. Temporary Stream Crossing. Remove all temporary stream crossing structures not designed to accommodate the estimated 25-year maximum frequency storm each year prior to the close of logging operations and before the period of maximum stream flow, but in no case later than November 15 of the current year.

916.7. Restriction Below Stream and Lake Transition Line. The timber operator shall not construct new roads, skid trails, firebreaks or log landings nor operate logging equipment so that side cast material, slash or debris is deposited below the stream and lake transition line, unless provided through the Fish and Game Code. The operator should avoid locating landings within 50 feet of the stream and lake transition line. Notice of intention and the reason for construction of roads, skid trails, firebreaks or log landings within 50 feet of any stream or lake which supports fish at any time of the year shall be clearly indicated on the Timber Harvesting Plan filed with the State Forester.

916.8. Stream and Lake Bed Restrictions. The timber operator shall not use beds of streams or portions of beds of streams, lakes, marshes, wet meadows and other wet areas as log landings, roads (except at prepared crossings), or logging skid trails, except as provided through Fish and Game Code.

916.9. Exclusion of Material from Streams and Lakes. The timber operator shall not discharge soil, silt, bark, slash, sawdust, petroleum, or other organic and earthen material from any logging, construction or associated activity into any stream or lake in quantities deleterious to fish, wildlife, or other beneficial uses of water.

916.10. Limitations Near Streams and Lakes. The timber operator shall not place or dispose of soil, silt, bark, slash, sawdust, petroleum, or other organic and earthen material from any logging, construction, or associated activity at locations where such materials could pass into any stream or lake in quantities deleterious to fish, wildlife, or other beneficial uses of water.

916.11. Wet Meadows and Other Wet Areas. Vegetation other than commercial species bordering and covering wet meadows and other wet areas shall be retained and protected as much as possible during timber operations.

#### SUBCHAPTER 2 NORTHERN FOREST DISTRICT

932.22. Stream or Lake Protection Zone. "Stream or lake protection zone" means a strip of soil and vegetation along both sides of a stream or around the circumference of a lake defined as follows:

- (a) 150 feet, as measured along the surface of the ground, from the stream or lake transition line of any stream or lake in areas with an extremely high Estimated Erosion Potential.
- (b) 100 feet, as measured along the surface of the ground, from the stream or lake transition line of any stream or lake in areas with high Estimated Erosion Potential.
- (c) 50 feet, as measured along the surface of the ground, from the stream or lake transition line of any stream or lake in areas with a moderate or low Estimated Erosion Potential.

The Registered Professional Forester and the State Forester may agree, after on-the-ground inspection, if requested by either party, to either increase or decrease the above distances not to exceed 50%, based on soil, slope, or climatic factors necessary to protect soil, water, or fish and wildlife resources. Such changes will be designated on the timber Harvesting Plan.

#### ARTICLE 5. EROSION CONTROL

935. Erosion Control. Every timber operator shall conduct his operations in such a manner as to protect the soil resources from unnecessary damage and erosion. Tractor roads, skid trails, landings, logging roads, and firebreaks shall be so located, constructed, and left after logging that water flow thereon and water flow in natural watercourses shall not contribute to excessive erosion of soil. To accomplish this, the erosion control measures as set forth in this article shall be required of the timber operator in conducting timber operations.

935.4. Waterbreaks. Waterbreaks shall be constructed within fifteen days of cessation of use of tractor roads, tractor skid trails, all other roads and landings used during the conduct of the timber operations which do not have permanent and adequate drainage facilities, but in no event later than October 15th of the current year of timber operations. Waterbreaks shall be constructed concurrently with the construction of firebreaks. Based on slope and Estimated Erosion Potential, waterbreaks shall be installed as follows:

(a) Distance between waterbreaks, as measured along the surface of the ground, shall be as follows;

#### MAXIMUM DISTANCE BETWEEN WATERBREAKS IN FEET

Estimated Erosion Potential	Road or Trail Gradient Percent			
	10 or less	11 - 25	26 - 50	Over 50
Extremely High	100	75	65	50
High	150	100	75	65
Moderate	200	150	100	75
Low	300	200	150	100

(b) In addition, effective waterbreaks shall be constructed at all natural watercourses regardless of the above quoted distances, except where culverts or bridges are provided.

(c) Waterbreaks shall be cut diagonally a minimum of six (6) inches into the firm roadbed, skid trail, or firebreak surface and shall have a continuous firm embankment of at least six (6) inches in height immediately adjacent to the lower edge of the waterbreak cut.

(d) Waterbreaks shall provide for unrestricted discharge at the lower end of the waterbreak so that water will be discharged and spread into the adjacent area in such a manner that erosion in the discharge area shall be minimized.

(e) Water shall be discharged into some form of vegetative cover or other nonerodible material whenever possible.

935.5. Erosion Control, Winter Period. for timber operations conducted between October 15th and April 1st of the following year, all erosion control facilities required by these rules shall be installed as soon as ground conditions permit and in no event later than July 1.

#### ARTICLE 6. STREAM AND LAKE PROTECTION

936. Stream and Lake Protection. The purpose of this article is to insure the protection of beneficial uses that are derived from the physical form, water quality, and biological capacity of streams and lakes. It is further purpose of this article to prevent unnatural erosion of stream and lake banks, excessive deepening of stream channels, and undercutting of slopes by streams followed by soil slippage from slopes above. To accomplish this purpose, timber operators shall prevent unreasonable gouging or cutting of stream and lake banks and beds during the conduct of timber operations and shall avoid unreasonable effects on the beneficial uses of water.

936.1. Stream and Lake Protection Zone - Timber Operations. During timber operations, keep all lakes, and streams below the stream or lake transition line, free of slash, debris and other material which is in such quantities that it will be deleterious to fish, wildlife, or other beneficial uses of water. Accidental deposits will be removed as soon as practicable. Non-merchantable riparian vegetation shall be protected from unreasonable damage.

Within the stream or lake protection zone enough trees or shrubs of any species shall be left so that 50% or more of the shade-producing canopy before timber operations shall remain after timber operations are completed. When explained and justified, the Timber harvesting Plan may provide for a lesser percentage of remaining shade-producing canopy where it is necessary to achieve stocking standards or if it can reasonably be expected there will not be substantial adverse effects on soil erosion, wildlife, aquatic life, or unreasonable effects on the beneficial uses of water because of one or more of the following conditions:

(a) The remaining canopy or streamside shrubs will still provide adequate protection;

(b) A stream is oriented with a northerly or easterly facing slope such that the aspect substantially reduces the amount of solar radiation;

(c) The depth and narrowness of the canyon at stream level is such that removal of additional percentage of canopy does not adversely affect the water or substantially increase erosion;

(d) The combination of inherent temperature, depth, rate of flow and volume of water is such as to prevent significant heating or temperatures higher than normally require for the survival of trout or anadromous fish;

(e) The length of stream affected by canopy decrease is less than 200 feet.

Only sanitation-salvage cutting may be done in future harvests within the stream and lake protection zone until such time that the canopy has become sufficiently reestablished to prevent substantial adverse effects on soil erosion, wildlife, aquatic life, or the beneficial use of water.

In the event the State Forester disagrees with the judgment exercised by the Registered Professional Forester under this section following an on-the-ground inspection, if requested by either party, and rejects the plan, the person who submitted the plan may appeal to the Board of Forestry as provided in regulations adopted by the Board.

Tractors shall be prohibited within 50 feet of the stream or lake transition line except for stream crossings or on existing roads, or where less damage will result from the use of such equipment within 50 feet of the stream or lake transition line.

Trees cut within 50 feet of a stream or lake transition line shall be felled as nearly as possible at right angles away from the stream or lake or in such other manner as to minimize erosion and maintain water quality.

936.2. Stream Crossings. Keep the number of places for stream crossings to a minimum. Logging skid trails shall be laid out and constructed so that skidding operations minimize disturbances of the stream bank and stream bed.

936.3. Silvicultural and Logging Methods - Stream or Lake Protection Zone. To minimize erosion and protect water quality within the stream or lake protection zone, use of clear-cutting and seed tree silvicultural methods or other cutting with the same leave tree results are prohibited, except as necessary to establish corridors for cable logging. Notwithstanding the provisions of this section, diseased or otherwise damaged trees may be removed. Damage to unmerchantable timber, young growth, and other soil protecting vegetation within the stream or lake protection zone shall be kept to a minimum.

Logs shall be end-lined from the area within 50 feet of the stream or lake transition line except where less damage will result from the use of other methods.

936.4. Soil Treatment - Stream or Lake Protection Zone. Areas within the stream or lake protecting zone, where mineral soil is exposed by timber operations exceeding 800 continuous square feet in size shall be treated, if necessary, for reduction of soil erosion prior to November 15th of the year of disturbance.

936.5. Stream Crossing Facilities. At all crossings of flowing streams, install culverts or provide other suitable methods to provide for the full surface flow of the stream throughout the entire period the crossing will be in use. Any culverts shall be placed at or below stream grade to allow unrestricted fish passage.

936.6. Temporary Stream Crossings. Remove any temporary stream crossing structure following completion of logging, or in no case later than October 15th of the year during which the crossing has been used for timber operations.

936.7. Restrictions Below Stream or Lake Transition Line. The timber operator shall not construct roads, skid trails, firebreaks, or log landings, nor operate logging equipment

so that side cast material, slash, or debris is deposited below the stream or lake transition line unless provided through the Fish and Game Code.

936.8. Stream and Lake Bed Restrictions. The timber operator shall not use beds or streams or portions of beds of streams, lakes, and marshes, meadows and wet areas as log landings, roads (except at prepared crossings), or logging skid trails except as provided through the Fish and Game Code.

936.9. Exclusion of Material From Streams and Lakes. The timber operator shall prevent discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity at locations where such materials could reasonably be expected to pass into any stream or lake in quantities that would be deleterious to fish, wildlife, or other beneficial uses of water.

936.10. Limitation Near Streams and Lakes. The timber operator shall not place or dispose of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity at locations where such materials could reasonably be expected to pass into any stream or lake in quantities that would be deleterious to fish, wildlife, or other beneficial uses of water.

936.11. Silviculture Method - Meadows and Wet Areas. All commercial species within meadows and wet areas may be clear-cut and these areas exempted from stocking provisions in order to attain or retain these areas for wildlife and livestock. Vegetation, other than commercial species, bordering and covering meadows and wet areas shall be retained and protected as much as possible during timber operations.

VII Comments and Responses



JON G. BROWN JR.  
GOVERNOR

State of California  
GOVERNOR'S OFFICE  
OFFICE OF PLANNING AND RESEARCH  
1400 TENTH STREET  
SACRAMENTO 95814  
(916) 4450613

July 11, 1978

Ted Fukushima  
State Lands Commission  
1807 Thirteenth Street  
Sacramento, CA 95814

SUBJECT: SCH# 78062048 - WATERSHED AND FOREST REHABILITATION

Dear Mr. Fukushima:

This is to certify that State review of your environmental document\* is complete.

The results of the State review are attached. You should respond to the comments as required by the California Environmental Quality Act. You should address your responses to the commenting agency with a copy to the Clearinghouse.

Sincerely,

*for Stephen Williamson*  
Deni Greene  
Director  
State Clearinghouse

DG/ddt  
Attachment  
cc: Ken Fellows, DWR  
Mary Schell, Library  
Ronald B. Robie, DWR

3 - of Col. 1010

Memorandum

To : Dave Black  
State Lands Commission  
1807 13th Street  
Sacramento, CA 95814

From : Department of Conservation  
Division of Mineral and Geology  
1418 - 9th Street, Sacramento 95814

Subject: Draft EIR, Watershed and Forest Rehabilitation Project,  
State Lands Commission, June 1978

In response to the Commission's memorandum of June 14, 1978 which requested comments on the subject report we recommend that the Department of Conservation report, Erosion and Sediment Control Handbook, May 1976, be referenced as a guideline in mitigating erosion problems caused by road construction and clearing activities.

APPROVED:

*James F. Davis*  
James F. Davis  
State Geologist

*Perry Y. Amisano*  
Perry Y. Amisano  
Advisory Services Officer

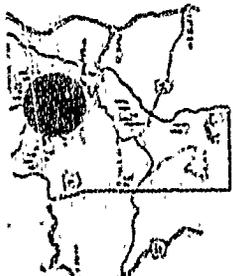
Response:

The Erosion and Sediment Control Handbook will be used as a guideline on this project.

The Resource Agency

Date: June 19, 1978

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STATE LANDS COMMISSION  
JUN 23 1 25 PM '78



**TRINITY COUNTY**  
 WEAVERVILLE, CALIFORNIA 96093  
 PLANNING DEPARTMENT  
 BOX 936  
 623-5594

June 16, 1978

Mr. William F. Northrop, Executive Officer  
 State Lands Commission  
 1807 13th Street  
 Sacramento, Calif. 95814

SUBJ: Draft EIR: Watershed and Forest Rehabilitation Project

Dear Mr. Northrop:

I have reviewed your draft environmental impact report. I have only one general comment and that is that the County Board of Supervisors have taken a firm stand against herbicide spraying within Trinity County. There are acceptable alternatives not cited in your general discussion.

I would like an opportunity to comment on specific plans to be implemented within Trinity County, when you have selected sites for this project we would appreciate early notification so that we can work out specific methods with you.

Sincerely,  
*Charles Johnson*  
 Chris Erikson  
 Assistant Planning Director  
 Charles Johnson  
 Planning Director

ce/na

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 JUN 19 1978  
 TRINITY COUNTY PLANNING DEPARTMENT

MINING HUNTING FISHING LUMBER GRAZING

Response:  
 An additional alternative, project with no herbicides, has been added, see page 64.

Response:

1. An analysis of this alternative follows.  
Project, No. Herbicides

This alternative would implement the project as proposed, with the exception that no herbicides would be used either for initial site clearing or for subsequent conifer release.

The major impact of this alternative would be the elimination of marginal areas from the project. Some parcels scheduled for reforestation under this project contain large areas which are unsuitable for mechanical work for a number of reasons: rock outcrops and/or steep slopes being the most common. If a parcel contains only small areas that cannot be cleared mechanically, hand clearing methods can be used economically since the cost effectiveness of air applied sprays decreases as the size of the area treated decreases. On the other hand, the cost of hand clearing methods becomes prohibitive as the areas to be cleared become larger. The cost of air treatment is in the area of \$30-\$60 per acre, while hand treatment costs range from \$10-\$150 per acre. Hand clearing methods can be used effectively under circumstances where work other than clearing brush needs to be done. Thinning, pruning and erosion control can be brought to be done at the same time as brush clearing and can bring the cost down to reasonable levels. If however, the area to be cleared consists only of brush, and no other work needs to be done, then air sprays are such a better alternative. In the case with most of the parcels scheduled for treatment with 2,4-D in this project, for the economic reasons outlined above, the choice for these parcels is reforestation under the project as outlined in the draft EIR, or no reforestation at all. If this alternative were implemented, these parcels would be eliminated from the project.

Site selection for the first years program is nearing completion. The elimination of parcels due to a restriction on the use of 2,4-D at this time will delay the project and reduce the acreage treated the first year. A prior State policy of selling off school land parcels has resulted in the sale of the most desirable and productive school land parcels. Much of the remaining school lands are marginal in some aspect, such as poor soils, steep slopes, etc. It may be difficult to identify sufficient additional parcels to replace those eliminated by the restriction of herbicide use.

The primary impacts of this alternative are:

A. Elimination of substantial areas of State school lands from coniferation under this project.

# SIERRA COUNTY

PLANNING DEPARTMENT • PLANNING COMMISSION

P.O. BOX 530  
DOWNEYVILLE, CALIFORNIA 95936  
PHONE: 935-289-0771 EXT. 22

June 20, 1978

RICHARD M. TUTTILL, CHAIRMAN  
PLANNING COMMISSION

THE H. BEALS  
PLANNING DIRECTOR

State Lands Commission  
1207 13th Street  
Sacramento, CA 95814

Attention: Mr. Dave Black

File: Herbicides

Dear Mr. Black:

Thank you for the opportunity to review the draft environmental impact report for the Watershed and Forest Rehabilitation Project. In general terms, I feel this environmental impact report was well researched and written. In addition, it appears that the author made a commendable attempt to prepare a concise and readable document.

In terms of specifics, I do have several comments as follows:

- 1) Alternatives: The alternative of implementing the project without the use of herbicides should be addressed.
- 2) Impacts on Wildlife: The documented toxic effects of 240 on eggs should be mentioned in this section. A mitigation measure could be included limiting the carrier material to water and thus eliminating the use of oil.

Thank you again for the opportunity to comment on this document.

Sincerely,

SIERRA COUNTY  
PLANNING DEPARTMENT

*Andy Eughanour*

Andy Eughanour  
Assistant Planning Director

AC/sent/6/42

JUN 20 1978

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PLANNING DEPARTMENT

B. Delay of the project and possible reduction in acreage created.

C. In some marginal areas excluded from this project by a ban on 2,4-D, will remain barren and/or unproductive of commercial species of timber.

Other impacts, beneficial and negative which will result from this alternative include:

A. No possible risk of contamination of air, water or soil.

B. Less risk of initiating erosion and/or mass movements since the areas which will be eliminated by this alternative are those most susceptible to these effects.

C. In areas where erosion is at present a problem, there will be no beneficial soil stabilizing effect due to the reforestation effort.

D. The loss to the State of any future income which may result from the sale of timber which potentially could be produced from the parcels which would be eliminated.

E. Areas which at present are barren and unsightly due to past burning or logging will receive no improvement in scenic qualities.

F. There are four known studies which evaluated the effects of 2,4-D, sprayed at field concentrations, on egg hatchability, chick malformation and subsequent growth (Dost 1977).

Of these four, Lutz-Ostertag and Lutz (1970) were the only researchers to find a toxic effect (Dost 1977). Subsequent research has failed to reproduce the embryonic mortality and terata.

Somers et al., (1973, 1974) performed two studies on chicken and pheasant eggs, and found no negative effects from spraying with mixtures of 2,4-D and 2,4,5-T or 2,4-D and picloram. In fact, male chicks had an improved rate of growth if they came from eggs sprayed with herbicides.

Gyrd-Hansen and Dalgaard-Mikkelsen (1974) dipped hen eggs in 2,4-D, also with no effect (Dost 1977).

Kepischke (1972) found no negative effects from spraying pheasant eggs with an aqueous solution of 2,4-D. Spraying with diesel fuel blocked hatching completely, however, indicating that the use of oil as a carrier during nesting season may be unwise.

Memorandum

Husy D. Johnson  
Secretary for Resources  
Attention: I. Frank Goodson

LIFE-LAS  
The Resources Agency

Date: July 3, 1978

Re: NEI

Subject: Comments, DEIR,  
"Watershed and Forest  
Rehabilitation Project"  
7/3/78

To: Department of Water Resources

The Department of Water Resources (DWR) has reviewed the subject report and has the following comments:

1. The DEIR contains an adequate discussion of the hydrologic aspects of the project.
2. Contrary to the report's claim, the impact of site preparation may be significant, depending on the size of the watershed, erosion and mass movement potential of the site, and previous disturbance of surrounding land. These factors should be considered for individual site preparation projects.
3. Although the DEIR states that many of the parcels to be reforested have been logged, it does not mention previous reforestation efforts. The reasons for the failure of any previous reforestation efforts should be analyzed before another planting is made.
4. Based on DWR studies of logging's effect on erosion and turbidity, we suggest the following as methods of preserving the long-range productivity of sensitive soils:
  - a. Leaving windrows unburned would increase soil and moisture retention, act as a windbreak, increase small-animal habitat, and reduce air pollution. These benefits should be compared with the possible risk of uncontrolled fire.
  - b. The sponsor should consider the benefits of retaining existing brush at specific locations. These benefits include reduction of the soil's susceptibility to mass movement or erosion and increased infiltration of rainwater.

*Harold L. Johnson*  
Harold B. Robie  
Director  
8-435-5582

- Responses:
- Comment 1. No response required.
  - Comment 2. The report states that the impact of site preparation on local hydrologic regimes may be inconsequential where the parcel is very small in relation to the total watershed. Size of parcel, erosion and mass movement potential and previous disturbance of surrounding land will be considered for each parcel individually prior to treatment.
  - Comment 3. Agreed. Any previous reforestation effort in the vicinity will be evaluated for causes of success or failure.
  - Comment 4. Agreed. These options will be considered for each parcel.

Comments Received By Telephone

California Department of Fish and Game

1. Requested inclusion of some provision for follow-up evaluations of the effect of the project on each areas wildlife, broost improvement, etc.

2. Requests the statement "the loss of habitat for the existing brushland wildlife will be balanced by the creation of new habitat for forest wildlife." on page 38 be deleted.

3. Requests recognition of the fact that California Department of Fish and Game has jurisdiction over rare and endangered plants.

Response:

1. All parcels will receive follow-up evaluations. These will take place one - three years after the project is terminated and will evaluate seedling mortality, growth rate and emergent brush competition as well as wildlife impacts and watershed rehabilitation.

2. Change made.

3. No response necessary.

## Exhibit B - Advertising Procedure

The staff prepared a two page notice to contractors describing the project and listing the parcels selected for mechanical site preparation by the private sector, which was advertised as follows:

- a. This notice was advertised once on each of two consecutive weeks in a local and general circulation newspaper distributed in the areas of the subject parcels;
- b. The notice was also advertised for two consecutive weeks in two builders' newspapers distributed in northern California;
- c. Both the above notice and a prospectus was delivered to the Minority Business Enterprise and Office of Small Business in Sacramento with follow-up in person by the staff;
- d. The notice was mailed to lists of contractors known to the State and Federal Forest officers in the regions of the subject parcels (50-60 names);
- e. The notice was mailed to the entire list of Builders' Exchanges in north and central California and northern Nevada. Follow-up calls were made to these to verify receipt and posting of the notices; and
- f. Prospectuses were mailed and hand-delivered to any who requested them.

This Calendar Item No. 32  
was approved as Minute Item  
No. 32 by the State Lands  
Commission by a vote of  
2-0 with one abstention  
at its 8/31/78 meeting. MINUTE ITEM

8/78  
Grimes

32. TIMBER MANAGEMENT PROGRAM - W 21630

During consideration of Calendar Item 32, attached,  
Commission-Alternate Sid McCausland abstained from voting on  
the item.

Upon motion duly made and carried, the resolution as presented  
in Calendar Item 32 was approved by a vote of 2-0, with one  
abstention.

At the close of the meeting, Mr. McCausland (now Acting Chairman)  
stated before the staff proceeded in becoming more active in its  
timber management program, he would like to have a policy dis-  
cussion to determine how far the Commission wants to become in-  
volved in the timber management business. Mr. William F. Northrop,  
Executive Officer, stated staff would submit a program to the  
Commission for its review setting forth various alternatives.

Attachment: Calendar Item 32 (3 pages)