

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	1
Introduction and Description of Document.....	1
Project Description	3
Relationship to Prior Documents	4
Summary of Impacts and Mitigation Measures.....	5
Cumulative Impacts.....	5
Alternatives.....	6
Unavoidable Significant Environmental Effects	6
Significant Irreversible Environmental Changes	6
Growth Inducing Effects	6
Effects Found not to be Significant	7
Potential Areas of Controversy and Issues to be Resolved	9
CHAPTER 1 INTRODUCTION.....	1-1
1.1 Project Background and History.....	1-1
1.1.1 Initial Application (1995)	1-1
1.1.2 Second Application (2003)	1-2
1.1.3 County Determinations with regard to CEQA Review.....	1-4
1.2 CEQA Evaluation Process and the Purpose of an EIR.....	1-4
1.3 Methodology and Scoping of the EIR	1-7
1.4 Organization of the EIR	1-8
CHAPTER 2 PROJECT DESCRIPTION	2-1
2.1 Project Objectives	2-1
2.2 Project Location and Setting.....	2-1
2.3 Project Description	2-4
CHAPTER 3 SETTINGS, IMPACTS, AND MITIGATION MEASURES	3-1
3.1 Introduction.....	3-1
3.1.1 Focus of Analysis.....	3-1
3.1.2 Determination of Significance	3-2
3.1.3 Relationship to General Plan and General Plan EIR	3-2
3.2 Impact Analysis.....	3-2
3.2.1 Biological Resources – Population of Coastal Cutthroat Trout.....	3-2
3.2.2 Water Resources – Substantial reduction in the amount of water otherwise available for public water supplies.....	3-10
CHAPTER 4 EVALUATION OF ALTERNATIVES AND CUMULATIVE EFFECTS..	4-1
4.1 Alternatives Analysis	4-1
4.1.1 Introduction.....	4-1
4.1.2 Alternative No. 1 – No Project Alternative	4-2
4.1.3 Alternative No. 2 – Alternative Water Supply (Wells).....	4-5
4.1.4 Alternative No. 3 – Clustered Development.....	4-8

4.1.5	Environmentally Superior Alternative	4-10
4.1.6	Feasibility Analysis	4-11
4.2	Cumulative Impacts.....	4-14
4.2.1	Summary	4-14
4.2.2	Identification of Projects Contributing to Cumulative Impacts	4-15
4.2.3	Cumulative Impacts of Development	4-17
CHAPTER 5	OTHER MANDATORY CEQA SECTIONS	5-1
5.1	Significant Environmental Effects which cannot be Avoided	5-1
5.2	Significant Irreversible Environmental Changes	5-1
5.3	Growth Inducing Impacts	5-1
5.4	Effects Found Not to Be Significant	5-2
5.5	Persons Contacted in the Preparation of this EIR.....	5-4
5.6	Persons Preparing this EIR.....	5-4
5.7	References	5-4
CHAPTER 6	MITIGATION MONITORING AND REPORTING PLAN	6-1
6.1	Introduction.....	6-1
6.2	The Program.....	6-1

APPENDICES

Appendix A:	Initial Study Prepared for Original Subdivision Application (1995)
Appendix B:	Water Supply for the City of Trinidad Assessment (Winzler & Kelly, 1995)
Appendix C:	Notice of Determination for Original Subdivision Application (1998)
Appendix D:	Streambed Alteration Permit
Appendix E:	Evaluation and Acceptance of Onsite Water System (2000)
Appendix F:	Appellate Court Decision, Friends of Westhaven and Trinidad vs. County of Humboldt (2000)
Appendix G:	Appellate Court Decision, Friends of Westhaven and Trinidad vs. County of Humboldt (2003)
Appendix H:	Initial Study Prepared for Re-Submittal of Subdivision Application (2005)
Appendix I:	Board of Supervisors Resolution No. 05-55 and 05-56
Appendix J:	Appellate Court Decision: Moss v. County of Humboldt
Appendix K:	City of Trinidad Water Demand Letters from 2004 and 2005
Appendix L:	2009 Notice of Preparation and Responses
Appendix M:	Biological Assessment of Deadman and Luffenholtz Creeks (URS Corp., 2009)
Appendix N:	Evaluation of Luffenholtz Creek Diversion Capacity – Trinidad Water System & Proposed Moss Minor Subdivision Project (LACO, 2009)
Appendix O:	Preliminary Feasibility of Connecting Memorandum (Winzler & Kelly, April 6, 2009) and Supplemental Evaluation of Luffenholtz Creek Diversion Capacity (LACO, May, 2010)
Appendix P:	Domestic Water Well Feasibility Analysis (LACO, 2009)
Appendix Q:	Cumulative Impacts Project List

EXECUTIVE SUMMARY

Introduction and Description of Document

The California Environmental Quality Act (Public Resources Code Section 21000 et seq.) (CEQA) and the associated State CEQA Guidelines (California Code of Regulations Section 15000 et seq.) require public agencies to analyze the potential effects of a proposed project to a wide variety of environmental and related factors prior to approval. If all potential effects are determined to be “less than significant,” a Negative Declaration is prepared. If any potential effects are determined to be “potentially significant”, then an Environmental Impact Report (EIR) is prepared. The purpose of an EIR is to disclose the anticipated effects of the project and any available alternatives or “mitigation measures” which would reduce, eliminate, or avoid the anticipated effect.

CEQA compliance is intended to be an open and public process with participation from public agencies, private individuals, and organizations. Participants are invited to provide input into the analysis of environmental effects, the determination of the level of significance of those effects and the design of mitigation measures. Where a project is expected to have significant effects, even after all available mitigation measures are adopted, the Lead Agency preparing an EIR has the responsibility to determine whether the advantages of the project outweigh the potential harm to the natural and human environment.

This EIR addresses the potential impacts of the Moss Parcel Map Subdivision, a proposed division of land under consideration by the County of Humboldt. On August 16, 1995, Mr. Moss, the property owner, submitted an application to divide approximately 94 acres of forested land east of the City of Trinidad into four parcels. As described in more detail below, Humboldt County conducted an Initial Study (Appendix A) of the proposed project and concluded that the project would have no potentially significant effects which could not be mitigated. The Humboldt County Planning Commission approved the project on November 20, 1997, and adopted a Negative Declaration. The Board of Supervisors considered an appeal of the Planning Commission’s approval on December 2, 1997, and upheld the Planning Commission’s findings. A Notice of Determination (Appendix C) was filed with the County Clerk on January 29, 1998, indicating that a Negative Declaration had been approved. Following litigation (described in greater detail below), on April 8, 2003, the Court of Appeal of California, First Appellate District, Division Three, determined that the Tentative Map approval had expired on November 20, 1999 (Appendix G). The Appellate Court further found that the request for a stay of time that Mr. Moss had submitted to the County of Humboldt on August 8, 2000, was not timely and could not be used to extend the life of the map.

On September 23, 2003, Mr. Moss submitted a new application to Humboldt County for permission to carry out a project identical to the one previously approved. A second Initial Study (Appendix H) was conducted following the new application and affirmed by the Humboldt County Board of Supervisors on August 16, 2005 (Appendix I). The California First Appellate

District Court of Appeal (Division Three) issued a ruling on May 7, 2008 (Appendix J), declaring that the original (1997) environmental analysis continues to be valid for the project except for those limited areas where the second (2005) Initial Study demonstrated that circumstances had changed between the two analyses. The Court of Appeal further determined that two of the potentially significant effects identified in the 2005 Initial Study meet this test and merit additional analysis. The concluding decision of the 2008 ruling of the Court of Appeal reads:

“The judgment of the trial court denying Moss’s petition for writ of mandate and requiring preparation of a new EIR with respect to issues addressed in Resolution No. 05-56 is reversed in part. The County may require a supplemental review under section 21166 only with respect to the project’s environmental impacts on (1) water supply to the City of Trinidad, and (2) the population of coastal cutthroat trout. In all other respects, the judgment is affirmed. Each side shall bear its own costs on appeal.”

The County of Humboldt has relied on three sections of the CEQA Guidelines to determine the appropriate type of environmental document to prepare for the current review of the Moss Parcel Map Subdivision in light of the Court of Appeals ruling. *CEQA Guidelines*, Section 15161 defines a “Project EIR” as:

“The most common type of EIR examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation.”

CEQA Guidelines Section 15162 and Section 15163 together describe required and permitted Lead Agency actions to be taken when, as in this case, it is determined that circumstances of a project have changed following the approval of an environmental document. Section 15162 requires the preparation of a “Subsequent EIR or Negative Declaration” when:

“Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects”

CEQA Guidelines Section 15163 permits the lead agency to prepare a supplement to an EIR if:

*“(1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and
(2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation”*

As such, Humboldt County has determined that the appropriate environmental document for the current review of the Moss Parcel Map Subdivision is a project level Supplemental EIR (SEIR). This EIR is written to update the findings of the 1997 Initial Study and Negative Declaration to

account for those potentially significant effects which were identified in the 2005 Initial Study and which were accepted by the Court of Appeals in its 2008 ruling as addressing changed circumstances.

On April 7, 2009, Humboldt County circulated a Notice of Preparation (NOP) (Appendix L) indicating that an EIR would be prepared for the project and soliciting additional comment. The 30-day comment period for the NOP ended on May 7, 2009. Individual agency scoping meetings were held on April 28, 2009, with the City of Trinidad and on May 1, 2009, with the California Department of Fish and Game (DFG). Written responses to the NOP were received from: The State Clearinghouse, the City of Trinidad, DFG, and Stephen Sungnome Madrone, (neighboring property owner) (Appendix L).

Section 15123 for the *CEQA Guidelines* requires that each EIR contain a brief summary of the proposed action and its consequences. The Executive Summary must include the following:

1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; 2) Areas of controversy known to the lead agency including issues raised by agencies and the public; and 3) Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects.

Project Description

The proposed project is located in Humboldt County, approximately one mile east of the City of Trinidad, on both sides of Fox Farm Road, approximately 0.91 mile northeast from the intersection of Fox Farm Road with North Westhaven Drive, on the properties known as 900, 1180, 1190, and 1199 Fox Farm Road (Figure 2-1). The project applicant proposes to divide an approximately 94 acre parcel into four parcels ranging from 20.11 acres to 32.11 acres (Figure 2-5) with the expectation that the lots will subsequently be developed in conformance with the County General Plan and Zoning Ordinance. The General Plan land use designation for the site, as shown in the North Humboldt General Plan (NHGP), is split with the southerly approximately 20 acres of the site designated as TIMBER; RECREATION, and the northerly approximately 74 acres designated as DISPERSED HOUSES; TIMBER. The site is within the Exclusive Agriculture (AE) Zone. Generally, the AE Zone permits a maximum of one residential unit per parcel.

Prior to the April 8, 2003, ruling of the California Court of Appeals indicating that the original map approval had expired on November 29, 1999, the applicant secured approvals and carried out improvements related to the project. Mr. Moss secured an encroachment permit and approval of design plans for the widening of Fox Farm Road. Improvements to the road were accepted as complete by Humboldt County. Mr. Moss also secured a "Section 1600" Streambed Alteration permit from the California DFG for the installation of domestic water collection facilities in Deadman Creek and the North Fork of Luffenholtz Creek (Appendix D). The water improvements were accepted by the Humboldt County Department of Environmental Health on

July 25, 2000 (Appendix E). As these improvements were approved and installed under the provisions of a valid environmental document, and prior to the determination that the originally approved Tentative Map had expired, those project elements are no longer considered to be a part of the current proposed project. Although the construction of water intake facilities was completed under an approved Streambed Alteration Permit, the DFG indicates in their response to the most recent Notice of Preparation (Appendix L), that the applicant will need to secure a subsequent Streambed Alteration Permit for the diversion of water from the streams to serve the proposed residences.

Relationship to Prior Documents

As noted above, an identical project was approved in 1997, with an Initial Study (Appendix A) which found that the project would have no significant effects. Upon reapplication, a new Initial Study (Appendix H) was completed in 2005, which resulted (following the resolution of litigation) in a determination that the 1997 Initial Study and associated Negative Declaration and Notice of Determination remain valid for the project for all potential impacts except those for which the 2005 Initial Study identified “changed circumstances.”

The two areas of the 1997 Initial Study determined to have been superceded by the 2005 Initial Study as a result of changed circumstances are:

Section IV.i: Water – Substantial reduction in the amount of water otherwise available for public water supplies; and

Section VII.a: Biological Resources – Impact to endangered, threatened, or rare species of their habitats (including but not limited to plants, fish, insects, animals, and birds.)

Section IV.i has been superceded on the basis of findings in the 2005 Initial Study that indicated the project could have a significant effect on the amount of water available for the City of Trinidad public water system. The proposed project would draw domestic water from the North Fork of Luffenholtz Creek, a tributary of Luffenholtz Creek which is the primary source of domestic water for the City of Trinidad. The City of Trinidad submitted a letter to the County of Humboldt on May 25, 2004 (Appendix K), indicating that municipal water demand had substantially exceeded the projections made in the 1997 Initial Study and that, therefore, the City would be significantly adversely affected by the reduction of water from Luffenholtz Creek upstream of their water intake. The City of Trinidad provided additional information to support this position in a second letter dated August 4, 2005 (Appendix K).

Furthermore, the Trinidad Cal Fire station located outside the City limits has since requested a water service extension to provide potable water to the station from the City’s municipal system since their current water source has become unreliable and unsuitable for drinking. An extension of City services to a location beyond the City’s boundaries requires action by the Local Agency Formation Commission (LAFCo). Before this action can occur, Cal Fire and the City are

required to participate in a feasibility study to ensure that a new service connection would not negatively impact the provision of adequate water supplies to the City's existing users.

Section VII.a has been superceded on the basis of findings in the 2005 Initial Study that the coastal cutthroat trout had been listed by the California DFG as a "Species of Concern" after the project had been reviewed and approved. As the coastal cutthroat trout was not identified as a species of concern at the time of the 1997 Initial Study, no effort had been made to determine whether that species inhabits the North Fork of Luffenholtz Creek, Deadman Creek, or Luffenholtz Creek, downstream of the subject site. The 2005 Initial Study indicates that additional information would be necessary to determine whether the proposed project would have a significant effect on coastal cutthroat trout.

This SEIR will be focused narrowly on the potential impacts to coastal cutthroat trout and the water supply of the City of Trinidad. The original (1997) Initial Study and Notice of Determination are included in Appendices A and C, and should be consulted for the analysis of all other resource areas. Some information in the 1997 Initial Study will be referenced or summarized in those portions of the EIR which are intended to address all project impacts comprehensively, such as the required list of potentially significant impacts and mitigation measures below. The inclusion of these references is intended to improve the readability and ease of use of the document, but is not intended to re-analyze, update, or amend the 1997 Initial Study and Negative Declaration.

Summary of Impacts and Mitigation Measures

CEQA Guidelines Section 15123(b)(1) requires an EIR Executive Summary to identify each environmental factor that is identified as significant in the absence of mitigation measures. All mitigation measures to reduce, eliminate, or avoid such impacts are also required to be identified in the Executive Summary. That information is summarized in Table ES-1 Summary of Potential Impacts and Proposed Mitigation Measures. All identified impacts including those to coastal cutthroat trout and the City of Trinidad water supply have been found to be less than significant or less than significant with appropriate mitigation measures. Note that Table ES-1 is a summary of information discussed in greater detail in Chapter 3 and Appendix A.

Cumulative Impacts

In addition to the analysis of the impacts of a specific project, CEQA Guidelines Section 15130 requires an EIR to include a discussion of the "cumulative effects" of a project. Cumulative effects typically arise where the impact from the proposed project is added to other closely related past, present, and reasonably foreseeable future projects. A cumulative effects analysis was conducted both of specific projects in the vicinity and assuming at full buildout of the local sub-watershed. Cumulative effects of the Moss Parcel Map Subdivision were determined to be less than significant with the adoption of appropriate mitigation measures.

Alternatives

CEQA Guidelines Section 15126.6 requires EIRs to discuss alternatives to the proposed project which would achieve some or all of the project goals and which have the potential to reduce one or more potential impacts of the proposed project. One of the alternatives considered is required to be the “No Project” Alternative. The complete alternatives analysis of the Moss Parcel Map Subdivision is found in Chapter 4. The alternatives considered are:

- Alternative No. 1 - “No Project”
- Alternative No. 2 – Alternative Water Supply (Wells)
- Alternative No. 3 – Clustered Development

The comparison of the potential impacts of the proposed project concluded that the “No Project” Alternative is the environmentally superior project; however, that alternative does not meet any of the project objectives. Of the alternatives that meet the project objectives Alternative No. 2 is the environmentally superior project.

Unavoidable Significant Environmental Effects

Unavoidable Significant Environmental Effects are effects of the project that cannot be mitigated or for which mitigation measures are not sufficient to reduce the impact below a threshold of significance. No unavoidable significant environmental effects have been identified as a result of the proposed project.

Significant Irreversible Environmental Changes

Significant Irreversible Environmental Changes are those which either irretrievably utilize considerable quantities of a nonrenewable resource or which commit future generations to a continued use of resources, or to a particular environmental consequence (e.g., by providing road access to a previously inaccessible area). No Significant Irreversible Environmental Changes have been identified as a result of the proposed project.

Growth Inducing Effects

Chapter Five includes a discussion of the growth inducing impact of the project, as required by CEQA Guidelines Section 15126.2(d). Such impacts are defined as the ways in which the project could encourage economic or population growth, or the construction of new housing development. Growth inducing impacts are often associated with General Plan Amendments and utility system capacity enhancements. Outside of the limited number of houses expected to be developed on the subject site, the project is not expected to lead to additional development in the area and will not have a significant effect on the local economy or ability to provide additional services.

Effects Found not to be Significant

The following effects were found not to be significant, or to be reduced to less than significant as a result of the application of appropriate mitigation measures.

- Land Use and Planning:
 - Conflict with General Plan designation or zoning
 - Be incompatible with existing land use in the vicinity
 - Affect agricultural resources or operation
 - Disrupt or divide the physical arrangement of an established community
- Population and Housing:
 - Cumulatively exceed official regional or local population projections
 - Induce substantial growth in an area either directly or indirectly
 - Displace existing housing, especially affordable housing
- Geological Problems Involving:
 - Fault Rupture
 - Seismic ground failure, including liquefaction
 - Seiche, tsunami, or volcanic hazard
 - Landslides or mudflows
 - Subsidence of the land
 - Expansive soils
 - Unique geologic or physical features
- Water:
 - Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff
 - Exposure of people or property to water related hazards such as flooding
 - Discharge into surface waters, or other alteration of surface water quality
 - Changes in the amount of surface water in any water body
 - Changes in currents, or the course or direction of water movements
 - Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability
 - Altered direction or rate of flow of groundwater
 - Impacts to groundwater quality
 - Substantial reduction in the amount of water otherwise available for public water supplies
- Air Quality:
 - Violate any air quality standard or contribute to an existing or projected air quality violation
 - Expose sensitive receptors to pollutants
 - Alter air movement, moisture, or temperature, or cause any change in climate
 - Create objectionable odors

- Transportation/Circulation:
 - Increased vehicle trips or traffic congestion
 - Insufficient parking capacity onsite or offsite
 - Conflicts with adopted policies supporting transportation
 - Rail, waterborne, or air traffic impacts
- Biological Resources:
 - Endangered, threaten[ed] or rare species or their habitats
 - Locally designated species
 - Locally designated natural communities
- Energy and Mineral Resources:
 - Conflict with adopted energy conservation plans
 - Use non-renewable resources in a wasteful and inefficient manner
 - Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State
- Hazards:
 - A risk of accidental explosion or release of hazardous substances
 - The creation of any health hazard or potential health hazard
 - Exposure of people to existing sources of potential health hazards
- Noise:
 - Increases in existing noise levels
 - Exposure of people to severe noise levels
- Public Services:
 - Effect or result in a need for new or altered police protection services
 - Effect or result in a need for new or altered school services
 - Effect or result in a need for new or altered other government services
- Utilities and Service Systems:
 - Power or natural gas
 - Communications systems
 - Local or regional water treatment or distribution facilities
 - Sewer or septic tanks
 - Storm water drainage
 - Solid waste disposal
 - Local or regional water supplies
- Aesthetics:
 - Affect a scenic vista or scenic highway
 - Have a demonstrable negative aesthetic effect
 - Create light or glare
- Cultural Resources:
 - Disturb paleontological resources
 - Disturb archaeological resource[s]
 - Affect historical resources

- Have the potential to cause a physical change [which] would affect unique ethnic cultural values
- Restrict existing religious or sacred uses within the potential impact area.
- Recreation:
 - Increase the demand for neighborhood or regional parks or other recreational facilities
 - Affect existing recreational opportunities
- Mandatory Findings of Significance:
 - Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory
 - Have the potential to achieve short-term, to the disadvantage of long-term, environmental goals
 - Have impacts which are individually limited, but cumulatively considerable
 - Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly

Potential Areas of Controversy and Issues to be Resolved

CEQA Guidelines Sections 15123(b)(2) and (3) require the Executive Summary to describe potential areas of controversy identified in preparation of the Draft EIR. This project has been the subject of considerable prior litigation and is expected to continue to be controversial as the environmental effects and appropriateness of the project are considered through the public review process. Issues identified in the Notice of Preparation period include the following:

- The appropriateness and completeness of the project description.
- The method of determining and analyzing cumulative impacts.
- The determination and analysis of potentially growth inducing effects of the project and actions (such as road construction), undertaken during the period in which an identical, prior project was active.

**Table ES-1
Summary of Potentially Significant Impacts and Proposed Mitigation Measures***

Impact Identifier	Impact	Mitigation Measure Identifier	Mitigation Measure	Level of Significance Following Mitigation
IS Section I.a)	Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project.	IS MM 1	Adams Fox Farm Road shall be improved to a Road Category 4 roadway as approved by the Land Use Division of the Department of Public Works from Westhaven Drive through the subject property.	Less Than Significant
		IS MM 9	The onsite sewage disposal systems shall be developed on the parcels in accordance with the County's sewage disposal regulations, and shall be located at least 100-feet from the stream transition lines of Luffenholtz and Deadman Creeks.	
IS Section III.b)	Geologic problems involving Seismic ground shaking	IS MM 2	The residential structures shall be of wood-frame construction, built in accordance with the latest edition of the Uniform Building Code for the highest seismic zone (Seismic Zone 4).	Less Than Significant
		IS MM 3	Any residential development proposed outside of the approved building envelopes as shown in the May 1995 SHN Consulting Engineers and Geologists Preliminary R-1 Geologic and Geotechnical Report shall require further geologic testing.	
IS Section III.f)	Geologic problems involving erosion, changes in topography or unstable soil conditions from excavation, grading, or fill	IS MM 4	Areas disturbed during construction shall be revegetated as soon as practical prior to the beginning of the rainy season as required in the May 1995 SHN Geologic Report.	Less Than Significant
		IS MM 5	Driveways, parking areas, and other impermeable surfaces shall be designed to dissipate runoff uniformly; particularly for runoff directed toward steep slopes or creeks.	
*Impacts and Mitigation Measures are drawn from the 1997 Initial Study Appendix A and Chapter 3 of this Draft SEIR. Impacts and Mitigation Measures discussed primarily in the 1997 Initial Study are identified as "IS Section XX" Impacts and Mitigation Measures discussed primarily in Chapter 3 are identified as "SEIR Section 3.XX."				

Impact Identifier	Impact	Mitigation Measure Identifier	Mitigation Measure	Level of Significance Following Mitigation
IS Section III.f)	Geologic problems involving erosion, changes in topography or unstable soil conditions from excavation, grading, or fill	IS MM 7	Streamside Management Areas of 100 feet from both sides of the stream transition lines of the North Fork of Luffenholtz and Deadman Creek shall be established, and erosion control and other measures for development within these areas shall include the following: a. During construction, land clearing and vegetation removal will be minimized. b. Construction sites will be planted with native or naturalized vegetation and mulched with natural or chemical stabilizers to aid in erosion control and insure re-vegetation. c. Long slopes will be minimized to increase infiltration and reduce water velocities down cut slopes by such techniques as soil roughing, serrated cuts, selective grading, shaping, benching, and berm construction. d. Concentrated runoff will be controlled by the construction and continued maintenance of culverts, conduits, non-erodible channels, diversions dikes, interceptor ditches, slope drains or appropriate mechanisms. Concentrated runoff will be carried to the nearest drainage course. Energy dissipaters may be installed to prevent erosion at the point of discharge where discharge is to natural ground or channels. e. Runoff shall be controlled to prevent erosion by onsite or offsite methods. Onsite methods include, but are not limited to, the use of infiltration basins, percolation pits, or trenches. Onsite methods are not suitable where high groundwater or slope stability problems would inhibit or be aggravated by onsite retention or where retention will provide no benefits for groundwater recharge or erosion control. Offsite methods	Less Than Significant

Impact Identifier	Impact	Mitigation Measure Identifier	Mitigation Measure	Level of Significance Following Mitigation
			<p>include detention or dispersal of runoff over non-erodible vegetated surfaces where it would not contribute to downstream erosion or flooding.</p> <p>f. Disposal of silt, organic, and earthen material from sediment basins and excess material from construction will be disposed of out of the Streamside Management Area to comply with California DFG and Regional Water Quality Control Board.</p> <p>g. No pesticides or herbicides shall be used within the Streamside Management Areas.</p> <p>Winter operations (generally October 15 through April 15) shall employ the following special considerations:</p> <p>h. Slopes will be temporarily stabilized by stage seeding and/or planting of fast germinating seeds such as barely or rye grass; and mulched with protective coverings such as natural or chemical stabilizations.</p> <p>i. Runoff from the site will be temporarily detained or filtered by berms, vegetated filter strips, and/or catch basins to prevent the escape of sediment from the site. Drainage controls are to be maintained as long as necessary to prevent erosion throughout construction.</p>	
IS Section VI.b)	Hazards to safety from design features or incompatible uses	IS MM 10	<p>A complete hydraulic report and drainage plan shall be submitted for approval by the Department of Public Works. This will require the construction of drainage facilities adjacent to and across Adams Fox Farm Road. The applicant shall dedicate drainage release easements to the County of Humboldt for all cross drains as directed by the Department of Public Works.</p>	Less Than Significant

Impact Identifier	Impact	Mitigation Measure Identifier	Mitigation Measure	Level of Significance Following Mitigation
		IS MM 6	A school bus turnaround area shall be provided on the subject property adjacent to Adams Fox Farm Road as shown on the Improvement Plans for Fox Farm Road.	
IS Section VI.c)	Inadequate emergency access or access to nearby uses	IS MM 1	As above	Less Than Significant
IS Section VI.e)	Hazards or barriers for pedestrians or bicyclists	IS MM 1	As above	Less Than Significant
IS Section VII.d)	Wetland habitat	IS MM 7	As above	Less Than Significant
IS Section VII.e)	Wildlife dispersal or migration corridors	IS MM 9	As above	Less Than Significant
IS Section IX.b)	Possible interference with an emergency response plan or emergency evacuation plan	IS MM 7	As above	Less Than Significant
IS Section IX.e)	Increased fire hazard in areas with flammable brush, grass, or trees	IS MM 1	As above	Less Than Significant
		IS MM 8	Residential development shall comply with Humboldt County Fire Safe Ordinance and shall include: <ul style="list-style-type: none"> a. Defensible space of at least 30-feet from all structures to property lines. b. A 2,500-gallon emergency water storage tank for each parcel. c. Street names, addresses, and water sources shall be clearly marked where visible from the public road d. Roadway and driveway grades shall not exceed 16%. e. Disposal, including chipping, burying, burning, or removal to a landfill site approved by the County, of flammable vegetation and fuels caused by site development and construction, road and driveway construction, and fuel modification, shall be completed prior to completion of road construction, or final inspection of a building permit or initiation of a use under a use permit. f. Sample Codes, Covenants, and Restrictions shall be written 	Less Than Significant

Impact Identifier	Impact	Mitigation Measure Identifier	Mitigation Measure	Level of Significance Following Mitigation
IS Section XI.a)	Effect or result in a need for new or altered government fire protection services	IS MM1 IS MM 8	As above As above	Less Than Significant
IS Section XI.d)	Effect or result in a need for new or altered maintenance of public facilities, including roads	IS MM 1 IS MM 8	As above As above	Less Than Significant
IS Section XIV.a)**	Disturb paleontological resources	IS MM 10 IS MM 11	As above If any paleontological, archaeological, or historical resources are discovered during construction, all activities must cease and a qualified cultural resources specialist contacted to analyze the significance of the find and formulate further mitigation (e.g., project relocation, excavation plan, and protective cover.) pursuant to California Health and Safety Code Section 7050.5, if human remains are encountered, all work must cease and the County Coroner contacted.	Less Than Significant
IS Section XIV.b)**	Disturb archaeological resource[s]	IS MM 11	As above	Less Than Significant
IS Section XIV.c)**	Affect historical resources	IS MM 11	As above	Less Than Significant
SEIR Section 3.2.1	Affect a Sensitive Species (Coastal Cutthroat Trout)	EIR MM 1	The provisions of 1997 IS Mitigation Measure 7 shall continue to apply to the project throughout the remainder of the project, including periods of vegetation removal to clear existing building pads, grading or re-grading of such pads and any construction activities which may occur on the subject site.	Less Than Significant

Impact Identifier	Impact	Mitigation Measure Identifier	Mitigation Measure	Level of Significance Following Mitigation
	EIR MM 2		<p>The developer/applicant shall provide dry season water storage facilities for each residence. Based on the current state of knowledge regarding dry season flows in the two affected streams and the life-cycle of non-anadromous populations of coastal cutthroat trout, the risk to the species through potential de-watering of the streams at or below the subject site is sufficient to prohibit any water diversions during the dry season. As such, each residence shall provide water storage sufficient for a minimum of 107 days of independent operation from August 1st through November 15th of each year. Each residence will be assumed to require a minimum of 400 gallons per day (pursuant to the Humboldt County Framework Plan §2554.9A), to a dry season total storage requirement of 42,800 gallons. Each parcel shall have recorded against it an agreement with the County, and enforceable by the County, requiring the installation of a water storage facility capable of meeting the needs described herein. Residential water storage quantities shall be above and beyond the 2,500 gallons required by Cal Fire for developments within the State Responsibility Area (SRA) for fire protection. Storage for both uses, however, may be provided for within one storage unit. Permanent flow meters shall be installed at the intake to each storage tank.</p>	
		EIR MM 3	<p>To avoid excess short-term withdrawals during the periods in which the tanks required by 2009 Mitigation Measure No. 2 are being filled, pumps shall be sized or otherwise regulated to draw a maximum of two gallons per minute on Deadman Creek and a combined maximum of five gallons per minute on the North Fork of Luffenholtz Creek.</p>	
SEIR Section	Cumulative impacts to the water supply of the City of Trinidad.	EIR MM 3	Prior to approving additional discretionary approvals for development in the vicinity of the subject site, the County of	Less Than Significant

Impact Identifier	Impact	Mitigation Measure Identifier	Mitigation Measure	Level of Significance Following Mitigation
4.2.3.3			<p>Humboldt shall identify all parcels within the Luffenholtz Creek Critical Water Supply Area (CWSA) and adopt a policy to require that any proposed future development of residential units within this area shall demonstrate that such development will not reduce in-streams water flows below that necessary for maintaining anticipated demand for the Trinidad Water System and minimum pass-by flows to maintain habitat value in the stream for fish and other species.</p>	

** Although paleontological archaeological and historic resource effects were listed as “less than significant”, the 1997 Mitigation Monitoring Plan adopted a Mitigation Measure for such effects.

CHAPTER 1 INTRODUCTION

1.1 Project Background and History

This Draft SEIR provides an analysis of the Moss Parcel Map Subdivision, a proposed division of land under consideration by the County of Humboldt. Mr. Moss, the property owner has submitted an application to divide approximately 94 acres of forested hillside land, east of the City of Trinidad into four parcels. The current consideration is expected to serve as the culmination of an application process first begun in 1995. This section is intended to provide an overview of the review process and a brief summary of associated litigation and findings to provide context for the review and for the determinations the County of Humboldt has made as the Lead Agency for this document. Additional information is available from the County of Humboldt Community Development Services Department.

1.1.1 Initial Application (1995)

Mr. Moss first applied for a division of land on August 8, 1995. County of Humboldt planning staff reviewed the application and, in accordance with the CEQA, prepared an Initial Study (Appendix A). The findings of the initial study relied, in part, on technical studies submitted with the application. The most critical of those studies to the ongoing consideration of the project was an assessment of the Water Supply of the City of Trinidad prepared by Winzler & Kelly, a Consulting Engineering Firm (Appendix B). The potential environmental impacts of the project were analyzed and Staff prepared proposed Mitigation Measures to reduce the impacts of effects found to be Significant. The Initial Study concludes with the finding that all potentially significant impacts had been mitigated to fall below the threshold of significance and that a Mitigated Negative Declaration should be prepared. The project was presented to the Humboldt County Planning Commission at a Public Hearing on November 20, 1997. The Planning Commission formalized the approval of the project, conditions of approval and the Mitigated Negative Declaration and directed Staff to file a Notice of Determination (NOD) with the Humboldt County Clerk.

An organization called “Friends of Westhaven & Trinidad” appealed the Planning Commission decision to the Board of Supervisors. The Board of Supervisors rejected the appeal on December 2, 1997, upholding the Planning Commission’s decision to approve the project and adopt a Mitigated Negative Declaration. A NOD recording the decision to adopt a Mitigated Negative Declaration was filed with the Humboldt County Clerk on January 29, 1998 (Appendix C).

“Friends of Westhaven & Trinidad” filed a petition with the courts on February 25, 1998, requesting an order to overturn the Board’s decision. While the case was under consideration by the courts, the applicant carried out several improvement projects which had been required as conditions of approval of the tentative map. Those improvements included the widening of Fox Farm Road, conducted under an encroachment permit issued by the County of Humboldt, and the installation of domestic water diversion and collection equipment in the North Fork of Luffenholtz Creek under a Streambed Alteration Permit issued by the DFG (Appendix D) and

accepted by the Humboldt County Division of Environmental Health (Appendix E). It appears that all of this work was completed prior to the final conclusion of litigation regarding the project. The “Friends of Westhaven” suit concluded with a decision of the Trial Court on January 31, 2000, and a further decision by the California Court of Appeal, First Appellate District, on April 3, 2000 (Appendix F). The Courts concluded that “Friends of Westhaven & Trinidad” had not exhausted their administrative remedies prior to filing the lawsuit. Therefore, the courts determined that the Board of Supervisor’s and Planning Commission’s actions should be sustained.

The Subdivision Map Act (Government Code Section 66410 et seq) governs the process local governments use for reviewing proposed divisions of land. Section 66463.5 of the Subdivision Map Act establishes an automatic expiration period of 24-months for approved tentative maps, unless one of several types of extension is granted. If a Final Map is not filed before the Tentative Map expires, the project terminates and no further action occurs unless a new application is submitted for review. If the approval of a Tentative Map is subject to a court proceeding, the sub-divider may apply to the local agency to request a stay of time while the suit is pending. If the local agency grants the stay, the 24 month period extends for up to five years while the court case is pending.

Based on the petition filed by “Friends of Westhaven and Trinidad”, the subdivider would have had the option to request a stay of time at any point after the petition was submitted on February 25, 1998. Mr. Moss submitted a request for a stay of time on August 8, 2000, after the conclusion of the court case. The Board of Supervisors approved the applicant’s request. “Friends of Westhaven & Trinidad” petitioned the court to overturn the decision to grant an extension of time, on the basis that the map had expired prior to the Board’s action, on November 29, 1999, 24-months after the Planning Commission approval. On April 8, 2003, the California Appellate Court (First District) issued an opinion (Appendix G) that essentially concurred with the position of the “Friends of Westhaven & Trinidad” that the map had expired prior to the request for a stay of time. As such, the project was deemed to have expired and the initial application for the Moss Parcel Map Subdivision was terminated.

1.1.2 Second Application (2003)

On September 23, 2003, Mr. Moss reapplied to the County of Humboldt for an identical division of land. County staff began the review process for the project as a new application. This review included the preparation of a second Initial Study (Appendix H) for the project which was completed on May 19, 2005. As the review was based on a new application, County Staff requested fresh input from the public and affected agencies with regard to the project. There are a number of substantive differences between the two documents. Some of those changes relate specifically to new information which was presented in the 2003-2005 review that was either unavailable in 1997 or which had changed in the interim. Some of the changes appear to follow from the changes in CEQA practice throughout the State and in Humboldt County between 1997

and 2005. With a new review and an updated approach to CEQA analysis, the 2005 Initial Study identified several potentially significant impacts which had not been identified as significant in the 1997 Initial Study. New mitigation measures were proposed and several impacts were identified as potentially significant after mitigation. On that basis, Staff recommended the preparation of an EIR.

The project applicant appealed Staff's determination to require an EIR to the Humboldt County Board of Supervisors, which denied the appeal on August 16, 2005 by Resolution Nos. 05-55 and 05-56 (Appendix I). The applicant then petitioned the court, requesting, in essence, that the 2005 Initial Study be set aside in favor of the 1997 Initial Study and adopted Mitigated Negative Declaration. The case was concluded on May 7, 2008, with a decision by the First District Court of Appeal of California (Appendix J). That decision found that the original (1997) Initial Study and Negative Declaration continued to be valid and applicable to the project except where the County had demonstrated that the circumstances in which the project would be carried out had changed substantially. The Court then considered the information in the 2005 Initial Study and determined that two of the impacts identified as "potentially significant" were supported by sufficient evidence of a changed circumstance to merit further consideration. Specifically, the Court authorized the County to require a supplemental review "only with respect to the project's environmental impacts on: (1) water supply to the City of Trinidad, and (2) the population of coastal cutthroat trout. The Court's reasoning for finding that changed circumstances with regard to these two issues merited further review may be summarized as follows:

Coastal Cutthroat Trout: Following the approval of the 1994 Initial Study, the County of Humboldt was notified that DFG had identified coastal cutthroat trout as a "species of concern". The original Initial Study contained no information to indicate whether coastal cutthroat trout may be present in Luffenholtz Creek or the North Fork of Luffenholtz Creek or whether the project could have a potentially significant effect on the population of the species, if they are present.

Water Supply to the City of Trinidad: The 1997 Initial Study analyzed the availability of surface water for the proposed project and the effect of withdrawals on the largest downstream user, the City of Trinidad. The analysis relied in large part on a technical study prepared in 1995 by a consulting engineering firm (Winzler & Kelly) (Appendix B). That study indicated that there was sufficient water available in Luffenholtz Creek to supply the City of Trinidad at then-current, and substantially increased demand. In 2004, the City of Trinidad submitted evidence to the County of Humboldt that municipal water demand had increased dramatically in the period following the 1995 study. As such, the City indicated there may no longer be sufficient water flows in the Luffenholtz Creek system to support additional upstream withdrawals.

1.1.3 County Determinations with regard to CEQA Review

Based on the 2008 findings of the California Appellate Court (First District), the County of Humboldt has made the following determinations with regard to the CEQA review for the Moss Parcel Map Subdivision:

- 1) With the exception of impacts to coastal cutthroat trout and water supply to the City of Trinidad, the 1997 Initial Study continues to provide a legally adequate analysis of all potential project impacts and appropriate mitigation measures.
- 2) With regard to potential project impacts to coastal cutthroat trout and the water supply to the City of Trinidad, the County will rely on the findings of the 2005 Initial Study which indicate that the circumstances under which the project will be carried out have changed, and further, that the changed circumstances are such that to cause potentially significant impacts to those resources.
- 3) The baseline date for determining whether circumstances have changed following the 1997 Initial Study is determined to be May 19, 2005. This is the date the Board of Supervisors adopted a resolution to uphold the second Initial Study. That resolution formed the basis of the appellate courts ruling.
- 4) As the 2005 Initial Study identifies potentially significant effects of the project which were not adequately mitigated below the threshold of significance, an EIR will be prepared for the project.
- 5) As a prior environmental review document (the 1997 Initial Study and associated Negative Declaration) continues to provide legally adequate analysis of the most potential impacts of the project, and only relatively minor changes are needed to address the changed circumstances, the County will prepare a Supplemental EIR as described in CEQA Guidelines Section 15163.
- 6) As the prior environmental document prepared for the project was a Negative Declaration, the Supplemental EIR will include all of the mandatory contents of an EIR as described in the CEQA Guidelines.

1.2 CEQA Evaluation Process and the Purpose of an EIR

The purpose of a Draft Environmental Impact Report (DEIR) is to evaluate the potentially significant environmental effects (“impacts”) of a proposed project and of alternatives to the project. As a Supplemental DEIR, the analysis is limited to those areas for which circumstances have changed since the original CEQA compliance documents (the 1997 Initial Study and Negative Declaration) were adopted. This EIR was prepared to meet all requirements of the CEQA (Public Resources Code Section 21000 et seq) and *Guidelines for the Implementation of the California Environmental Quality Act* (California Code of Regulations, Title 14, Chapter 3, Section 15000 et seq. – commonly referred to as the “*CEQA Guidelines*”).

The lead agency for the EIR is the County of Humboldt. CEQA typically establishes the lead agency as the public agency with the earliest, or most important discretionary authority to approve the project. In this case, the project and associated EIR will be considered for approval,

modification or denial by the Humboldt County Planning Commission. LACO Associates (LACO) has prepared the EIR as a consultant to the County.

CEQA Guidelines Section 15121(a) defines an EIR as an informational document to:

“...inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.”

Where an Initial Study or the body of an EIR leads to a finding that a project may have one or more significant environmental effects, the Section 15091 of the CEQA Guidelines requires the lead agency to make the following findings for each significant impact prior to approving the project:

- Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen (i.e., mitigate) the significant environmental effect as identified in the final EIR.
- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency, or can and should be adopted by such other agency.
- Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the Final EIR which are necessary to mitigate the impacts.

The lead agency is required to balance the economic and social benefits of a project against any unavoidable environmental effects of the project. If, in the lead agency’s opinion, the benefits outweigh the adverse effects, the agency may adopt a “Statement of Overriding Considerations” which describes specifically the benefits the lead agency expects to follow from the project and discloses how those benefits were balanced with the anticipated impacts.

CEQA Guidelines section 15004 encourages the preparation of an EIR as early in the project planning as feasible. This is to allow environmental considerations to influence project design where possible. At a minimum, the EIR must be prepared before the lead agency approves the project. The EIR provides an opportunity to change the design of the project, to mitigate significant environmental impacts, or, if appropriate, to adopt alternatives to the project that may achieve the project’s goals with less risk to the environment.

Section 15145 of the CEQA Guidelines directs lead agencies to terminate discussion of impacts which are too speculative to evaluate, after a thorough investigation.

In general, mitigation measures are required to identify specific physical changes in the project in order to be considered adequate to reduce potential impacts. Measures which are advisory or which rely on future studies with uncertain standards are typically inadequate. CEQA regulations

also require the evaluation of the impacts of actions required to mitigate environmental effects. In some cases, the California Courts have accepted mitigation measures based upon compliance with future studies or permits provided those studies or permits conform to performance standards which are disclosed in the Draft EIR and which provide sufficient assurance that the impact will, in fact, be mitigated as suggested.

Pursuant to CEQA Guidelines Section 15087, the Draft EIR will be circulated for public review. CEQA requires the lead agency to request and consider input from other agencies, individuals, and organizations. CEQA is designed to be a public process with full public disclosure of the expected environmental effects of the project. The public will have opportunities to provide comments on the Draft EIR during a 45-day review period. CEQA directs the agency to provide public notice that the Draft EIR is available for comment through a combination of mailings, postings, and published notices. During the review period, the public and all responsible agencies, trustee agencies, and other organizations may comment verbally or in writing on the Draft EIR. CEQA permits, but does not require, the lead agency to conduct a public hearing to take comments during this period. No such public hearing is proposed for this project.

Section 15132 of the CEQA Guidelines requires the lead agency to respond in writing to every comment made regarding the Draft EIR. After all comments are received, the responses will be compiled, and a Final EIR will be considered by the lead agency for certification. A Final EIR includes the following:

- The original Draft EIR.
- Corrections and amendments to the Draft EIR in response to comments from the public and reviewing agencies.
- A list of all individuals, organizations, or agencies which commented on the Draft EIR.
- All comments received.
- Lead agency responses to comments regarding the Draft EIR.

The lead agency will conduct a public hearing to take testimony regarding the adequacy of the Final EIR. Following the public hearing, the agency will exercise its independent judgment to determine whether the Final EIR has been appropriately prepared in compliance with CEQA. If so, the agency will make appropriate findings, certify the EIR and, if necessary, adopt a Statement of Overriding Considerations.

CEQA Section 21081.6 requires the lead agency to adopt a formal Mitigation Monitoring and Reporting Program if the CEQA document relies on any mitigation measures to reduce an impact below the threshold of significance. As the 1997 Initial Study identifies several such mitigation measures, a draft Mitigation Monitoring and Reporting Program has been included in the Draft EIR as Chapter Six. The purpose of the program is to ensure that mitigation measures identified in the Initial Study and/or EIR are actually carried out and achieve their intended goals. The program names the person or agency responsible for implementing each required mitigation

measure, along with a reporting process for ensuring that compliance with the mitigation measure is recorded appropriately. Where appropriate, a Mitigation Monitoring and Reporting Program may include performance standards to determine how effective the measure actually is in reducing the project's impacts. In some cases, contingency measures may be included in Mitigation Monitoring and Reporting Plans to respond to circumstances in which the primary Mitigation Measures do not perform as anticipated.

A lead agency is required to exercise its independent judgment when evaluating the anticipated impacts of a project through the preparation of an EIR or other CEQA document. The agency may rely on expert advice, or on outside consultants to prepare all or part of an EIR, but it may not merely rely on the opinion of another agency regarding the intensity of a potential effect or the sufficiency of proposed mitigations. For example, the granting of a compliance permit by an air pollution control district is not sufficient to lead to a finding that the project will have no significant effects on air quality.

1.3 Methodology and Scoping of the EIR

The first step in CEQA compliance is a scoping process to determine the type and extent of environmental study required. The scoping process also provides an initial opportunity for public and agency input. Scoping may include preparation of an Initial Study, distribution of a Notice of Preparation, and public scoping sessions.

Scoping often begins, as in this project, with the preparation of an "Initial Study" which includes a checklist of potential impacts. The purpose of the Initial Study is to provide the lead agency with the information necessary to determine whether to prepare an EIR or a Negative Declaration. If the proposed project has the potential to result in one or more significant environmental impacts, for which adequate mitigation measures have not been identified, an EIR must be prepared. If there will be no significant impacts, or if all potentially significant impacts can be mitigated to "less than significant", then a simpler Negative Declaration is sufficient to comply with CEQA.

As described in the "Project Background and History" section above, Humboldt County has prepared two Initial Studies for the identical project, in 1997 and 2005, respectively. As the 1997 Initial Study led to the adoption of a Mitigated Negative Declaration by the Humboldt County Planning Commission, the conclusions of that Initial Study have been determined by the First District Appellate Court of California to continue to hold except where specific information in the 2005 Initial Study indicates that the circumstances under which the project will be carried out have changed. As such, and pursuant to the findings of the Appellate Court (see Appendix J), the overall scope of this EIR has been determined to address two issues: Potential impacts to coastal cutthroat trout and the availability of adequate water supplies to the City of Trinidad. On April 7, 2009, the County of Humboldt circulated a NOP of an EIR, requesting information from the public and other agencies regarding the appropriate scope of study of the issues to be discussed in the EIR. The NOP, distribution list, and comments received may be found in Appendix L. On

April 28, 2009, Humboldt County staff met with representatives of the City of Trinidad to further refine the scope of the water supply portion of the EIR. On May 1, 2009, a similar meeting was conducted with the DFG to refine the scope of study of the impacts to coastal cutthroat trout.

The evaluation of these effects is presented below in Chapter Three “Environmental Analysis”. Each section is divided into parts: Introduction; Regulatory and Physical Setting; Impacts Analysis, including Significance Thresholds and Project Impacts and Mitigation Measures. In addition to these discussions in each section, those impacts that cannot be mitigated to a level that is less than significant (and are, therefore, considered significant unavoidable adverse impacts) are discussed in Chapters Three and Five.

1.4 Organization of the EIR

The first section of the EIR is the Executive Summary, as required by CEQA Guidelines Section 15123 as follows:

- (a) An EIR shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical.*
- (b) The summary shall identify:*
 - (1) Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect;*
 - (2) Areas of controversy known to the lead agency including issues raised by agencies and the public; and*
 - (3) Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects.*

The Executive Summary of this EIR contains a table (Table ES-1) which summarizes all impacts and recommended mitigation measures, including those identified in the 1997 Initial Study which has not been amended by the subsequent Initial Study or the EIR.

Chapter One states the nature of the project and informs the reader of the reason for preparing the EIR. It also explains the purposes of CEQA and briefly summarizes the CEQA process.

Chapter Two is the project description. That chapter addresses the site location, the project’s objectives, actions to be carried out in conducting the project, subsequent permits and approvals required the general environmental setting of the project site and surrounding area. Chapter Two also includes a brief discussion of relevant regulations and plans as they relate to the project.

Chapter Three details the *environmental setting* as it relates to each area which is not sufficiently addressed in the Initial Study, identifies and evaluates *impacts*, including *cumulative impacts*, and proposes *mitigation measures* to reduce impacts to less than significant levels, where feasible. The format and content of this chapter are described as follows:

Each impact area includes the following analysis:

INTRODUCTION

Where applicable, a brief introduction is presented under each general topical heading describing the resource to be discussed or protected and typical sources of impacts to be addressed.

REGULATORY AND PHYSICAL SETTING

The Regulatory and Physical setting and conditions with respect to the environmental topic being discussed are briefly described.

IMPACT EVALUATION CRITERIA

The criteria with which impacts are measured are presented. The purpose of this section is to establish the level at which an environmental impact will be considered significant. For the purposes of this EIR the CEQA thresholds were used. Where it was determined that quantitative thresholds exist, they were used in lieu of the qualitative thresholds in the Guidelines.

PROJECT IMPACTS AND MITIGATION MEASURES

Impact Number Title: Each identified environmental impact is numbered for reference. They are numbered in accord with the Chapter subsection (e.g., No. 3.8.1).

Determination of Significance: This is a statement of whether or not an identified impact is significant or less than significant. Significant environmental effects will include direct, indirect, short-term, long-term, cumulative, and unavoidable impacts.

Mitigation Measure Numbers: Each mitigation measure is numbered in accord with its chapter subsection and correlated with the impact to which it applies.

Effectiveness of Measure: For significant impacts, a statement is made regarding whether the impact can be mitigated to a less than significant level or, alternatively, whether the impact is only partially mitigated, immitigable, unavoidable, and/or irreversible, based on the Impact Evaluation Criteria.

The above format is intended to conform to standards for adequacy of the EIR as described in §15151 of the *CEQA Guidelines*, which states:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed

in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and good faith effort at full disclosure.

Chapter Four describes and evaluates alternatives to the proposed project and Cumulative Impacts. CEQA Guidelines Section 15126.6 requires that one of the alternatives considered be the “No Project” alternative. The potential environmental impact of these alternatives will be compared to the environmental impact of the project as proposed. The Cumulative Impacts Section evaluates the potential of the project to incrementally add to environmental effects when considered in the context of other recent and anticipated development.

Chapter Five includes several mandatory sections which must be included in any EIR. Among the issues addressed in Chapter Five are: Unavoidable Significant Environmental Effects, Significant Irreversible Changes, Growth-Inducing Impacts, and Effects Found Not to be Significant. Chapter Five also includes the list of preparers of the Environmental Impact Report, persons contacted to provide information regarding the report and a brief bibliography of references used in the EIR.

Chapter Six presents the Mitigation Monitoring and Reporting Plan.

CHAPTER 2 PROJECT DESCRIPTION

2.1 Project Objectives

The CEQA process encourages the identification of underlying project objectives in the preparation of an EIR. These objectives may be used in determining the feasibility of mitigation measures and the effectiveness or appropriateness of various project alternatives.

The project objectives established for the Moss Minor Subdivision Project are:

Objective No. 1: Subdivide the subject site in conformance with the standards of the Humboldt County General Plan and Zoning Ordinance, Subdivision Ordinance and Subdivision Map Act. It is anticipated that following the subdivision, each parcel would be developed for residential use.

Objective No. 2: Provide infrastructure including water, sewer, roads, power, and communications necessary to support the subdivision of the subject site.

The project includes all of the entitlements, permits, etc. necessary to the authorization and development of the proposed project. Such entitlements include, but are not limited to the following:

- Tentative Parcel Map Subdivision.
- Final Parcel Map or Parcel Map Waiver (if authorized).
- Humboldt County Encroachment Permits.
- DFG Streambed Alteration Permit for installation of improvements (issued and exercised under prior approvals).
- DFG Streambed Alteration Permit(s) for diversion of water from North Fork Luffenholtz Creek and Deadman Creek for residential use.
- Construction permits for residential and appurtenant development pursuant to the Humboldt County Zoning Ordinance.
- Humboldt County Department of Environmental Health permits for surface water and septic systems.

2.2 Project Location and Setting

The subject site is located on both sides of Fox Farm Road, approximately 0.91 mile northeast from the intersection of Fox Farm Road and North Westhaven Drive, approximately one mile east of the City of Trinidad, California in Humboldt County (Figure 2-1). The site is identified as Assessor's Parcel Numbers 515-131-23 and 24, and 515-131-40, 41, 42 and 43, and consists of the addresses 900, 1180, 1190, and 1199 Fox Farm Road (Figure 2-2).

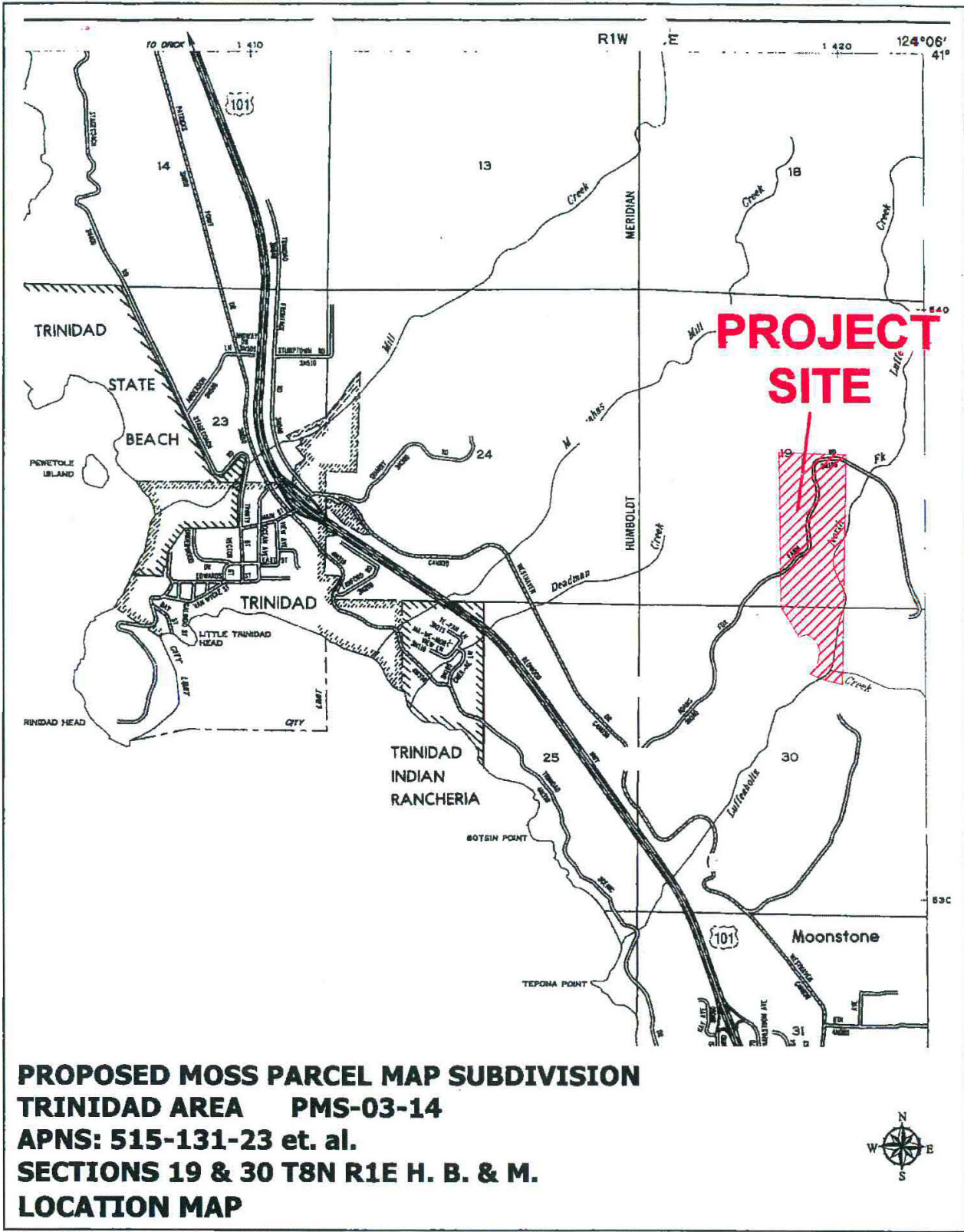


Figure 2-1 - Vicinity Map

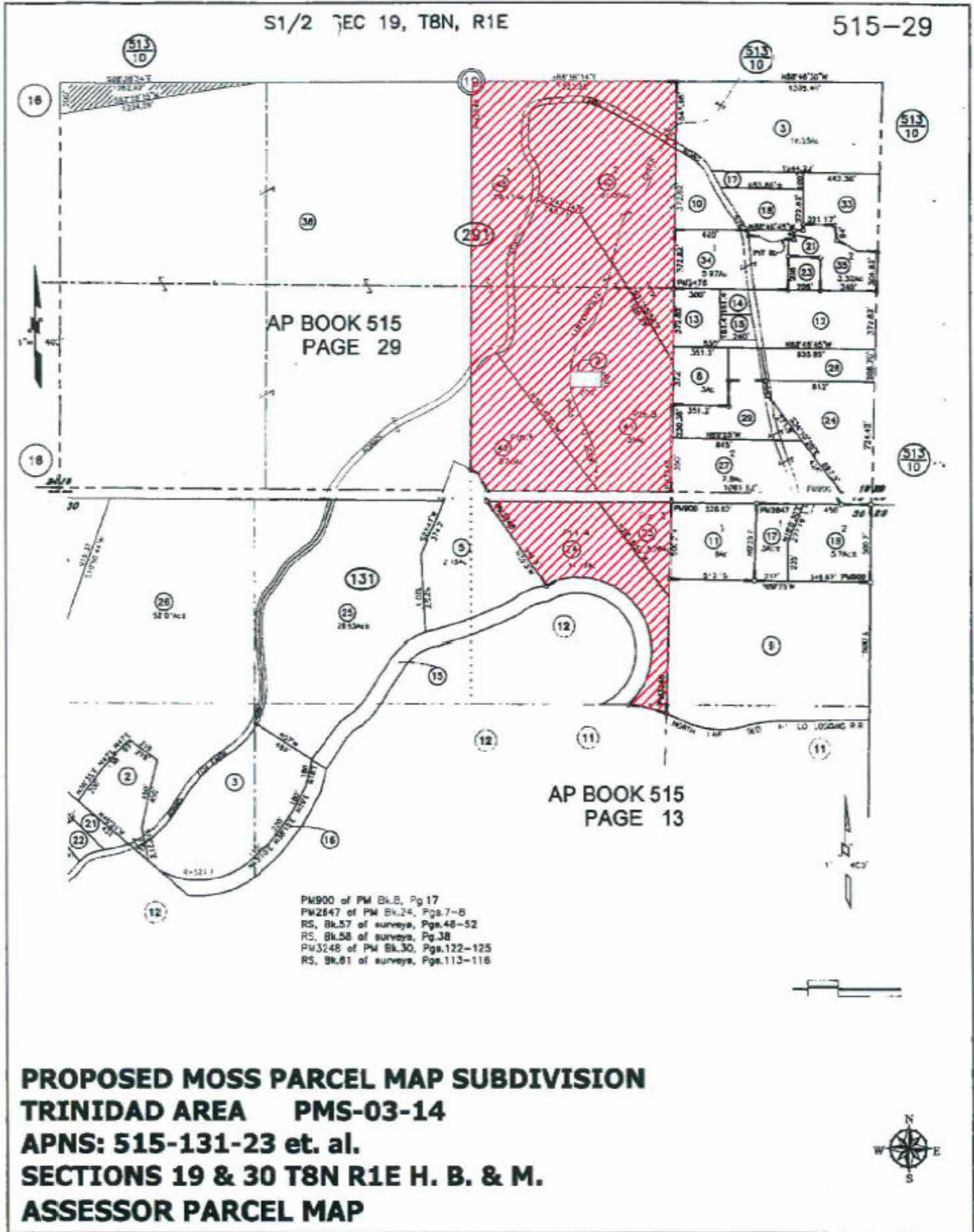


Figure 2-2 - Assessor's Parcel Map

The affected property is a 94 acre single parcel of record, with a varied topography. The North Fork Luffenholtz Creek traverses the property from north to south in an increasingly deep channel. The slopes of the creek channel generally rise to or past the easterly property line; however, there are relatively level areas on the site to the west of the creek channel, with a modest rise toward the southeast to a shallow knoll as shown on the U.S.G.S. Quad Map (Figure 2-3). The site is undeveloped with the exception of several unpaved roads and driveways generally on the westerly portions of the parcel. Dense native vegetation, typical of riparian redwood forest follows the stream channel. Several of the areas outside of the stream channel show signs of having been cleared within the last several years, leading to a mix of native and non-native natural communities. In addition to the North Fork of Luffenholtz Creek, the subject site is also crossed by Deadman Creek in the northwesterly section of the property.

The property is located in a mixed area of undeveloped timberland and rural residential development. To the north and west are undeveloped parcels, with the area to the north having apparently been logged in the relatively recent past. The parcels immediately south of the subject site consist primarily of vacant, forested parcels, with one single family residence on a 13 acre property. The property immediately to the east of the subject site consists of rural residential development on parcels ranging from approximately 0.75 acres to 20 acres.

The Northern Humboldt General Plan (NHGP) shows the site as split between two land use designations. The southerly portion of the site (approximately 20 acres) is designated as TIMBER; RECREATION. The northerly portion (approximately 74 acres) is designated as DISPERSED HOUSES; TIMBER. Both designations permit development of residences to a maximum of one unit per 20 acres. The entire site is within the AE Zone (Figure 2-4). The primary uses permitted in that zone are agricultural; however, each parcel in that zone may be developed with a single family residence.

2.3 Project Description

The Moss Parcel Map Subdivision consists of the division of an approximately 94 acre parcel into four parcels as follows (Figure 2-5 Proposed Parcel Map):

- Parcel 1: A 20.11 acre parcel consisting of the portions of the property to the west and north of Fox Farm Road. A building area has been identified in approximately the mid-point of the proposed parcel, with immediate frontage onto Fox Farm Road. Residential development on the site will be served with surface water from Deadman Creek and will require an onsite septic system. A water collection facility has been installed in Deadman Creek (Appendix E).
- Parcel 2: A 21.02 acre parcel consisting of the northerly portion of the parcel, south and east of Fox Farm Road and continuing to the easterly property line. A building area has been identified on the proposed parcel, to the east of Fox Farm Road along a driveway/private drive which will be shared with Parcel 3 to the south.

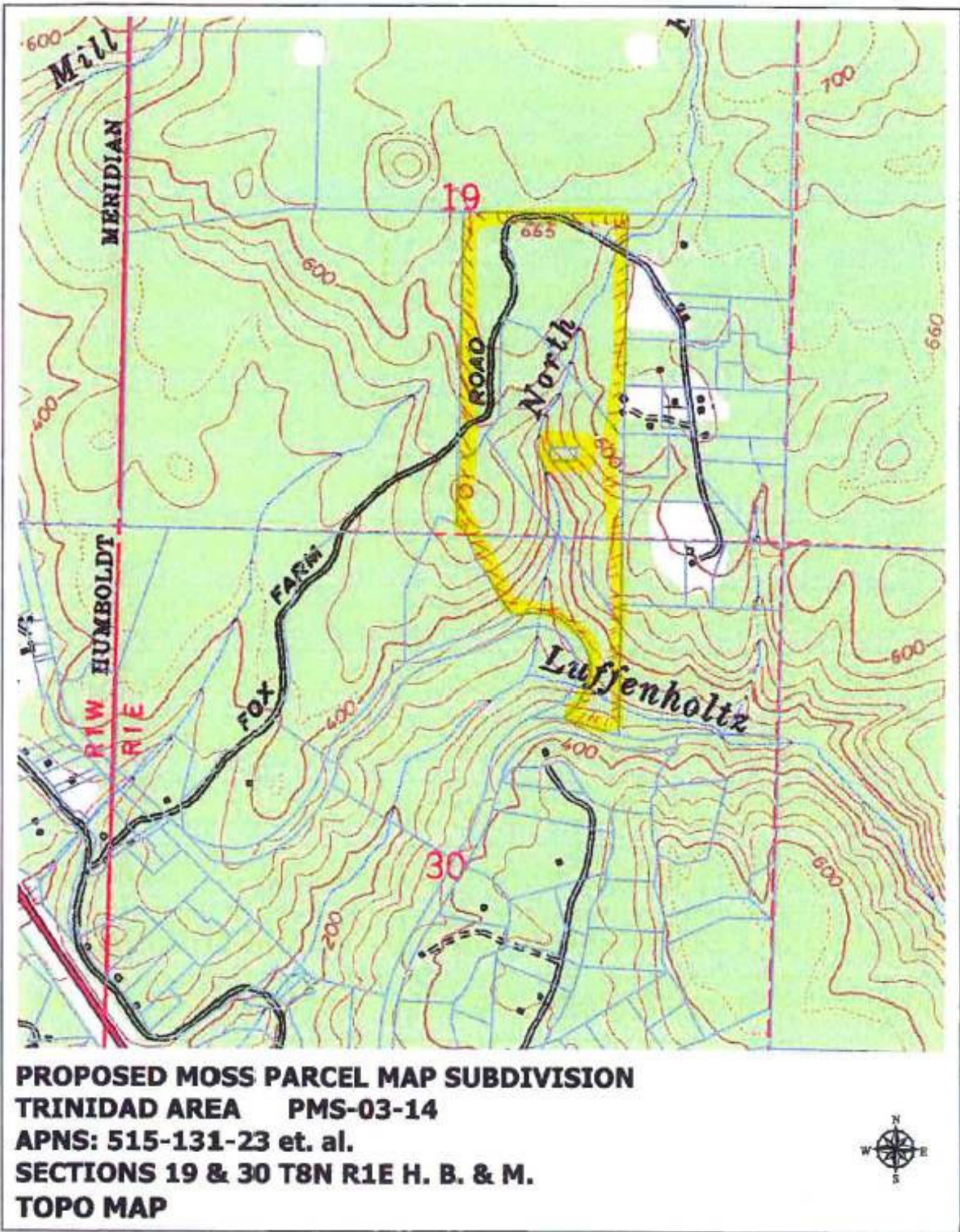


Figure 2-3 - USGS Quad Map

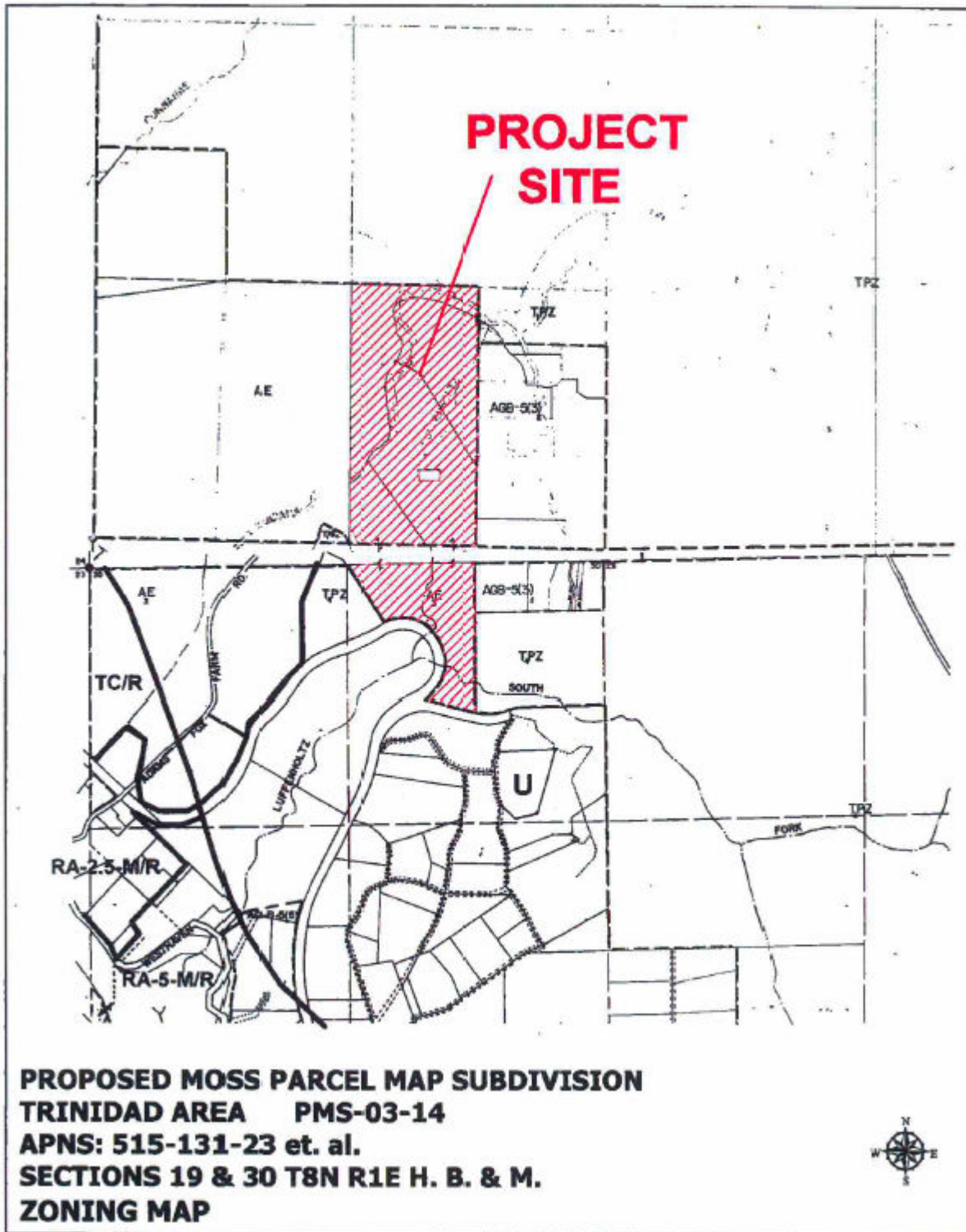


Figure 2-4 – Zoning Map

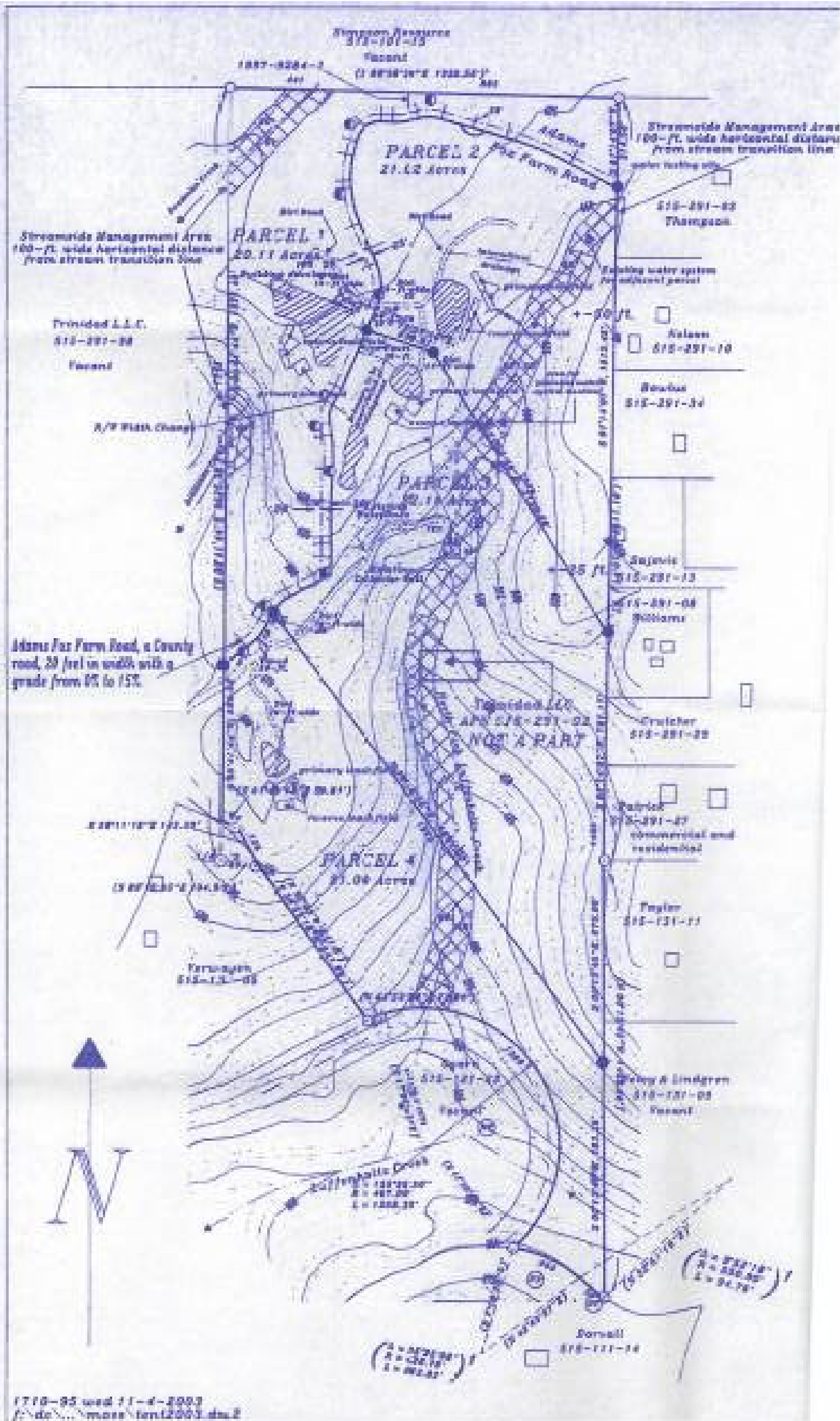


Figure 2-5 – Proposed Parcel Map

Residential development on the site will be served with surface water from the North Fork of Luffenholtz Creek and will require an onsite septic system. A water collection facility has been installed in the North Fork of Luffenholtz Creek on proposed Parcel No. 3 which will serve proposed Parcels 2, 3, and 4.

Parcel 3: A 32.11 acre parcel consisting of the central portion of the property, east of Fox Farm Road. This parcel surrounds APN No. 515-291-02, which is not affected by the proposed project. Two potential building sites have been identified in the northerly portion of the proposed parcel. One building site is served from a shared private drive taking access from Fox Farm Road on proposed Parcel 2. The second building site has no immediately identified access; however, it is in close proximity to Fox Farm Road to the west, and an existing dirt road/private drive extending through the parcel from proposed Parcel 2. Residential development on the site will be served with surface water from the North Fork of Luffenholtz Creek and will require an onsite septic system. A water collection facility has been installed in the North Fork of Luffenholtz Creek, in approximately the mid-point of proposed Parcel 3.

Parcel 4: A 21 acre parcel consisting of the southerly portion of the property. This is an unusually long, narrow parcel, bordered to the south by a disused railroad embankment. A building site has been identified in the westerly portion of the site with access from Fox Farm Road along a private driveway. Residential development on the site will be served with surface water from the North Fork of Luffenholtz Creek and will require an onsite septic system. Parcel 4 will share the use of the water collection facility which has been installed in the north fork of Luffenholtz Creek on Proposed Parcel 3.

CHAPTER 3 SETTINGS, IMPACTS, AND MITIGATION MEASURES

3.1 Introduction

This section of the EIR provides a detailed analysis of the anticipated impacts of the proposed project as required by the CEQA. Each topic discussed includes a description of the physical and regulatory setting of the project. The Impacts and Mitigation Measures section for each topic is project and site specific.

Where mitigation measures are listed, they will be assumed to be sufficient to reduce the project's impact below the threshold of significance unless otherwise noted. When more than one mitigation measure is provided for a specific impact, all listed mitigation measures will be assumed to be required to reduce the impact below the threshold of significance unless those measures are clearly described as alternate approaches to mitigation. Impacts which will be less than significant are included in this section as well, except where such impacts were fully addressed in an earlier Initial Study. CEQA does not require mitigation measures for impacts which will be less than significant.

3.1.1 Focus of Analysis

CEQA encourages the efficient use of prior approved documents and analysis when they are available. As noted in Chapter 1, the County of Humboldt prepared an Initial Study for an identical project in 1997 (Appendix A). Following expiration of the original project approval, the property owner re-applied in 2003. Humboldt County Staff completed a new Initial Study of the project in 2005. The California Court of Appeals (First District), determined in 2008 (Appendix J), that 1997 Initial Study remains valid for the project except for those limited areas in which the 2005 Initial Study provided evidence that the circumstances under which the project will be carried out have changed. The concluding finding of the Court of Appeals ruling reads as follows:

“The County may require a supplemental review under section 21166 only with respect to the project’s environmental impacts on (1) water supply to the City of Trinidad, and (2) the population of coastal cutthroat trout.”

As such, no additional analysis of the impact areas discussed in the 1997 Initial Study which remain valid, will be included in this section. Reviewers are referred to the discussion in the Initial Study (Appendix A). A Notice of Preparation (NOP) was circulated on April 7, 2009, to request assistance in scoping the studies necessary to analyze impacts to the water supply of the City of Trinidad and the population of coastal cutthroat trout. The NOP and related comments are included in Appendix L. Scoping meetings to assist in the determination of the depth of study necessary to assess the impacts covered in this section were conducted on April 28, 2009, with the City of Trinidad, and on May 1, 2009, with the DFG.

3.1.2 Determination of Significance

CEQA Code Section 21068 defines a “significant impact” as follows:

"Significant effect on the environment" means a substantial, or potentially substantial, adverse change in the environment."

The CEQA Guidelines direct lead agencies to determine whether each potential impact is significant based on substantial evidence in light of the whole record. In each impact section, the criteria for determining whether a particular impact will be significant are identified. In General, the County of Humboldt relies on the guidance provided by Appendix G of the CEQA Guidelines (the “Checklist”), as the basis for its determination, however, in some areas, the criteria include conformance with General Plan Policies, and/or the adopted standards of Responsible and/or Trustee Agencies.

3.1.3 Relationship to General Plan and General Plan EIR

Reference to the “General Plan”, “General Plan EIR”, or other General Plan CEQA documents may be included in the impact analysis to provide a setting for the discussion of the project and its potential impacts. Several separate General Plan Elements apply to the proposed project. As those elements have been adopted and updated periodically, appropriate CEQA documents have been prepared as required at the time of adoption. Where reference is made to a specific policy, mitigation measure or information regarding potential effects of the project, the specific element or CEQA analysis will be referenced. All elements of the General Plan and their associated CEQA documents are available at the Humboldt County Community Development Services Department. While those documents may be used for reference and sources of valuable information, CEQA analysis adopted for the various elements of the General Plan are not treated as a Master or Program EIR for this analysis. This EIR is intended to provide a separate, project level analysis of its topic areas.

3.2 Impact Analysis

3.2.1 Biological Resources – Population of Coastal Cutthroat Trout

3.2.1.1 Introduction

Public Resources Code Section 2100(c) finds and declares that it is the policy of the State to prevent the elimination of fish or wildlife species due to human activities, ensure that fish and wildlife populations do not drop below self-sustaining levels, and preserve for future generations representations of all plant and wildlife communities and examples of the major periods of California history.

This Biological Resources section describes the biological resources and habitat found near the subject site. An analysis of the suitability of the North Fork of Luffenholtz Creek and Deadman Creek as habitat for Coastal Cutthroat trout, the likelihood of inhabitation, risk to the species as a result of the project, and potential measures to reduce that risk has been prepared by a qualified

Biologist (Michael Carbiener, Senior Biologist, URS Corp.), and is included in this report as Appendix M.

As described in Chapter One, the 2005 Initial Study (Appendix H) found that the project may have a potentially significant impact on special status species. Specifically, the 2005 Initial Study noted that the project description includes the diversion of water from Deadman Creek and the north fork of Luffenholtz Creek. Evidence had been submitted to indicate that both waterways have the potential to provide habitat to the coastal cutthroat trout, which had been identified as a “Species of Special Concern” after the adoption of the 1997 Initial Study (Appendix A). Upon review, the courts found that the listing of coastal cutthroat trout constituted a changed circumstance which merited further review. All other issues with regard to biological resources have been determined to be adequately described by the 1997 Initial Study and will not be revisited in this section.

3.2.1.2 Physical Setting

The project site is located on a largely forested hillside. The north fork of Luffenholtz Creek traverses the property from north to south. Deadman Creek crosses the northwesterly section of the property. Dense native vegetation, typical of riparian redwood forest follows both stream channels. The North Fork of Luffenholtz Creek drains an area of approximately 600 acres, with dry season, base flows on the order of 15 to 31 gallons per minute. The North Fork of Luffenholtz Creek flows into Luffenholtz Creek downstream of the subject site. Luffenholtz Creek and its tributaries (including the North Fork) drain a combined area of approximately 3,163 acres.

As noted in the Biological Study, the North Fork of Luffenholtz Creek consists of a moderate to low gradient stream. The physical characteristics of the creek, including gradient, presence of overhead and in stream cover and other features provide a good habitat for coastal cutthroat trout. Luffenholtz Creek is separated from the Pacific Ocean by a steep, rocky set of cascades (natural and man-made) which are poor habitat for trout and likely preclude the presence of anadromous (migrating between fresh and saltwater) populations. However, populations of coastal cutthroat trout have been identified which do not leave freshwater streams throughout their lifecycle. Luffenholtz Creek has the potential to support such a population.

The DFG provides the following information with regard to the range, habitat, and lifecycle of coastal cutthroat trout:

The coastal cutthroat is one of the three native cutthroat subspecies in California. The coastal cutthroat is characterized by profuse spotting on the body and the typical red-orange slashes under the jaw. These marks may fade or disappear completely when the fish resides in salt water. Anglers often mistake coastal cutthroats for rainbow trout. In California, the native range of the coastal cutthroat begins near the Eel River drainage and includes drainages north to Oregon and beyond into Alaska. Many of the populations

are anadromous, "sea-run" cutthroat. Others are freshwater residents and some travel between the brackish estuaries and the freshwater tributaries. Although much of the native range is still occupied their numbers have suffered declines. In most areas where cutthroat exist, fishing opportunities have been limited by restrictions to protect anadromous salmonids. http://www.dfg.ca.gov/fish/Resources/WildTrout/WT_CCutDesc.asp

3.2.1.3 Regulatory Setting

California cutthroat trout (*Oncorhynchus clarki clarki*) has been listed by the California DFG as a Species of Special Concern (SSC). DFG describes an SSC as:

“A species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered, but has not formally been listed;
- is experiencing, or formerly experienced, serious (nonscyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

This designation carries no formal legal status or protections, however, these species are identified to encourage actions to conserve the species and seek recovery before they meet the criteria for listing as threatened or endangered under the California Endangered Species Act (CESA). Threatened and endangered species are accorded special legal protections by CESA.

SSC is typically treated as a sensitive resource under CEQA. The DFG (at <http://www.dfg.ca.gov/wildlife/nongame/ssc/index.html>) notes that:

“Sections 15063 and 15065 of the CEQA Guidelines, which address how an impact is identified as significant, are particularly relevant to SSCs. Project-level impacts to listed (rare, threatened, or endangered species) species are generally considered significant thus requiring lead agencies to prepare an Environmental Impact Report to fully analyze and evaluate the impacts. In assigning "impact significance" to populations of non-listed species, analysts usually consider factors such as population-level effects, proportion of the taxon's range affected by a project, regional effects, and impacts to habitat features.”

In general, properties bordering or containing an active stream can secure “riparian” water rights, allowing diversions from that stream for reasonable use on the property, including residential uses. It is beyond the scope of this EIR to assess the limits of such water rights as they may apply to the subject site. For the purposes of this analysis, it is assumed that each parcel created along the North Fork of Luffenholtz Creek and Deadman Creek will have the ability to secure sufficient water rights to serve one single family residence. Thus, this EIR includes consideration of the effects to coastal cutthroat trout of reducing the in-stream flow along Deadman Creek by an amount which would serve one residence and the in-stream flow along the North Fork of Luffenholtz Creek by an amount which would serve three residences.

Humboldt County has designated a “Streamside Management Area” along the North Fork of Luffenholtz Creek pursuant to Section 314-61.1(g)(6) of the Humboldt County Code. Where such areas are identified, development activity is required to maintain a 100 foot setback from the edge of the stream transition line to protect the stream from erosion, siltation, and the removal of vegetation.

3.2.1.4 Impact Evaluation Criteria:

In the 2005 Initial Study (Appendix H), Humboldt County identified the following as a “potentially significant impact.”

Checklist Item 4.a) Biological Resources. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The basis for this determination was that the streams on site have the potential to serve as habitat for the coastal cutthroat trout, and that the potential effects on this species had not been adequately studied. As noted above, the DFG states that “*analysts usually consider factors such as population-level effects, proportion of the taxon's range affected by a project, regional effects, and impacts to habitat features*” when establishing thresholds of significance.

Based on the information that the range of the coastal cutthroat trout extends from approximately the Eel River Drainage to the Oregon border, and then north to Alaska, and that although “*much of the native range is still occupied their numbers have suffered decline*”, the relevant threshold of significance for determining the potential impact of the proposed project will be based on impacts to habitat features. As such, the following threshold is adopted:

A significant effect will be determined to occur if the existing habitat values of Deadman Creek, the North Fork of Luffenholtz Creek and/or Luffenholtz Creek for coastal cutthroat trout are substantially degraded as a result of the project.

3.2.1.5 Project Impacts

No direct alterations to the stream channel are proposed in the project description. Diversion structures have already been placed within Deadman Creek and the North Fork of Luffenholtz Creek pursuant to a Streambed Alteration Agreement issued by the DFG (Appendix D). The proposed building pads for all four parcels are on generally level ground set back from the banks of the waterways and outside of the mandatory 100 foot setback from the adopted Streambed Management Area. However, in the absence of appropriate controls, increased runoff from developed areas has the potential to affect the habitat values of Deadman Creek and Luffenholtz Creek. Concentrated runoff from the developed portions of the site has the potential to increase erosion along the stream banks, carrying silt and soil into the streams. Runoff from developed areas may contain contaminants, including landscape chemicals (pesticides, fertilizers, etc.) and roadway contaminants.

Diversions of water from both Deadman and Luffenholtz Creeks have the greatest potential to substantially degrade the coastal cutthroat trout habitat values of both creeks, both of which are adjacent to and downstream of the subject site. As noted in the biological report, an analysis of flows in both streams was conducted in conjunction with the application for a streambed alteration permit. The results of those studies are summarized in the application materials in Appendix E. Dry weather testing in 1994 and 1996 found minimum flows in Deadman Creek of 8.5 gpm (12,240 gpd), and in the North Fork of Luffenholtz Creek of 15 gpm (21,600 gpd).

In order to assess the effect of water diversions to populations of coastal cutthroat trout, it is necessary to determine the likely magnitude of such diversions to serve the development anticipated as a result of the proposed project. Water consumption estimates were collected from a variety of sources as follows:

- 1) The Humboldt County Department of Environmental Health is responsible for determining whether a sufficient water source is available to serve proposed development. The Department uses a standard that every new single family residence must have demonstrated access to a minimum flow of 0.5 gpm. Although this flow equates to 720 gallons per day, the standard is intended to ensure adequate instantaneous flows, and is not typically used to estimate daily water demand.
- 2) The Humboldt County Framework Plan, §2554.9A, establishes a subdivision standard which requires proof of the availability of a minimum of 400 gallons per day for each residence.
- 3) The City of Trinidad is the nearest provider of metered domestic water service. As noted in the City of Trinidad Water Supply Assessment (Appendix N) prepared for this report, the average metered use at the City of Trinidad is 327 gallons per day per service connection.

- 4) The California DFG has participated in extensive discussions regarding the preservation of dry weather stream flows along the Mattole River, which flows through forested areas adjacent to rural residential uses in southern Humboldt County. In their response to the 2009 Notice of Preparation (Appendix L), the Department estimates usage of 55 to 75 gallons per person per day plus 18.5 gallons per day per 100 square feet of garden and further estimates that each residence will house three people and be accompanied by a 1,000 sq.ft. garden. This yields an estimated water usage of 350 to 410 gallons per day, per residence.
- 5) A literature search conducted as a component of the Water Supply Assessment identified anticipated water usage of 160 to 166 gallons per day per capita. Based on the average household size in the vicinity of 1.85 persons per household (U.S. Census), this rate would yield a demand of approximately 306 gallons per day.
- 6) For purposes of comparison, the Humboldt Community Services District and the City of Eureka have determined their average day demand per service connection (residential) at 256 gallons per day and 243 gallons per day, respectively.

Based upon the above range of estimated demand values, the lead agency concludes that the General Plan requirement of 400 gallons per day per residence is the appropriate standard to use in evaluating likely demand for the proposed project.

No reliable scientific information has been identified to establish minimum acceptable flow which is broadly applicable to support non-anadromous populations of coastal cutthroat trout. In personal communication, Jane Arnold, of the California DFG noted a fundamental risk that a momentary peak demand, occurring during the dry season, would have the potential to completely de-water smaller streams. Even a brief period of such a loss would make the stream uninhabitable downstream of the diversion point. The Biological Study prepared for this EIR (Appendix M) notes that “*Water diversions that result in the complete or near complete depletion of surface flows are likely to cause stress and mortality to salmonids.*”

In the absence of controls limiting withdrawals, particularly those during the dry season, the project has the potential to cause the total or near total de-watering of Deadman Creek and Luffenholtz Creek either at the project intake or by reducing flows to existing downstream users causing their intakes to dewater the stream(s). In the absence of a more detailed study of dry season flows and downstream diversions, the analysis of impacts and design of mitigation measures will address this risk.

3.2.1.6 Determination of Significance (without mitigation)

In the absence of mitigation, the proposed project would have a ***significant effect*** on the population of coastal cutthroat trout through the potential increases in erosion and siltation and the reductions of in-stream flows to unsustainable levels during peak diversions in the dry seasons.

3.2.1.7 Mitigation Measures

Mitigation Measures 7 and 10 which were adopted with the 1997 Mitigated Negative Declaration continue to apply to the project and will reduce the potential impact of to the population of coastal cutthroat trout.

1997 IS Mitigation Measure No. 7

Streamside Management Areas of 100 feet from both sides of the stream transition lines of the North Fork of Luffenholtz and Deadman Creek shall be established, and erosion control and other measures for development within these areas shall include the following:

- a. During construction, clearing, and vegetation removal will be minimized.
- b. Construction sites will be planted with native or naturalized vegetation and mulched with natural or chemical stabilizers to aid in erosion control and insure re-vegetation.
- c. Long slopes will be minimized to increase infiltration and reduce water velocities down cut slopes by such techniques as soil roughing, serrated cuts, selective grading, shaping, benching, and berm construction.
- d. Concentrated runoff will be controlled by the construction and continued maintenance of culverts, conduits, non-erodible channels, diversion dikes, interceptor ditches, slope drains or appropriate mechanisms. Concentrated runoff will be carried to the nearest drainage course. Energy dissipaters may be installed to prevent erosion at the point of discharge where discharge is to natural ground or channels.
- e. Runoff shall be controlled to prevent erosion by onsite or offsite methods. Onsite methods include, but are not limited to, the use of infiltration basins, percolation pits, or trenches. Onsite methods are not suitable where high groundwater or slope stability problems would inhibit or be aggravated by onsite retention or where retention will provide no benefits for groundwater recharge or erosion control. Offsite methods include detention or dispersal of runoff over non-erodible vegetated surfaces where it would not contribute to downstream erosion or flooding.
- f. Silt, organic, and earthen material from sediment basins and excess material from construction will be disposed of out of the Streamside Management Area to comply with California DFG and Regional Water Quality Control Board.
- g. No pesticides or herbicides shall be used within the Streamside Management Areas.

Winter Operations (generally October 15 through April 15) shall employ the following special considerations:

- a. Slopes will be temporarily stabilized by stage seeding and/or planting of fast germinating seeds such as barley or rye grass; and mulched with protective coverings such as natural or chemical stabilizations.
- b. Runoff from the site will be temporarily detained or filtered by berms, vegetated filter strips, and/or catch basin(s) to prevent the escape of sediment from the site. Drainage controls are to be maintained as long as necessary to prevent erosion throughout construction.

1997 IS Mitigation Measure No. 10

A complete hydraulic report and drainage plan shall be submitted for approval by the Department of Public Works. This will require the construction of drainage facilities adjacent to and across Adams Fox Farm Road. The applicant shall dedicate drainage release easements to the County of Humboldt for all cross drains as directed by the Department of Public Works.

The following Mitigation Measure(s) will also be applied to the project to further reduce the potential impact to coastal cutthroat trout:

EIR Mitigation Measure No. 1

The provisions of 1997 IS Mitigation Measure 7 shall continue to apply to the project throughout the remainder of the project, including periods of vegetation removal to clear existing building pads, grading or re-grading of such pads and any construction activities which may occur on the subject site.

EIR Mitigation Measure No. 2

The developer/applicant shall provide dry season water storage facilities for each residence. Based on the current state of knowledge regarding dry season flows in the two affected streams and the life-cycle of non-anadromous populations of coastal cutthroat trout, the risk to the species through potential de-watering of the streams at or below the subject site is sufficient to prohibit any water diversions during the dry season. As such, each residence shall provide water storage sufficient for a minimum of 107 days of independent operation from August 1st through November 15th of each year. Each residence will be assumed to require a minimum of 400 gallons per day (pursuant to the Humboldt County Framework Plan §2554.9A), to a dry season total storage requirement of 42,800 gallons. Each parcel shall have recorded against it an agreement with the County, and enforceable by the County, requiring the installation of a water storage facility capable of meeting the needs described herein. Residential water storage quantities shall be above and beyond the 2,500 gallons required by Cal Fire for developments within the State Responsibility Area (SRA) for fire protection. Storage for both uses, however, may be provided for within one storage unit. Permanent flow meters shall be installed at the intake to each storage tank.

EIR Mitigation Measure No. 3

To avoid excess short-term withdrawals during the periods in which the tanks required by 2009 Mitigation Measure No. 2 are being filled, pumps shall be sized or otherwise regulated to draw a maximum of two gallons per minute on Deadman Creek and a combined maximum of five gallons per minute on the North Fork of Luffenholtz Creek.

3.2.1.8 Effectiveness of Mitigation Measures

The implementation of 1997 IS Mitigation Measure No. 7, 1997 IS Mitigation Measure No.10 and 2009 EIR Mitigation Measures 1 and 2, will have the effect of protecting any resident populations of coastal cutthroat trout from effects related to construction, sedimentation and erosion, and will preserve in-stream flows sufficiently to avoid impacts to such populations. Following mitigation, the impact to the population of coastal cutthroat trout will be *less than significant*.

3.2.2 Water Resources – Substantial reduction in the amount of water otherwise available for public water supplies

3.2.2.1 Introduction

Potable water is a valuable and increasingly constrained resource throughout California and in the Humboldt County. Protection of water sources for domestic, environmental, agricultural, and industrial purposes is critical to sustainable future of the region. The water resources section addresses potential affects to water quality and availability by examining the potential for contamination, overdraft of groundwater supplies and diversion of water from existing beneficial uses.

As described in Chapter One, the 2005 Initial Study (Appendix H) found that the project may have a potentially significant impact to the amount of water available to the City of Trinidad. The City relies on Luffenholtz Creek as the primary water supply. Any withdrawals from the North Fork of Luffenholtz Creek will necessarily be reflected in less water arriving at the City of Trinidad and available for their continued use. This finding was based on information received from the City of Trinidad regarding changes in their water demand which had occurred after the adoption of the 1997 Initial Study. Upon review, the courts concurred with the County’s findings that the information from the City of Trinidad constituted a “changed circumstance” which merited further review. All other issues with regard to biological resources have been determined to be adequately described by the 1997 Initial Study and will not be revisited in this section.

A Supplemental Water Supply Assessment of the City of Trinidad was prepared by LACO Associates (Appendix N) to update and extend the 1995 Winzler and Kelly study (Appendix B) prepared for the original application. The Supplemental Water Supply Assessment reviews available information regarding water demand in Trinidad over time, required pass-through flows in Luffenholtz Creek and other factors to determine whether reductions in flows along the

North Fork of Luffenholtz Creek are likely limit the City's ability to continue providing service to their customers.

Following the completion of the LACO Associates' study (Appendix N), the lead agency learned of a similar study prepared in April 2009, by Winzler & Kelly (Appendix O) on behalf of the Trinidad Cal Fire station located outside the City's limits on Patrick's Point Drive. The Winzler & Kelly study analyzed the potential impacts that a 1-inch water line extension from the City's existing service system to the station could have on the City's water supply. Any service extension of this type outside of a municipal service boundary requires action of the local LAFCo authority; the preparation of this study was intended to satisfy one of the application requirements for extension. LACO prepared a 2010 addendum (Appendix O) to the 2009 LACO Water Supply Assessment to include the information in the 2009 Winzler & Kelly Study.

3.2.2.2 Physical Setting

The North Fork of Luffenholtz Creek crosses the property generally from north to south, entering the main stem of Luffenholtz Creek approximately 350 feet south of the subject site. Together, the Luffenholtz Creek, the North Fork of Luffenholtz Creek and other tributaries such as Eighteen Creek and Grassy Creek drain a watershed of approximately 3,200 acres. Downstream of the confluence with the North Fork of Luffenholtz Creek, the stream continues approximately 1.1 miles to the southwest, entering the Pacific Ocean at Luffenholtz Beach County Park.

The City of Trinidad water system intake is located along Luffenholtz Creek approximately one mile downstream of the subject site. The intake consists of 180 gpm (229,000 gpd) capacity surface water treatment plant. Raw surface water is collected from Luffenholtz Creek and treated by direct filtration and chlorination. The distribution system consists of approximately 13 miles of predominantly asbestos-cement piping and includes two 150,000 gallon redwood storage tanks. The system serves 315 metered connections and five unmetered connections.

Based on prior studies and analysis, the LACO 2009 Supplemental Water Supply Assessment (Appendix N) estimates that Luffenholtz Creek will produce a minimum of 290 gallons per minute at the Trinidad water system intake in dry years. This estimation remains unchanged even after adding the proposed water service extension for the Cal Fire station with an additional estimated use of 800 gpd.

3.2.2.3 Regulatory Setting

Each of the three proposed parcels which border the North Fork of Luffenholtz Creek are expected to claim a riparian right to use water within the stream. The following is excerpted from the State Water Resources Control Board website at (http://www.waterboards.ca.gov/waterrights/board_info/water_rights_process.shtml):

Water right law in California and the rest of the West is markedly different from the laws governing water use in the eastern United States.

Seasonal, geographic, and quantitative differences in precipitation caused California's system to develop into a unique blend of two very different kinds of rights: riparian and appropriative. Other types of rights exist in California as well, among them reserved rights (water set aside by the federal government when it reserves land for the public domain) and pueblo rights (a municipal right based on Spanish and Mexican law).

Riparian rights usually come with owning a parcel of land that is adjacent to a source of water. With statehood, California adopted the English common law familiar to the eastern seaboard; such law also included the riparian doctrine.

A riparian right entitles the landowner to use a correlative share of the water flowing past his or her property. Riparian rights do not require permits, licenses, or government approval, but they apply only to the water which would naturally flow in the stream. Riparian rights do not entitle a water user to divert water to storage in a reservoir for use in the dry season or to use water on land outside of the watershed. Riparian rights remain with the property when it changes hands, although parcels severed from the adjacent water source generally lose their right to the water.

Section 3362 of the Humboldt County General Plan (Framework Plan) recognized the Luffenholtz Creek watershed as the City of Trinidad's "Critical Water Supply Area." Such areas are defined as those "used by a specific municipality or community for its water supply system, which is so limited in area that it is susceptible to a potential risk of contamination from development activities."

Section 3361.3 of the Humboldt County General Plan includes the following policy:

"Ensure that the intensity and timing of new development will be consistent with the capacity of water supplies."

3.2.2.4 Impact Evaluation Criteria:

The 1997 Initial Study identified checklist item IV(d) "*Would the project result in substantial reduction in the amount of water otherwise available for public water supplies?*" as Less than Significant, largely on the basis of information submitted in the 1995 Winzler & Kelly Water Supply Analysis (Appendix B). The 2005 Initial Study has no comparable question for analysis, however, the reference to changed information which calls into question the findings of the 1997 Initial Study is found in response to checklist item 8)c "*Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?*" As the issue to be resolved in this EIR is focused on water supplies for the City of Trinidad, the threshold of significance will be based on the 1997 Initial Study checklist question. The information submitted by the City of Trinidad established a fair argument that a significant effect would occur based on changes in the amount of water diverted from Luffenholtz Creek

between 1995 and 2005. It was the City's assertion that the change in diversions coupled with a fixed minimum pass-by flow, had combined to bring the City close to its maximum permitted draw from Luffenholtz Creek and that reductions in flows in the creek resulting from upstream development had the potential to limit the City's continued ability to provide water service. As such, the following threshold is adopted:

“A significant effect will be determined to occur if upstream diversions from Luffenholtz Creek (and its tributaries) resulting from this project, will cause a substantial risk to the City of Trinidad's continued ability to meet existing and reasonably anticipated water demand, while preserving mandatory pass-through flows.”

3.2.2.5 Project Impacts

In order to determine the magnitude of the project's impact to the City of Trinidad, it is necessary to determine values for anticipated flows in Luffenholtz Creek, minimum pass-by flows at the City of Trinidad intake, anticipated demand for diversion to serve the City of Trinidad, and the likely diversions of water from Luffenholtz Creek necessary to serve the project.

A Supplemental Water Supply Assessment of the City of Trinidad's water system (Appendix N) was prepared for this project by LACO Associates to address these questions and to supplement the 1995 Winzler and Kelly report (Appendix B). In general, where the factual basis of the 1997 Initial Study and the 2004 Initial Study agree, and where no contradictory information was uncovered in the Water Supply Assessment, those facts are assumed to continue to be valid.

Anticipated flows in Luffenholtz Creek:

The 1995 Winzler & Kelly report (Appendix B) included a direct measurement of flows at the City of Trinidad intake structure. Based on the measured flows and two prior studies, (1968-1969 and 1980), the study concludes that the best available data predicts a low flow volume of 290 gpm. The 2009 LACO report (Appendix N) accepted the findings of the 1995 Winzler & Kelly report as the best data currently available.

Minimum Pass-By Flows:

The 1995 Winzler & Kelly report identified a minimum permissible flow following diversion for the City of Trinidad, and downstream users of 67 gpm in dry years and 112 gpm in normal years. These volumes are set to maintain the habitat value in the stream for fish and other species. Downstream diversions were identified as “less than three gallons per minute.” The 2009 LACO report accepted these findings; however, the study assumes that the normal year pass-by flows for habitat of 112 gallons per minute should be maintained even in dry-years with reduced in-stream flows. This yields a conservative estimate of 115 gallons per minute as the minimum pass-by flow which should be preserved at the City of Trinidad intake. Assuming a dry-year flow of 290 gpm as previously established, the maximum diversion from the stream should be 175 gallons per minute.

Anticipated Demand for the Trinidad Water System:

This is the component which has been subject to the greatest debate in past documents, and was the primary focus of the 2009 LACO report. The 1995 Winzler & Kelly report estimated peak diversions to be 125 gallons per minute, leaving 95 gpm available for additional diversions within the City or upstream. The letters submitted by the City of Trinidad, providing input to the 2005 Initial Study indicated that water diversions at the City's intake had increased by 73 percent between 1995 and 2004. This would indicate that peak diversions would be expected to be 216 gallons per minute. This increase in diversions was determined in the 2005 Initial Study to approach the maximum available flow of 220 gallons per minute which had been established in the 1995 Winzler & Kelly report.

The 2009 LACO study analyzed actual water use records from 1997 to 2009. Both the amount diverted from Luffenholtz Creek, and the volume of metered deliveries was considered. Note that the difference between the diversion volume and the metered delivery volume represents the water sent to the five existing unmetered services, leaks, and other system losses. As the City of Trinidad reports these figures on an aggregate monthly basis, the 2009 LACO study also addressed the "peaking factor" which is necessary to estimate the Maximum Day Demand (MDD). It should be noted that the City of Trinidad been actively seeking to identify and repair system leaks over the course of several years. City Staff report correcting a significant leak in 2008, estimated to have been responsible for the loss of approximately 20 gallons per minute.

The highest single month diversion from Luffenholtz Creek over the study period occurred in July, 2006. During that month, the average daily diversion was 104,613 gallons (72.6 gallons per minute). Based on a review of actual use records, correspondence from the City of Trinidad, and a review of available literature, the study concludes that the appropriate "peaking factor" for the City is 1.8, meaning that the MDD is expected to be 1.8 times the Average Day Demand. Thus, the calculated MDD for the system over the period from 1997 to 2009 was determined to be 188,352 gpd (130.8 gpm). This is approximately 44.2 gpm less than the calculated maximum flow in Luffenholtz Creek, which would be available for diversion. Using the established peaking factor, the study concluded that the average demand for each service connection on the day of the largest demand occurring in the period of 1997 to 2009 would have been 589 gpd (0.4 gpm).

The 2009 LACO study includes a section which projects future demand for diversion to serve the City of Trinidad. This section presumes full buildout of the currently adopted General Plan, as described in the current (1997) Housing Element. In that document, the City of Trinidad anticipates the development of an additional 64 residential units, all of which are expected to be served by the municipal water system. Adding these units to the existing system would yield a future average day demand in the maximum month of 132,177 gallons (92 gpm), and a future MDD of 230,299 gallons (160 gpm).

Under the worst circumstances described, in the future case in which an additional 64 units have been constructed, under dry year flows in Luffenholtz Creek of 290 gpm, and accounting for normal year pass-by flows of 112 gpm, and maintaining 3 gpm for downstream users, the MDD of 160 gpm would leave an additional 15 gpm available in Luffenholtz Creek for additional diversions upstream or downstream without imposing limits on diversions to the City of Trinidad.

Following completion of the LACO 2009 Supplemental Water System Analysis (Appendix N), the Lead Agency was informed of an additional analysis of the water supply available to the City of Trinidad (Preliminary Feasibility of Connecting Study, Winzler & Kelly, 2009) (Appendix O). That study was conducted specifically to address the request by the Trinidad Cal Fire station on Patrick's Point Drive to receive a new extension of water service to the station from the City's water system. A Preliminary Feasibility of Connecting Study was prepared which indicated that the fire station would require a total peak daily water supply of 800 gpd (0.6 gpm), and concluded that the City of Trinidad water system had the capacity to meet that demand. At the Lead Agency's request, LACO prepared a supplement (Appendix O) to the LACO 2009 Supplemental Water Supply Assessment to determine whether the underlying assumptions of the Winzler & Kelly 2009 study continued to support the findings of both the Winzler & Kelly 1995 Study (Appendix B), and the LACO 2009 Study. The LACO 2010 supplement also addresses any changes to the original analysis which may be caused by the proposed service to the Trinidad CalFire Station. As LACO's 2009 Study used conservative assumptions, the outcome of this second analysis remains nearly the same; e.g., the addition of the 800 gpd to be used by the fire station, is generally in line with the anticipated growth in demand already factored into the LACO analysis and does not materially alter its findings.

Project Demand

Project water demand was estimated in the Water Supply Assessment to be similar to the average demand per service connection established for the City of Trinidad – 327 gallons per day (0.2 gpm) with a maximum day demand of 589 gallons per day (0.4 gpm). The Project consists of up to three additional residential homes obtaining water from Luffenholtz Creek, resulting in an average day demand of 981 gallons per day (0.7 gpm) and a maximum day demand of 1,570 gallons per day (1.1 gpm). (The fourth proposed residence would take water from Deadman Creek and is excluded from consideration of impacts to the City of Trinidad's water system). As described in Section 3.2.1.5 above, an alternative method for calculating project demand which was not considered in the technical study would be to rely on the minimum mandatory flow of 400 gpm to comply with Section 2554.9.A of the Humboldt County Framework Plan element of the General Plan. As the analysis in the technical study relies on a MDD of 589 gpd which exceeds the General Plan minimum, the analysis of impacts to water supply for the City of Trinidad will rely on the assumptions within the technical study.

2009 Mitigation Measure No. 2, above, requires the installation of water tanks on the subject property to avoid the withdrawal of surface water during the dry season (generally August 15 to November 15). Further, to limit excessive withdrawals while tanks are being filled, 2009 Mitigation Measure No. 3, above, requires that pumps be sized or otherwise regulated to limit withdrawals from the North Fork of Luffenholtz Creek to a maximum of 6 gpm. The only period of sustained withdrawal would be likely to occur during the early weeks of the wet season as the tanks are being refilled. During this period, flows in Luffenholtz Creek at the City of Trinidad intake will also be above their dry season minimum, allowing additional stream capacity without restricting the City of Trinidad's diversions.

Anticipated Project Affect on Available Supply:

Taking all of the above into account leads to the following:

Future Year Diversion for Trinidad Water System
(Full Plan Buildout, Peak Day in Maximum Month):160 gpm

Pass-by Flow reserved for downstream users:	3 gpm
Pass-by Flow reserved for Habitat (normal year):	112 gpm
Dry year flow in Luffenholtz Creek at Intake (Without Project):	290 gpm
Dry year flow in Luffenholtz Creek at Intake (With Project, Peak Day in Maximum Month):	289 gpm
“Unassigned” Pass-by Flow without project (Peak Day in Maximum Month):	15 gpm
“Unassigned” Pass-by Flow with project (Peak Day in Maximum Month):	14 gpm

3.2.2.6 Determination of Significance (without mitigation)

The reduction in “unassigned” pass by flows from 15 gpm to 14 gpm in the worst case analysis (full General Plan buildout, peak day demand, in the maximum month of a dry year, while preserving normal year habitat flows) does not present a substantial risk to the City of Trinidad’s continued ability to meet existing and reasonably anticipated water demand, while preserving mandatory pass-through flows. Therefore the project impact is determined to be *less than significant*.

3.2.2.7 Mitigation Measures

None Required

CHAPTER 4 EVALUATION OF ALTERNATIVES AND CUMULATIVE EFFECTS

4.1 Alternatives Analysis

4.1.1 Introduction

CEQA Guidelines Section 15126.6 requires an EIR to include the description of a range of reasonable alternatives to the project, or to the location of the project. One of the alternatives must be the “No Project” alternative, which analyzes the effects of a decision not to carry out the project as proposed. Other alternatives should be selected to achieve at least some of the project objectives while avoiding or substantially reducing any of the significant effects of the project. The design of appropriate alternatives is necessarily somewhat subjective; however, a “rule of reason” applies to the process to encourage the design of alternatives which could be implemented if selected.

As noted in Chapter Two, Project Description, the following objectives apply to the project. Selected alternatives (with the exception of the “No Project” Alternative) should meet at least one of these objectives:

Objective No. 1: Subdivide the subject site in conformance with the standards of the Humboldt County General Plan and Zoning Ordinance, Subdivision Ordinance and Subdivision Map Act. It is anticipated that following the subdivision, each parcels would be developed for residential use.

Objective No. 2: Provide infrastructure including water, sewer, roads, power, and communications necessary to support the subdivision of the subject site.

To determine whether an Alternative is “feasible” the lead agency may consider site suitability, economic viability, availability of infrastructure, consistency with the General Plan, conformance with regulatory limitations, and the presence of jurisdictional boundaries. The CEQA Guidelines also encourage the lead agency to take into account whether the project proponent owns, or can reasonably acquire, control or otherwise have access to an alternative project location.

In the typical scoping process for an EIR, an Initial Study is prepared which identifies potentially significant effects and appropriate mitigation measures. If there are any impacts which cannot be mitigated below the threshold of significance, an EIR is prepared. In such cases, the lead agency may choose to focus the EIR only on those issues identified in the Initial Study as potentially significant. However, the Alternatives Analysis typically addresses all of the potential effects of the project and is not limited to those topics discussed in the EIR Impact Analysis. This EIR takes a similar approach. An Initial Study was prepared for the proposed project in 1997, which identified no potentially significant effects which could not be adequately mitigated. As such, no EIR was prepared, and no alternatives analysis was conducted. In 2008, the Appellate Court of California (District 1) determined that Humboldt County may require a supplemental EIR for the project focused on the effects of the project on 1) the population of coastal cutthroat trout; and 2)

the water supply of the City of Trinidad. However, as no alternatives analysis was undertaken with the original approval in 1997, it is appropriate at this time to consider effects of project alternative to the complete range of potential impacts.

The alternatives which have been determined to be appropriate for consideration on this site are the following:

- Alternative No. 1) No Project
- Alternative No. 2) Alternative water supply (wells)
- Alternative No. 3) Clustered development

4.1.2 Alternative No. 1 – No Project Alternative

Section 15126.6(e)(2) of the CEQA Guidelines requires that the “no project” alternative be evaluated during the preparation of any EIR. The no project alternative discusses existing conditions on the site as well as what would reasonably be expected to occur if the project is not approved. The purpose of the “No Project” Alternative is to compare the consequences of approving a project with the consequences of not approving it.

Under the “No Project” Alternative, the 94 acre parcel would not be divided into four independent parcels. As the subject site is greater than 40 acres in size, it would be expected to be developed with two residential units pursuant to Section 314-7.1 of the Humboldt County Zoning Ordinance. The potential would remain for the subject site to be managed for timber production, most likely in conjunction with neighboring parcels to the north and west. Residential water service would be expected to be approximately half that assumed for the Proposed Project, but without the limitations on time of year and maximum withdrawal rate established by 2009 Mitigation Measures 2 and 3.

Brief Analysis of Impacts: “No Project” Alternative:

- Land Use and Planning: Less than Significant Impact; Similar to the project
As proposed, the project has been found to be in conformance with existing General Plan and Zoning standards and to be compatible with existing land uses in the vicinity. Depending upon their location, the two residences permitted in the “No Project” Alternative would be expected to have somewhat less impact on potential future timber harvests, if any occur.
- Population and Housing: Less than Significant; Similar to the project
The “No Project” Alternative would be expected to lead to the construction of two fewer residences than are proposed in the project. At an average of 1.85 residents per household (US Census) in the vicinity of Trinidad, neither the project, nor the “No Project” Alternative are expected to lead to a substantial increase in the growth of the area.

- **Geological Problems: Less Than Significant Impact: Similar to Project**
 The proposed project includes mitigation measures sufficient to reduce potential concerns related to seismic activity, landslides, erosion, etc. to less than significant levels. Although the specific mitigation measures would not apply to houses constructed under the “No Project” Alternative, the standards of the Uniform Building Code and policies of the Humboldt County Zoning Ordinance regarding placement of housing in the vicinity of steep slopes and water courses would provide adequate protection for people and property.
- **Water: Less Than Significant Impact: Similar to Project**
 The proposed project includes mitigation measures sufficient to reduce potential concerns related to water quality to less than significant levels. Although the specific mitigation measures would not apply to houses constructed under the “No Project” Alternative, the standards of the Uniform Building Code and policies of the Humboldt County Zoning Ordinance regarding placement of housing in the vicinity of steep slopes and water courses and would provide adequate protection for people and property. While fewer residences would be constructed under this alternative, reducing projected withdrawals from the North Fork of Luffenholtz Creek and/or Deadman Creek, those residences would not be subject to the proposed water storage mitigation measures.
- **Air Quality: Less Than Significant Impact: Similar to Project**
 The proposed project would be subject to the PM₁₀ “Fugitive Dust” control measures adopted by the North Coast Unified Air Quality Control District (NCUAQMD). Such regulations apply during construction activities to limit dust formation from grading, construction vehicle operation, etc. The “No Project” Alternative would result in fewer vehicle trips to the subject site with a modest reduction in project related air quality effects.
- **Transportation/Circulation: Less Than Significant Impact: Similar to Project**
 Pursuant to the approved 1998 Mitigated Negative Declaration, and prior to the expiration of the Tentative Minor Subdivision Map, the applicant completed improvements to Fox Farm Road sufficient to address the potential effects of the proposed project. While the “No Project” Alternative would result in fewer vehicle trips to the subject site, the presence of improvements completed under the original approval are adequate to accommodate traffic serving the proposed project.
- **Biological Resources: Less Than Significant Impact: Greater than Project**
 The proposed project includes mitigation measures sufficient to reduce potential concerns related to biological resources to less than significant levels. Many of these protections (such as setbacks and Best Management Practices) would apply through the application of existing regulations to development which could occur under the “No Project”

scenario. However, it is unlikely that the requirement for seasonal off-stream water storage would be imposed under the “No Project” Alternative. While the total volume of water withdrawals from the North Fork of Luffenholtz Creek and/or Deadman Creek would be reduced under the “No Project” alternative, the inability time withdrawals to avoid the dry season increases the potential effect to populations of coastal cutthroat trout.

- **Energy and Mineral Resources: Less Than Significant Impact: Less Than Project**
The “No Project” Alternative would be expected to lead to the construction of two fewer residences than are proposed in the project. This would yield a modest proportionate reduction in energy demand and use of mineral resources.
- **Hazards: Less Than Significant Impact: Similar to Project**
The proposed project includes mitigation measures sufficient to reduce potential hazards from seismic activity, flooding and other sources to less than significant levels. Although the specific mitigation measures would not apply to houses constructed under the “No Project” Alternative, the standards of the Uniform Building Code and policies of the Humboldt County Zoning Ordinance regarding placement of housing in the vicinity of steep slopes and water courses would provide adequate protection for people and property.
- **Noise: Less Than Significant Impact: Similar to Project**
The “No Project” Alternative would be expected to lead to the construction of two fewer residences than are proposed in the project. This would yield a modest proportionate reduction in noise generation from stationary sources and traffic. No concerns have been identified in either alternative regarding the exposure of people to noise sources from aircraft or neighboring uses.
- **Public Services: Less Than Significant Impact: Less Than Project**
The “No Project” Alternative would be expected to lead to the construction of two fewer residences than are proposed in the project. This would yield a modest proportionate reduction in demand for public services such as police, fire and schools.
- **Utilities and Service Systems: Less Than Significant Impact: Less Than Project**
The “No Project” Alternative would be expected to lead to the construction of two fewer residences than are proposed in the project. This would yield a modest proportionate reduction in demand for utilities.
- **Aesthetics: Less Than Significant Impact: Less Than Project**
The primary aesthetic effect of the project is the construction of housing in an attractive setting, visible from Fox Farm Road. Such construction would be similar to other

properties in the vicinity; however, the “No Project” Alternative would be expected to lead to the construction of two fewer residences than are proposed in the project. This would yield a modest proportionate reduction in the potential aesthetic effect of the project.

- **Cultural Resources: Less Than Significant Impact: Similar to the Project**
No cultural resources have been identified on the subject site. The proposed project includes mitigation measures to address appropriate protocols for protecting resources which are uncovered during construction. Although these mitigation measures would not be adopted under the “No Project” Alternative, regulations with a similar effect are in place to ensure that inadvertent discoveries are protected and characterized before their removal or destruction.
- **Recreation: Less Than Significant Impact: Less Than Project**
The “No Project” Alternative would be expected to lead to the construction of two fewer residences than are proposed in the project. This would yield a modest proportionate reduction in demand for recreation facilities and services.

4.1.3 Alternative No. 2 – Alternative Water Supply (Wells)

Under the Alternative Water Supply approach, the water supply for all four parcels would be converted from surface water draws from Deadman Creek (one parcel) and the North Fork of Luffenholtz Creek (three parcels), to individual or shared domestic water wells to serve each site. As noted in the Hydrology Section of the 2005 Initial Study (Appendix H), this approach carries two potential risks which require consideration. First, the presence of wells on site does not interfere with a property owner’s riparian rights to withdraw water from adjacent streams. Any advantage to be gained from the provision of domestic water from wells rather than surface water must be balanced against the potential that a property owner would continue to exercise riparian water rights, diverting water from Luffenholtz Creek or Deadman Creek for increased landscaping, agricultural production or other uses. For the purposes of this study, it will be assumed that such an approach would be accompanied by a mitigation measure requiring property owners to vacate their riparian water rights as a condition of approval of the Minor Subdivision Map.

The second risk associated with this alternative is that little direct hydrogeologic information is available with regard to the subject site. The hillside areas in the vicinity of Westhaven, and throughout Humboldt County, have highly variable subsurface groundwater availability. While water wells have been successfully developed in the general vicinity of the subject site, there is no direct evidence to indicate that wells could be developed on site to provide sufficient domestic water supplies. Another concern raised in the 2005 Initial Study is that any such well could be directly linked to Deadman Creek, or Luffenholtz Creek, essentially drawing from subsurface flows of those watercourses. In that circumstance, there is the potential that the

proposed alternative would cause reductions in surface flows similar to those which would occur under the proposed project.

If these technical challenges can be overcome, Alternative No. 2 has the potential to maintain existing flows in both watercourses on the subject site, limiting the potential effects both to natural communities and to the water supply which ultimately reaches the City of Trinidad.

- **Land Use and Planning: Less than Significant Impact; Similar to the project**
As proposed, the project has been found to be in conformance with existing General Plan and Zoning standards and to be compatible with existing land uses in the vicinity. An alternative water supply would have no effect on such findings.
- **Population and Housing: Less than Significant; Similar to the project**
An alternative water supply will not change the magnitude of effects of the project with regard to population and housing.
- **Geological Problems: Less Than Significant Impact: Similar to Project**
An alternative water supply will not change the magnitude of effects of the project with regard to geological hazards and related concerns. The proposed mitigation measures to reduce potential concerns related to seismic activity, landslides, erosion, etc. would remain in effect.
- **Water: Less Than Significant Impact: Less Than Project**
An alternative water supply will not change the magnitude of effects of the project with regard to water quality. The proposed mitigation measures to reduce potential concerns related to erosion, siltation and runoff would remain in effect.

Reducing the direct withdrawals from the North Fork of Luffenholtz Creek does have the potential to reduce the effect of the project with regard to water availability for downstream users, most particularly, the City of Trinidad. While this effect was found to be less than significant for the proposed project, it was not found to be negligible. Removing the potential to withdraw water from the North Creek of Luffenholtz Creek, would, therefore, reduce the magnitude of the impact to the water supply of the City of Trinidad.

- **Air Quality: Less Than Significant Impact: Similar to Project**
An alternative water supply will not change the magnitude of effects of the project with regard to air quality. The NCAQMD measures to reduce potential concerns related to the formation of fugitive dust (PM₁₀) would remain in effect.

- **Transportation/Circulation: Less Than Significant Impact: Similar to Project**
 An alternative water supply will not change the magnitude of effects of the project with regard to transportation and circulation. The effectiveness of the mitigation measures already fulfilled pursuant to the approved 1998 Mitigated Negative Declaration would not be affected.
- **Biological Resources: Less Than Significant Impact: Less than Project**
 Alternative No. 2 has the potential to reduce the impacts of the project to sensitive species by eliminating the requirement to withdraw water from the North Fork of Luffenholtz Creek and from Deadman Creek as currently proposed. Both water courses have the potential to serve as habitat for coastal cutthroat trout (designated by the California DFG as a SSC) and other riparian species. The proposed mitigation measures with regard to the placement of residences on the subject site, use of Best Management Practices, and the requirement to provide seasonal off-stream water storage are sufficient to reduce the effects to less than significant levels. However, if the technical considerations described above can be resolved, development of wells as an alternative to the use of the existing in-stream water intakes which were installed under the approved 1998 Mitigated Negative Declaration, has the potential to reduce the magnitude of the residual effect by eliminating the potential to reduce stream flows.
- **Energy and Mineral Resources: Less Than Significant Impact: Similar to Project**
 An alternative water supply will not change the magnitude of effects of the project with regard to the use of energy and mineral resources.
- **Hazards: Less Than Significant Impact: Similar to Project**
 An alternative water supply will not change the magnitude of effects of the project with regard to the exposure of people or property to natural or manmade hazards.
- **Noise: Less Than Significant Impact: Similar to Project**
 An alternative water supply will not change the magnitude of effects of the project with regard to the exposure of people to excessive levels of noise.
- **Public Services: Less Than Significant Impact: Similar to Project**
 An alternative water supply will not change the magnitude of effects of the project with regard to the demand for public services.
- **Utilities and Service Systems: Less Than Significant Impact: Similar to Project**
 An alternative water supply will not change the magnitude of effects of the project with regard to the demand for utilities and other services.

- **Aesthetics: Less Than Significant Impact: Similar to Project**
An alternative water supply will not change the magnitude of effects of the project to scenic vistas, the generation of light and glare, or other aesthetic values.
- **Cultural Resources: Less Than Significant Impact: Similar to Project**
An alternative water supply will not change the magnitude of effects of the project to historic or archaeological resources on the subject site
- **Recreation: Less Than Significant Impact: Similar to Project**
An alternative water supply will not change the magnitude of effects of the project with regard to the demand for recreational facilities or services.

4.1.4 Alternative No. 3 – Clustered Development

Under the clustered development approach, the project would be amended to concentrate development onto a smaller portion of the site, while retaining a larger area undisturbed. Under this scenario, Parcel 1, which is separated from the majority of the site by Fox Farm Road, would be unaffected. Parcels 2, 3, and 4 would be reconfigured into approximately one acre parcels, taking advantage of the three potential building pads identified in the northerly portion of the site, generally along Fox Farm Road. The remainder of the property, including the development site identified on proposed Parcel 4, would be consolidated into a Remainder parcel of approximately 84 acres. It is assumed that residential development rights on the Remainder parcel would be dedicated to the County or would be otherwise restricted. By concentrating development, this approach has the potential to reduce the overall developed footprint of the project by limiting onsite private road and driveway requirements, and potentially unifying the grading plans for neighboring building pads.

- **Land Use and Planning: Less than Significant Impact; Greater than the project**
As proposed, the project has been found to be in conformance with existing General Plan and Zoning standards and to be compatible with existing land uses in the vicinity. The subject site is Zoned AE (Exclusive Agriculture) which imposes a minimum lot size of 20 acres. As the Alternative 3 calls for the formation of three lots of approximately one-acre each, the project would require additional elements to bring the proposal into conformance with the Zoning Ordinance. Options available include a Zone Change to a zoning designation which permits parcels smaller than 20-acres, application of the PD (Planned Development) Zone and approval of a Planned Development Permit with reduced lot sizes or approval of a Zone Variance to permit reduced lot sizes. Any of these approaches may be accompanied by a General Plan Amendment to a designation which encourages clustered, higher density development.

- This alternative may have a countervailing positive effect on Land Use and Planning by preserving a substantial portion of the site in a single remainder parcel. A single larger parcel under common ownership provides a more convenient platform for agricultural and timber production. While such use of the 84 acre Remainder parcel cannot be guaranteed, it may be more likely under Alternative No. 3, providing greater conformance with the principles of the TIMBER; RECREATION and DISPERSED HOUSES; TIMBER General Plan designations.
- Population and Housing: Less than Significant; Similar to the project
Clustering development will not change the magnitude of effects of the project with regard to population and housing.
- Geological Problems: Less Than Significant Impact: Less than project
Clustering development has the potential to require a smaller overall footprint of developed area, with accompanying reductions in grading. This has the potential to reduce the risk of erosion. The proposed mitigation measures to reduce potential concerns related to seismic activity, landslides, erosion, etc. would remain in effect.
- Water: Less Than Significant Impact: Similar to Project
Clustering development will not change the magnitude of effects of the project with regard to water quality or water supply to downstream users. The proposed mitigation measures to reduce potential concerns related to erosion, siltation, and runoff would remain in effect.
- Air Quality: Less Than Significant Impact: Similar to Project
Clustering development will not change the magnitude of effects of the project with regard to air quality. The NCAQCD measures to reduce potential concerns related to the formation of fugitive dust (PM₁₀) would remain in effect.
- Transportation/Circulation: Less Than Significant Impact: Similar to Project
Clustering development will not change the magnitude of effects of the project with regard to transportation and circulation. The effectiveness of the mitigation measures already fulfilled pursuant to the approved 1998 Mitigated Negative Declaration would not be affected.
- Biological Resources: Less Than Significant Impact: Similar to Project
Clustering development will not change the magnitude of effects of the project to biological resources. The proposed mitigation measures with regard to the placement of residences on the subject site, use of Best Management Practices, and the requirement to provide seasonal off-stream water storage would remain in effect.

- Energy and Mineral Resources: Less Than Significant Impact: Less Than Project
Clustering development will not change the magnitude of effects of the project with regard to the use of energy and mineral resources.
- Hazards: Less Than Significant Impact: Similar to Project
Clustering development will not change the magnitude of effects of the project with regard to the exposure of people or property to natural or manmade hazards.
- Noise: Less Than Significant Impact: Similar to Project
Clustering development will not change the magnitude of effects of the project with regard to the exposure of people to excessive levels of noise.
- Public Services: Less Than Significant Impact: Less Than Project
Clustering development will not change the magnitude of effects of the project with regard to the demand for public services.
- Utilities and Service Systems: Less Than Significant Impact: Less Than Project
Clustering development will not change the magnitude of effects of the project with regard to the demand for utilities and other services.
- Aesthetics: Less Than Significant Impact: Less Than Project
Clustering development will not predictably change the magnitude of effects of the project to scenic vistas, the generation of light and glare, or other aesthetic values. By creating a larger, centrally located development area, Alternative No. 3 reduces the extent, but increases the intensity of the interruption of woodland views from Fox Farm Road.
- Cultural Resources: Less Than Significant Impact: Similar to Project
Clustering development will not change the magnitude of effects of the project to historic or archaeological resources on the subject site
- Recreation: Less Than Significant Impact: Less Than Project
Clustering development will not change the magnitude of effects of the project with regard to the demand for recreational facilities or services.

4.1.5 Environmentally Superior Alternative

In addition to the analysis of the environmental merits and concerns for each alternative, individually, CEQA requires that the alternatives be generally ranked from the least to the most environmental effects. A ranking matrix is presented as Table 4-1. Alternative 1 – “No Project” is the environmentally superior alternative; however, it does not meet either of the project objectives. Where the “No Project” Alternative is rated as the most environmentally superior

option, CEQA also requires the identification of the most superior of the other projects. Alternative No. 2 (Alternative Water Supply) is rated as the most superior remaining alternative, provided wells can be developed on the subject site which are both sufficient to supply the domestic water needs of the project and can be demonstrated not to exhibit direct influence on surface water flows.

4.1.6 Feasibility Analysis

If one of the project alternatives is rated environmentally superior to the proposed project, and fulfills the project objectives, an EIR is required to address the feasibility of that Alternative.

Development of domestic wells on the subject site, as proposed under Alternative No. 2 would require the identification of a groundwater source with sufficient capacity to serve the proposed residences. A memorandum regarding the likelihood of identifying such a source was provided by LACO (Appendix P). Based on general hydrogeologic information regarding the project vicinity, the memorandum concludes that it is reasonably likely that a well could be developed on the upper portions of the site with sufficient capacity to serve the development. The memorandum also notes that, while such an effect cannot be conclusively ruled out in the absence of additional study, it is unlikely that a domestic well drawing from the local aquifer would have a direct measurable effect on the volume of surface flows in adjacent streams.

It is possible that the development of a well on the subject site could be proven to be infeasible based on the development of site specific information. Such a determination would require additional information regarding subsurface hydrogeology, typically derived from onsite test wells. The installation of such test wells is beyond the scope of this EIR.

In the absence of evidence to the contrary, this Report tentatively determines that Alternative No. 2 is technically feasible. As installation of water wells is a common requirement for development which does not enjoy riparian water rights, this Report also tentatively concludes that Alternative No. 2 is financially feasible. As a potentially feasible and environmentally superior alternative to the proposed project is available, it is expected that findings adopting Alternative No. 2 as the preferred project will be approved. Such findings would require the applicant to either amend the project to incorporate domestic wells or provide evidence clearly indicating that this alternative is infeasible on the basis of the lack of demonstrated groundwater availability.

**Table 4-1
Environmental Impacts of Alternative
Compared to Project**

		Impacts Rated as Significant in an Initial Study and/or Requiring Mitigation Measures							
Alternative	Feasible?	Meet Project Objectives?	Land Use and Planning	Population and Housing	Geological Problems	Hydrology/ Water Quality	Air Quality	Transportation/ Circulation	Biological Resources
Project	Yes	Yes	Less Than Significant with Mitigation	Less Than Significant	Less Than Significant with Mitigation	Less than Significant with Mitigation	Less Than Significant	Less than Significant with mitigation	Less than Significant with mitigation
Alternative No. 1 – “No Project”	Yes	No	Less	Less	Same	Same	Same	Same	Greater
Alternative No. 2 – Alternative Water Supply (Wells)	Yes (Tentatively)	Yes	Same	Same	Same	Less	Same	Same	Less
Alternative No. 3 – Clustered Development	Yes	Yes	Greater	Same	Less	Less	Same	Same	Same

Impacts Rated as Significant in an Initial Study and/or Requiring Mitigation Measures										
Alternative	Feasible?	Meet Project Objectives?	Energy and Mineral Resources	Hazards	Noise	Public Services	Utilities and Service Systems	Aesthetics	Cultural Resources	Recreation
Project	Yes	Yes	Less Than Significant	Less Than Significant with Mitigation	Less Than Significant	Less Than Significant	Less Than Significant	Less than Significant with mitigation	Less than Significant with mitigation	Less than Significant
Alternative No. 1 – “No Project”	Yes	No	Less	Same	Same	Less	Less	Less	Same	Less
Alternative No. 2 – Alternative Water Supply (Wells)	Yes (Tentatively)	Yes	Same	Same	Same	Same	Same	Same	Same	Same
Alternative No. 3 – Clustered Development	Yes	Yes	Same	Same	Same	Same	Same	Same	Same	Same

4.2 Cumulative Impacts

4.2.1 Summary

The CEQA Guidelines require that all Environmental Impact Reports contain an analysis of the cumulative impacts of the proposed project. Section 15355 of the Guidelines defines Cumulative Impacts as:

"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- (a) The individual effects may be changes resulting from a single project or a number of separate projects.*
- (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."*

The first step in this analysis typically occurs during the Initial Study. Such effects may be discussed with individual resources and must be considered when addressing "Mandatory Findings of Significance." CEQA Guidelines Section 15065(a)(3) requires a lead agency to determine that a project may have a significant effect, and to prepare an EIR whenever:

"The project has possible environmental effects that are individually limited but cumulatively considerable. 'Cumulatively considerable' means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

When such cumulatively considerable effects are identified in the Initial Study, and the lead agency determines that an EIR should be prepared, CEQA Guidelines Section 15065(c) requires that cumulative effects be taken into account when determining the depth of discussion of various potential impacts, the design of appropriate mitigation measures, and the evaluation of project alternatives.

The 1997 Initial Study (Appendix A), concluded that the project does not have impacts which are individually limited but cumulatively considerable. The primary basis for this finding was the limited ability of neighboring properties to be developed in the absence of comprehensive environmental reviews. The Initial Study prepared in 2005 (Appendix H), found cumulative impacts to be potentially significant. The 2008 Appellate Court decision (Appendix J) authorizes the preparation of a Supplemental EIR to discuss solely the issues of potential impacts to the population of coastal cutthroat trout and the water supply of the City of Trinidad. The Appellate Court does not specifically discuss the issue of cumulative impacts. Based on the above facts and prior analyses, the County of Humboldt, acting as lead agency, has determined that the analysis

regarding effects which are “cumulatively considerable” continue to apply to this analysis and that the EIR must include a discussion of the potential cumulative impacts of the project to the two areas on which the EIR is focused.

The first step in preparing a Cumulative Impacts analysis is to set the project in context with other proposed and potential development. CEQA Guidelines Section 15130(b) provides direction for setting this context. The lead agency may use either of the following methods to determine what other projects to consider in the analysis:

- A. A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or*
- B. A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.*

4.2.2 Identification of Projects Contributing to Cumulative Impacts

The lead agency has opted to prepare two complementary analyses of Cumulative Impacts using both the “list of projects” approach and the “General Plan Buildout” approach. The “list of projects” approach was utilized to give the most precise measure of anticipated development in the area, and allows a specific discussion of actual anticipated impacts. The complementary General Plan Buildout approach was prepared to address comments received regarding cumulative impacts in response to both the 1997 and 2005 Initial Studies and in response to the 2009 NOP (Appendix L). Such comments have encouraged the lead agency to take an unusually expansive view of the cumulative impacts of the proposed project. Some comments suggest that the project be viewed as the first stage of a plan for development of a much larger area, generally north and east of the subject site.

The lead agency has utilized a “sub-watershed” buildout approach to analyze a larger series of subdivisions throughout the project area based on a projection that most existing large parcels would be divided to approximately the minimum lot size permitted by the General Plan (generally 20 acres). This approach was used even though there is uncertainty in determining the source of water which would be proposed in such a scenario. Large parcels in the vicinity could draw from one of at least three surface water sources (Luffenholtz Creek, Deadman Creek, and Mill Creek), a larger variety of springs and minor drainages, or could propose the development of onsite wells. As the critical areas for consideration in this EIR are strongly dependent on an analysis of water supply, the lead agency determined that a sub-watershed “build-out” method of calculating cumulative impacts should also be addressed with regard to the potential impacts to coastal cutthroat trout and the water supply of the City of Trinidad.

The lead agency has also received comments, suggesting that the cumulative impacts analysis should address build out to densities not currently permitted by the General Plan by assuming that future General Plan Amendments may be proposed. Some comments found additional justification in this suggestion from the ongoing comprehensive General Plan update process being undertaken by the County of Humboldt. One of the four alternate development scenarios (Alternative C) being assessed in that process would permit considerably higher density development (rural residence 5-20 acres) on the subject site and parcels to the west and south. The lead agency finds no justification in the CEQA Statutes or Guidelines for assuming that the General Plan will be changed in specific ways or that any particular alternative in the General Plan Update process will be selected. If a General Plan Amendment is proposed which would permit increased residential density on the subject site, that project will be subject to considerable CEQA review on its own merits. Until such a project is proposed, however, the potential impacts of development to a standard not currently permitted has been determined to be too speculative to address.

“List of Projects” Approach

As both impact areas to discuss relate specifically to the watercourses which traverse the property, the County identified the watersheds of the Luffenholtz Creek, the North Fork of Luffenholtz Creek and Deadman Creek, respectively, as the geographic area in which contributions to cumulative effects could occur. Specifically, Humboldt County Staff prepared a list of all projects which had been initiated since 1996 on any of the parcels shown in Assessor’s Parcel Map Book 515, Pages 11, 12, 13, 14, and 29, and Assessor’s Parcel Map Book 513, Pages 10 and 11 (Appendix Q). The search included projects that had been completed, projects currently underway, and projects which have not yet been formally initiated, but which have been brought to the County’s attention through an early consultation or request for information.

In addition to the subject project, the County identified the following proposals:

- 1) Coastal Development Permits and other requests for the development of a total of six new single family residences.
- 2) Proposed divisions of land from a total of three existing parcels to a total of seven proposed parcels.

Sub-Watershed Buildout Approach

In addition to the “list of projects” approach, and in an effort to also look at potential cumulative impacts through a sub-watershed approach, the Lead Agency considered the development potential within the Luffenholtz sub-watershed along Adams Fox Farm Road of all assessor parcels within Section 19 and the North quarter of Section 30. This generated the following APN list, with the respective development potential:

AG-B5(3) zoning, three acre minimum parcel size: 515-291-08, -10, -12, -13, -14, -15, -17, -18, -21, -23, -24, -27, -28, -29, -33, -34, -35; 515-131-11, -17, -18.

All of these parcels show some improvements (i.e. are already developed), and five of them have the potential for further subdivision (of one lot into two) under the minimum parcel size of three acres, for a potential of five additional lots.

AE zoning, 20 acre minimum parcel size: 513-101-19, 515-291-44, -45, -46; 515-131-26
Five of these parcels (including the Moss parcel) have the potential for further subdivision into minimum 20 acre parcels that could result in 13 parcels where five exist today, for eight additional potential parcels. Note 515-291-46 is the Moss property and represents three of the new lot potential.

Unclassified zoning (RE general plan): 515-121-23. There is one undeveloped parcel that has the potential for one dwelling unit according to the Housing Inventory.

TPZ zoning, 160 minimum parcel size (40 acres with a JTMP): 515-291-03, 513-101-15; 515-131-05. Two parcels are 20 acres or less and have some improvements (i.e. is already developed) and the other parcels is 270 acres, undeveloped, and has the potential for subdivision into six parcels with a Joint Timber Management Plan (JTMP). These parcels have the potential for six additional dwelling units.

Total subdivision and/or new residential development potential (exclusive of secondary dwelling units) for this area is the possible development of an additional 20 residential units. The development of secondary dwelling units on these parcels has been determined to be too speculative to analyze in relevant CEQA case law, however, typically, fewer than 20 percent of residential parcels have secondary dwelling units in other areas of the County (personal communication with Humboldt County Planning Division Staff, June, 2010).

As noted above, it is unlikely that all of the potential new development would be served by water withdrawals from surface waters which could affect coastal cutthroat trout or the water supply of the City of Trinidad. Many of the evaluated parcels lack access to surface water and, therefore, are unlikely to be able to secure surface water rights. If development on those parcels is proposed, they are likely to utilize on site water wells for domestic water supplies. Public comments previously submitted addressing the current project expressed concern that under a worst case cumulative scenario, the cumulative subdivision and build out potential of the sub-watershed has the potential to exceed the available surface water flow in Luffenholtz Creek. This situation has been recognized in the Humboldt County general plan (see section 4.2.3.2 below).

4.2.3 Cumulative Impacts of Development

For the purposes of calculating cumulative impacts to the watershed, the County utilizes the following assumptions:

- 1) Subdivision of land indicates an intention or willingness to develop single family residential uses on each created parcel.

- 2) Each parcel created by a subdivision has the potential to be developed with one dwelling unit (a main residence). Note: accessory (secondary) dwelling units allowed pursuant to the County Zoning Ordinance were not considered pursuant to Save Round Valley Alliance v. County of Inyo (2007) 157 Cal. App. 4th 1437, which found such analysis to be unduly speculative.
- 3) Each new dwelling unit will withdraw water either directly or indirectly from Luffenholtz Creek. This is a simplifying assumption intended to show a likely worst-case scenario.
- 4) Pursuant to the adopted standards of the Humboldt County Department of Environmental Health, each dwelling unit is presumed to draw an average of 0.5 gpm from their water source.

Under the project list approach, the total impact of recent, current, and reasonably anticipated development to the flows along Luffenholtz Creek is calculated to be approximately 6.5 gpm (seven new parcels at one dwelling unit each, plus six additional dwelling units, times 0.5 gpm per unit). When added to the anticipated draw from the North Fork of Luffenholtz Creek identified in Chapter 3 and Appendix N of approximately 1.1 gpm, the cumulative impact is approximately 7.6 gpm.

Under the sub-watershed approach, the total impact of potential subdivisions and development to the flows along Luffenholtz Creek is calculated to be 10.0 gpm (19 new parcels at one dwelling unit each and one additional dwelling unit times 0.5 gpm per unit). When added to the anticipated draw from the North Fork of Luffenholtz Creek, the cumulative impact is 11.1 gpm. This, more conservative, estimate of cumulative water demand will be used for impact analysis and the design of appropriate mitigation measures.

4.2.3.1 Cumulative Impacts to Coastal Cutthroat Trout

As noted in Chapter 3, no reliable scientific information has been identified to establish minimum acceptable flow which is broadly applicable to support non-anadromous populations of coastal cutthroat trout. In personal communication, Jane Arnold, of the California DFG noted a fundamental risk that momentary peak demand, occurring during the dry season, have the potential to completely de-water smaller streams. Even a brief period of such a loss would make the stream uninhabitable downstream of the diversion point. The Biological Study prepared for this EIR (Appendix M) notes that “*Water diversions that result in the complete or near complete depletion of surface flows are likely to cause stress and mortality to salmonids.*”

In the absence of controls limiting withdrawals, particularly those during the dry season, the project has the potential to cause the total or near total de-watering of Deadman Creek and Luffenholtz Creek, either at the project intake or by reducing flows to existing downstream users causing their intakes to dewater the stream(s).

The projects identified for analysis as having potentially cumulative effects in conjunction with the proposed project are located within the Luffenholtz Creek watershed, but do not all share access to the same tributaries as the proposed project. One project, a coastal development permit for a single family residence, is located on Deadman Creek, downstream of the subject site. That project has the potential to exercise riparian water rights to Deadman Creek for domestic use or other purposes. Other projects are located along McConnahas Mill Creek, and in the vicinity of the main stem of Luffenholtz Creek.

The direct effects of the project are substantially reduced through mitigations which provide for building setbacks from the streambed, erosion control measures, and, most significantly, requirements for off-stream storage of water for use in the dry season. Similar setbacks and erosion controls apply generally to development in the vicinity of streams and are expected to apply to each of the proposed projects. Humboldt County has not typically imposed similar requirements for off-stream storage. However, the mitigation measure requiring off-stream storage is sufficiently comprehensive to prevent any project contribution to the potential dewatering of the North Fork of Luffenholtz Creek and/or Deadman Creek during the critical dry season period of vulnerability.

The water quality protections applicable to all projects, coupled with the complete restriction on dry-season water withdrawals for the proposed project are sufficient to ensure that the cumulative effect of the project, when considered in conjunction with nearby approved and proposed projects will be **less than significant**.

4.2.3.2 Cumulative Impacts to the Water Supply of the City of Trinidad

As described in Chapter 3, upon full buildout of the City of Trinidad General Plan, the Trinidad municipal water system is expected to withdraw approximately 160 gpm from Luffenholtz Creek on the peak day of the month with the greatest demand. Downstream users account for an additional 3 gpm, with 112 gpm reserved for habitat values. The dry year flow at the City of Trinidad intake without the project is estimated to be 290 gpm, leaving a total of 15 gpm “unassigned” and available for additional users. The project accounts for approximately 1.1 gpm, reducing the unassigned flows to 14 gpm. Development of additional properties in the Luffenholtz Creek watershed has the potential to further reduce flows upstream of the City of Trinidad water intake by approximately 11 gpm, leaving 3 gpm unassigned, even under quite conservative estimates of future demand. This also continues the approach established in the Water Supply Study (Appendix N) of assuming that “normal” year habitat flows should be maintained even in dry years.

Nonetheless, the Luffenholtz Creek watershed has been recognized as the City of Trinidad’s “Critical Water Supply Area” per §3362 of the Humboldt County General Plan (Framework Plan). The Framework Plan defines these areas as those “used by a specific municipality or community for its water supply system, which is so limited in area that it is susceptible to a potential risk of contamination from development activities.” While water quality concerns with

regard to the project have been determined by the appellate court to have been adequately described in the 1995 Initial Study (Appendix A), the status of Luffenholtz Creek as a Critical Water Supply Area requires the County to provide assurance that adequate water supplies will continue to be available as development occurs within the Luffenholtz Creek watershed. This fact is critical to the issue of cumulative impact from this new development.

Additionally, Section 3361.3 of the Humboldt County General Plan establishes the following policy: ***Ensure that the intensity and timing of new development will be consistent with the capacity of water supplies.***

Further subdivisions in the Luffenholtz Creek watershed could have an impact on the capacity of water supplies by altering the water flow characteristics, changing land uses, and changing water demands on the limited water supply that is available within the watershed. While domestic water wells may be a viable alternative for some potential development, to date, no data has been developed to estimate the capacity of groundwater supplies, recharge rates or the potential for groundwater overdraft. Newly created parcels may benefit from certain riparian water rights which could reduce in-stream water flows.

Section 3362 of the Humboldt County General Plan, which defines Critical Water Supply Area as noted above, further states that development proposed within such areas shall demonstrate that no risk of contamination to the water supply area would occur due to the development activity proposed. While not specifically addressed in that policy, the lead agency has elected to adopt a similar threshold for the assessment of the potential cumulative risk that development would reduce water supplies for the City of Trinidad.

Future discretionary development within the Luffenholtz Creek critical water supply area would be required to demonstrate that there would be no impact on the City of Trinidad water supply and demonstrate no risk of contamination to the water supply due to development activity proposed. To address this potential cumulative impact category, the following mitigation is proposed.

4.2.3.3 Determination of Significance (without mitigation)

In the absence of mitigation, the proposed project would have a ***significant cumulative effect*** on the water supply for the City of Trinidad.

4.2.3.4 Mitigation Measures

EIR MM 4: Prior to approving additional discretionary approvals for development in the vicinity of the subject site, the County of Humboldt shall identify all parcels within the Luffenholtz Creek Critical Water Supply Area (CWSA) and adopt a policy to require that any proposed future development of residential units within this area shall demonstrate that such development

will not reduce in-streams water flows below that necessary for maintaining anticipated demand for the Trinidad Water System and minimum pass-by flows to maintain habitat value in the stream for fish and other species.

4.2.3.5 Effectiveness of Mitigation Measures

As the implementation of Mitigation Measure CI.1 will ensure that estimates of the water supply available to the City of Trinidad at the Luffenholtz Creek intake, continue to demonstrate adequate capacity to meet future needs as well as allocations for habitat, downstream users and upstream development, including the proposed project and nearby approved and proposed projects, following mitigation, the cumulative effect of the project to the water supply of the City of Trinidad will be **less than significant**.

CHAPTER 5 OTHER MANDATORY CEQA SECTIONS

5.1 Significant Environmental Effects which cannot be Avoided

CEQA Guidelines Section 15126.2 (b) requires EIRs to clearly show what the environmental effects of the project which cannot be avoided through mitigation. The impact analysis found in the 1997 Initial Study (Appendix A) and in Chapter 3, indicates that all potential impacts can be mitigated below the threshold of significance.

5.2 Significant Irreversible Environmental Changes

CEQA Guidelines Section 15126.2(c) requires EIR's to address significant permanent changes to the environment. Examples of such changes are the use of large quantities of nonrenewable resources, or the construction of roads into previously inaccessible areas. The proposed project is generally sensitive to riparian portions of the site, which are the most vulnerable to permanent alteration. The proposed parcel map shows individual development sites on each parcel which are substantially removed from the streamside management areas along the North Fork of Luffenholtz Creek and Deadman Creek. Therefore, the project is not anticipated to cause Significant Irreversible Environmental Changes to any resource considered in this EIR.

5.3 Growth Inducing Impacts

CEQA Guidelines Section 15126(d) requires EIR's to:

“Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”

As originally proposed in 1995, the proposed project included at least one clearly growth-inducing component; the widening of Fox Farm Road to meet County Fire Safe regulations. This project component removed a substantial barrier to development both on existing parcels and for potential new subdivisions along its route. However, those improvements were approved, completed, and accepted by the County of Humboldt in 2000, before the first application for a Parcel Map Subdivision had been deemed to have expired by the California Appellate Court (First District) (Appendix G). The environmental assessment of the road improvements was incorporated into the 1997 Initial Study and Negative Declaration, and is not subject to continued review in this EIR.

No other infrastructure element proposed for the project has the potential to encourage further development on nearby parcels. Power and communications lines have been extended to the area to serve adjacent, higher density development to the east of the subject site. On site sewer and water systems will not be of benefit to nearby developments.

The project will increase the residential development potential of the subject site from two units to eight units. The average number of residents per household in Humboldt County is 2.4 (U.S. Census, 2000) indicating that the proposed project could increase anticipated population on the subject site from five to 19 people. While a relatively modest increase in absolute numbers, such increases must also be considered in context of the neighboring parcels. In some cases, the introduction even modest populations into undeveloped areas may encourage the conversion of adjacent lands from agricultural, timber, or similar resource production uses into less productive uses and/or into residentially oriented subdivision. That does not appear to be the case in this instance. The project is immediately adjacent to a considerably greater density of development directly to the east of the site, consisting of approximately 19 parcels ranging from 0.33 acres to 20 acres. If each of those parcels were to develop to the maximum of two units, those parcels would be expected to house approximately 91 people. No evidence has been presented to indicate that the creation of four parcels of approximately 20 acres each would increase development pressures on adjacent larger parcels beyond the effect already present from existing development.

5.4 Effects Found Not to Be Significant

As described in Appendix A (1997 Initial Study), Chapter 3 (Impact Analysis), Chapter 4 (Cumulative Impacts), and Chapter 5.3 (Growth Inducing Impacts), the following effects were found to be less than significant, and do not require the adoption of mitigation measures.

- Population and Housing:
 - Cumulatively exceed official regional or local population project[tion]s
 - Induce substantial growth in an area either directly or indirectly
 - Displace existing housing, especially affordable housing
- Water:
 - Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff
 - Exposure of people or property to water related hazards such as flooding
 - Discharge into surface waters, or other alterations of surface water quality
 - Changes in the amount of surface water in any water body
 - Changes in currents, or the course of direction of water movements
 - Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability
 - Altered direction or rate of flow of groundwater
 - Impacts to groundwater quality

- Substantial reduction in the amount of water otherwise available for public water supplies
- Air Quality:
 - Violate any air quality standard or contribute to an existing or projected air quality violation
 - Expose sensitive receptors to pollutants
 - Alter air movement, moisture, or temperature, or cause any change in climate
 - Create objectionable odors
- Energy and Mineral Resources:
 - Conflict with adopted energy conservation plans
 - Use non-renewable resources in a wasteful and inefficient manner
 - Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State
- Noise:
 - Increases in existing noise levels
 - Exposure of people to severe noise levels
- Aesthetics:
 - Affect a scenic vista or scenic highway
 - Have a demonstrable negative aesthetic effect
 - Create light or glare
- Cultural Resources:
 - Disturb paleontological resources
 - Disturb archaeological resource[s]
 - Affect historical resources
 - Have the potential to cause a physical change [which] would affect unique ethnic cultural values
 - Restrict existing religious or sacred uses within the potential impact area
- Recreation:
 - Increase the demand for neighborhood or regional parks or other recreational facilities
 - Affect existing recreational opportunities
- Mandatory Findings of Significance:
 - Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or range of a rare or endangered plant, or animal, or eliminate important examples of the major periods of California history or prehistory
 - Have the potential to achieve short-term, to the disadvantage of long-term, environmental goals
 - Have impacts which are individually limited, but cumulatively considerable

- Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly

5.5 Persons Contacted in the Preparation of this EIR

The following people provided verbal input, testimony, or information which was used in the preparation of this Draft Supplemental EIR:

Allison Jackson, Applicant's Representative
Steven Albright, City Manager, City of Trinidad
Bryan Buckman, Water Treatment Plant Operator, City of Trinidad
Jane Arnold, California Department of Fish and Game
Sungnome Madrone, Project Neighbor

5.6 Persons Preparing this EIR

The following persons were directly responsible for the preparation of one or more sections of this EIR:

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County of Humboldt

Michael Wheeler, Senior Planner

5.7 References

The following reference materials were utilized in the preparation of this EIR:

- Humboldt County General Plan – North Humboldt General Plan, Humboldt County Community Development Services Department
- Humboldt County Zoning Ordinance, Humboldt County Community Development Services Department
- Trinidad-Westhaven Integrated Coastal Watershed Management Plan (ICWMP), City of Trinidad, California
- U.S. Census – 2000, www.census.gov
- Fish Species of Special Concern, Second Edition (June, 1995), California Department of Fish and Game

- 1997 Project Initial Study (Appendix A)
- Evaluation of Supply and Demand of Trinidad Water System, January 24, 1005, Winzler and Kelly (Appendix B)
- 2005 Project Initial Study (Appendix H)
- Humboldt County Board of Supervisors Resolutions 05-55 and 05-56 (Appendix I)
- Appellate Court Decision, Michael Moss v. County of Humboldt, (Appendix J)
- California Department of Fish and Game Streambed Alteration Agreement, Notification No. 98-0423 (Appendix D)
- R.D. Hunt Surveying & Forestry June 12, 2000 letter summarizing well pump test results (Appendix E)
- City of Trinidad Letters regarding municipal water demand dated May 25, 2004 and August 4, 2005 (Appendix K)
- Humboldt County Framework Plan (Volume I, Framework Plan)

CHAPTER 6 MITIGATION MONITORING AND REPORTING PLAN

6.1 Introduction

State and local agencies are required by CEQA Statute Section 21081.6 to establish a monitoring and reporting program for all projects which are approved and which require CEQA processing. Local agencies have considerable flexibility in developing programs which meet this requirement. The mitigation monitoring program outlined in this chapter is based upon guidance issued by the Governor's Office of Planning and Research.

The mitigation monitoring and reporting program for the proposed project correspond to mitigation measures outlined in the 1997 Initial Study (Appendix A) and in the Chapter 3 of this EIR. The Program summarizes the environmental issues identified in the EIR, the mitigation measures required to reduce each potentially significant impact to below the threshold of significance, the person, or agency responsible for implementing the measures, and the agency or agencies responsible for monitoring and reporting on the implementation of the mitigation measures.

6.2 The Program

The mitigation measures contained herein shall be incorporated into the Conditions of Approval of the proposed Tentative Minor Subdivision Map, and shall be further incorporated into design and construction contracts and into contracts of sale as appropriate. The County of Humboldt will ensure that improvement plans, building permit applications, and other approvals conform to the conditions of the mitigated project. Construction inspections shall include verification of compliance with the mitigation measures as adopted.

**Table 6-1
Mitigation and Monitoring Program**

Impact	Mitigation Measure Identifier	Mitigation Measure	Implementation	Monitoring	Time Span
IS Section I.a) Conflict with plans and policies	IS MM 1	Adams Fox Farm Road shall be improved to a Road Category 4 roadway as approved by the Land Use Division of the Department of Public Works from Westhaven Drive through the subject property.	County of Humboldt Public Works Department shall verify	County of Humboldt record of Public Works inspections	Completed
	IS MM 9	The onsite sewage disposal systems shall be developed on the parcels in accordance with the County's sewage disposal regulations, and shall be located at least 100-feet from the stream transition lines of Luffenholtz and Deadman Creeks.	County of Humboldt Division of Environmental Health shall verify	County of Humboldt record of inspection	With individual building permits
IS Section III.b) Seismic ground shaking	IS MM 2	The residential structures shall be of wood-frame construction, built in accordance with the latest edition of the Uniform Building Code for the highest seismic zone (Seismic Zone 4).	County of Humboldt Building Division Shall verify	County of Humboldt review of building permits and record of inspection	With individual building permits
	IS MM 3	Any residential development proposed outside of the approved building envelopes as shown in the May 1995 SHN Consulting Engineers and Geologists Preliminary R-1 Geologic and Geotechnical Report shall require further geologic testing.	County of Humboldt Building Division Shall verify	County of Humboldt review of building permits	With individual building permits
IS Section III.f) Erosion and grading	IS MM 4	Areas disturbed during construction shall be revegetated as soon as practical prior to the beginning of the rainy season as required in the May 1995 SHN Geologic Report.	County of Humboldt Building Division shall verify	County of Humboldt record of building inspections.	With individual building permits

Impact	Mitigation Measure Identifier	Mitigation Measure	Implementation	Monitoring	Time Span
	IS MM 5	Driveways, parking areas and other impermeable surfaces shall be designed to dissipate runoff uniformly, particularly for runoff directed toward steep slopes or creeks.	County of Humboldt Building Division shall verify	County of Humboldt review of building permits and record of inspection	With individual building permits
IS Section III.f) Erosion and Grading	IS MM 7	Streamside Management Areas of 100 feet from both sides of the stream transition lines of the North Fork of Luffenholtz and Deadman Creek shall be established, and erosion control and other measures for development within these areas shall include the following: a. During construction, land clearing and vegetation removal will be minimized. b. Construction sites will be planted with native or naturalized vegetation and mulched with natural or chemical stabilizers to aid in erosion control and insure re-vegetation. c. Long slopes will be minimized to increase infiltration and reduce water velocities down cut slopes by such techniques as soil roughing, serrated cuts, selective grading, shaping, benching, and berm construction. d. Concentrated runoff will be controlled by the construction and continued maintenance of culverts, conduits, non-erodible channels, diversions dikes, interceptor ditches, slope drains or appropriate mechanisms. Concentrated runoff will be carried to the nearest drainage course. Energy dissipaters may be installed to prevent erosion at the point of discharge where discharge is to natural ground or channels. e. Runoff shall be controlled to prevent erosion by onsite or offsite methods. Onsite methods include,	County of Humboldt Building Division shall verify	County of Humboldt review of building permits and record of inspection	With individual building permits

Impact	Mitigation Measure Identifier	Mitigation Measure	Implementation	Monitoring	Time Span
		<p>but are not limited to, the use of infiltration basins, percolation pits, or trenches. Onsite methods are not suitable where high groundwater or slope stability problems would inhibit or be aggravated by onsite retention or where retention will provide no benefits for groundwater recharge or erosion control. Off-site methods include detention or dispersal of runoff over non-erodible vegetated surfaces where it would not contribute to downstream erosion or flooding.</p> <p>f. Disposal of silt, organic, and earthen material from sediment basins and excess material from construction will be disposed of out of the Streamside Management Area to comply with California Department of Fish and Game and Regional Water Quality Control Board.</p> <p>g. No pesticides or herbicides shall be used within the Streamside Management Areas.</p> <p>Winter operations (generally October 15 through April 15) shall employ the following special considerations:</p> <p>a. Slopes will be temporarily stabilized by stage seeding and/or planting of fast germinating seeds such as barely or rye grass; and mulched with protective coverings such as natural or chemical stabilizations.</p> <p>b. Runoff from the site will be temporarily detained or filtered by berms, vegetated filter strips, and/or catch basins to prevent the escape of sediment from the site. Drainage controls are to be maintained as long as necessary to prevent erosion throughout construction.</p>			

Impact	Mitigation Measure Identifier	Mitigation Measure	Implementation	Monitoring	Time Span
	IS MM 10	A complete hydraulic report and drainage plan shall be submitted for approval by the Department of Public Works. This will require the construction of drainage facilities adjacent to and across Adams Fox Farm Road. The applicant shall dedicate drainage release easements to the County of Humboldt for all cross drains as directed by the Department of Public Works.	County of Humboldt Public Works Department shall verify	County of Humboldt record of Public Works inspections	Prior to approval of Final Map or Waiver
IS Section VI.b)	IS MM 1	As above	As above	As above	As above
Hazards from design features	IS MM 6	A school bus turnaround area shall be provided on the subject property adjacent to Adams Fox Farm Road as shown on the Improvement Plans for Fox Farm Road.	County of Humboldt Public Works Department shall verify	County of Humboldt record of Public Works inspections	Completed
IS Section VI.c)	IS MM 1	As above	As above	As above	As above
Inadequate emergency access					
IS Section VI.e)	IS MM 1	As above	As above	As above	As above
Hazards to pedestrians and bicyclists					
IS Section VII.d)	IS MM 7	As above	As above	As above	As above
Wetland Habitat	IS MM 9	As above	As above	As above	As above
IS Section VII.e)	IS MM 7	As above	As above	As above	As above
Wildlife					

Impact	Mitigation Measure Identifier	Mitigation Measure	Implementation	Monitoring	Time Span
migration					
IS Section IX.b) Emergency response	IS MM 1	As above	As above	As above	As above
IS Section IX.e) Wildland fire hazard	IS MM 8	<p>Residential development shall comply with Humboldt County Fire Safe Ordinance and shall include:</p> <ol style="list-style-type: none"> Defensible space of at least 30-feet from all structures to property lines. A 2,500-gallon emergency water storage tank for each parcel. Street names, addresses, and water sources shall be clearly marked where visible from the public road Roadway and driveway grades shall not exceed 16%. Disposal, including chipping, burying, burning, or removal to a landfill site approved by the County, of flammable vegetation and fuels caused by site development and construction, road and driveway construction, and fuel modification, shall be completed prior to completion of road construction, or final inspection of a building permit or initiation of a use under a use permit. Sample Codes, Covenants, and Restrictions shall be written prior to recordation of the Parcel Map which specifies the future landowners' responsibility in maintaining their property in order to comply with State Fire Regulations and the County [Fire Safe] Regulations. 	<p>County of Humboldt Building Division shall verify</p> <p>County of Humboldt review of building permits and record of inspections</p>	With individual building permits	
IS Section XI.a)	IS MM1	As above	As above	As above	As above

Impact	Mitigation Measure Identifier	Mitigation Measure	Implementation	Monitoring	Time Span
Fire protection services	IS MM 8	As above	As above	As above	As above
IS Section XI.d)	IS MM 1	As above	As above	As above	As above
Maintenance of public facilities	IS MM 8	As above	As above	As above	As above
	IS MM 10	As above	As above	As above	As above
IS Section XIV.a)**	IS MM 11	If any paleontological, archaeological, or historical resources are discovered during construction, all activities must cease and a qualified cultural resources specialist contacted to analyze the significance of the find and formulate further mitigation (e.g., project relocation, excavation plan, and protective cover.) pursuant to California Health and Safety Code Section 7050.5, if human remains are encountered, all work must cease and the County Coroner contacted.	County of Humboldt Building Division shall ensure notation of requirement on building permits	County of Humboldt building permit review	Individual building permits
IS Section XIV.b)**	IS MM 11	As above	As above	As above	As above
Archaeological Resources					
IS Section XIV.c)**	IS MM 11	As above	As above	As above	As above
Historical Resources					
SEIR Section 3.2.1 Sensitive Species	EIR MM 1	The provisions of 1997 IS Mitigation Measure 7 shall continue to apply to the project throughout the remainder of the project, including periods of vegetation removal to clear existing building pads, grading or re-grading of such pads, and any construction activities which may occur on the subject site.	County of Humboldt Building Division shall verify	County of Humboldt building permit review and record of inspection	Individual building permits
	EIR MM 2	The developer/applicant shall provide dry season water	County of	The County of	Tanks

Impact	Mitigation Measure Identifier	Mitigation Measure	Implementation	Monitoring	Time Span
		<p>storage facilities for each residence. Based on the current state of knowledge regarding dry season flows in the two affected streams and the life-cycle of non-anadromous populations of coastal cutthroat trout, the risk to the species through potential de-watering of the streams at or below the subject site is sufficient to prohibit any water diversions during the dry season. As such, each residence shall provide water storage sufficient for a minimum of 107 days of independent operation from August 1st through November 15th of each year. Each residence will be assumed to require a minimum of 400 gallons per day (pursuant to Humboldt County Framework Plan §2554.9A), to a dry season total storage requirement of 42,800 gallons. Each parcel shall have recorded against it an agreement with the County, and enforceable by the County, requiring the installation of a water storage facility capable of meeting the needs described herein. Residential water storage quantities shall be above and beyond the 2,500 gallons required by Cal Fire for developments within the State Responsibility Area (SRA) for fire protection. Storage for both uses, however, may be provided for within one storage unit.</p>	<p>Humboldt Public Works Division shall verify.</p>	<p>Humboldt Planning Division shall send affected property owners twice yearly notices of dry weather water withdrawal restrictions. Such notices shall include recommended dates to ensure tanks are full and the dates during which water withdrawals are prohibited. Further, the Planning Division shall annually verify through field visits and review of the required flow meters that the property owners continue to comply with the</p>	<p>installed prior to Final Map or waiver. Notices send to property owners annually for five years following approval of building permits</p>

Impact	Mitigation Measure Identifier	Mitigation Measure	Implementation	Monitoring	Time Span
	EIR MM 3	To avoid excess short-term withdrawals during the periods in which the tanks required by EIR Mitigation Measure No. 2 are being filled, pumps shall be sized or otherwise regulated to draw a maximum of two gallons per minute on Deadman Creek and a combined maximum of five gallons per minute on the North Fork of Luffenholtz Creek. Permanent flow meters shall be installed at the intake to each storage tank.	County of Humboldt Public Works Department shall verify	County of Humboldt review of improvement plans and public works inspection records	Equipment shall be in place prior to approval of Final Map or Waiver
Cumulative Effects	EIR MM 4	Prior to approving additional discretionary approvals for development in the vicinity of the subject site, the County of Humboldt shall identify all parcels within the Luffenholtz Creek Critical Water Supply Area (CWSA) and adopt a policy to require that any proposed future development of residential units within this area shall demonstrate that such development will not reduce in stream water flows below that necessary for maintaining anticipated demand for the Trinidad Water System and minimum pass-by flows to maintain habitat value in the stream for fish and other species.	County of Humboldt Planning Division shall prepare policy	Planning Commission or Board of Supervisors Resolution establishing policy	Within 12 months of approval of Parcel Map Subdivision