AGENDA
CITY OF FERNDALE – HUMBOLDT COUNTY CALIFORNIA – U.S.A.
REGULAR PLANNING COMMISSION MEETING

Location:	City Hall 834 Main Street Ferndale CA 95536	Date:	October 15, 2014
		Time:	7:00 pm
		Posted:	October 8, 2014

The City endeavors to be ADA compliant. Should you require assistance with written information or access to the facility please call 786-4224 24 hours prior to the meeting.

1.0 Call meeting to order / Flag salute / Roll call
2.0 Ceremonial
3.0 Modifications to the Agenda
4.0 Approval of previous minutes
  4.1 Minutes of September 17, 2014 Regular Meeting ..... Page 3
5.0 Public Comment
6.0 Public Hearing (Note: This is the time for commissioners to report any Ex Parte communications on this agenda item.)
  6.1 Recommend Draft Ordinance 2014-06 Amending Zoning Ordinance 02-02 Parking and Non-Conforming Use Regulations to City Council for Adoption ..... Page 6
  6.2 Discuss and Review Draft Noise & Air Quality Element Update . Page 15
7.0 Business (Note: This is the time for commissioners to report any Ex Parte communications on this agenda item.)
  7.1 Building and Land Use Permits August 10 – Sept. 8, 2014 ..... Page 61
  7.2 Design Review Committee Report & Minutes..... Page 62
8.0 Correspondence ..... Page 65
9.0 Commissioner Comments
10.0 City Planner's and City Clerk's Staff Reports
11.0 Adjournment

The next regular meeting of the Ferndale Planning Commission will be on November 19, 2014 at 7:00 pm.

Section 1: CALL MEETING TO ORDER

Section 2: CEREMONIAL

Section 3: MODIFICATION TO THE AGENDA

Section 4: APPROVAL OF PREVIOUS MINUTES

City of Ferndale, Humboldt County, California USA
DRAFT Minutes for Planning Commission Meeting of September 17, 2014

Call to Order — Chair Jorgen Von Frausing-Borch called the Planning Commission Meeting to order at 7:04 pm. Commissioners Mike Warner and Doug Brower were present along with staff Deputy City Clerk Kristene Tavares, Contract City Planner's George Williamson and Leslie Marshall. Commissioner Dean Nielson was not present (unexcused absence). Those in attendance pledged allegiance to the flag. Commissioner Mogni arrived at 7:15pm.

2.0 Ceremonial - None.

3.0 Modifications to the Agenda – None.

4.0 Approval of previous minutes – **MOTION:** to approve the minutes of the August 20, 2014 Regular Meeting **(Warner/Brower) 3-0**

5.0 Public Comment – None

6.0 Public Hearing

6.1 Consider Recommending Draft Ordinance 2014-06 Amending Zoning Ordinance 02-02 Parking and Non-Conforming Use Regulations to City Council for Adoption. Contract City Planner Leslie Marshall presented an overview of the proposed Amendment. Commissioners said in Section 7.16.5 (f) seating square footage should include outside dining areas. Commissioners also commented that Section 7.16.6 (a) square footage of the building should be used instead of the "envelope" of the building. Also, if additional square footage is added to a building in the downtown exempt area, the additional square footage should be subject to parking requirements. Commissioners were also concerned on Section 7.16.7 and the use of staff time to monitor parking agreements and changes of Use. Parking agreements need to be provided to and recorded by the City Clerk making it part of the parcel file. Making it part of a parcel file will make parking agreements accessible by staff if one of the parties applies for a building permit or other permit type. Also in Section 7.16.7 (ciii) Commissioners would like a remedy added if the parking agreement breaks down. In Section 12.01.8 would like square footage used in place of envelope to make amendment clearer. Commissioners would like to also see in this Ordinance, that staff has verified compliance of parking requirements once an agreement is made and approved. Commissioners would like to see Draft Ordinance back next month with proposed changes, including the addition of verification process that the parking requirements have been met. **MOTION:** To incorporate suggested changes including a verification process that applicant is compliant and bring Draft Ordinance back to October 15, 2014 Planning Commission Meeting. **(Warner/Brower) 3-0-1**

7.0 Business

7.1 Solar Panel Information and Discussion. Chair Jorgen Von-Frausing Borch presented commissioners with information on solar panels and explained the advancements in their technology. He also explained that the new type panels that are now available should not

detract from the city's historical ambiance. Staff has been directed to provide information to Design Review Committee at the next meeting.

7.2 Building and Land Use Permits: No Comments

7.3 Design Review Committee Report and Minutes: No Comments

8.0 Correspondence: No Comments

9.0 Commissioner Comments: No Comments

10.0 City Planner's and Deputy City Clerk's Staff Reports: City Planner George Williamson commended the Planning Commission on their recommendations for the Sign Ordinance as well as the Housing Element.

The meeting was adjourned at 8:08pm.

Respectfully submitted,

Kristene Tavares,
Deputy City Clerk

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Section 5: PUBLIC COMMENT

Section 6: PUBLIC HEARING

Meeting Date:	October 15, 2014			Agenda Item Number		6.1
Agenda Item Title	Draft Ordinance 2014-06 Amending Off-street Parking Regulations and Non-conforming Uses for Recommendation to the City Council					
Presented By:	Deputy City Clerk and/or Contract City Planner					
Type of Item:	X	Action		Discussion		Information
Action Required:		No Action	X	Voice Vote		Roll Call Vote

RECOMMENDATION: Review Draft Ordinance 2014-06 Amending Zoning Ordinance Off-street Parking Regulations and Non-conforming Uses and recommend changes to the City Council for Ordinance Amendment.

BACKGROUND: The current off-street parking regulations (Zoning Ordinance §7.16, see Attachment B) do not account for Ferndale's historic downtown area, where buildings were erected without providing off-street parking spaces. There is little space left, especially in the downtown business district, to provide for onsite off-street parking, yet the current regulations require that existing non-conforming uses and structures come into compliance with the parking requirements prior to any change in use of the building. The City has periodically reviewed this issue, beginning no later than in 1967, and in the late 1980's the Planning Commission, City Council, and City Planner coordinated on a series of reports proposing potential remedies (available at City Hall). The remedies recommended by the Planner, Parking Committee, and Planning Commission are similar to those proposed in the attached Draft Ordinance. September 17, 2014 Planning Commission meeting input is included in the redline-strikeout language (Attachment A).

Amending off-street parking requirements and eliminating nonconforming structures in the downtown area (see Attachment C) will better enable the City to address parking issues while reducing the burden and uncertainty on business owners. On April 3, 2014 the City Council adopted Resolution 2014-06 Authorization of staff time and materials to amend Zoning Ordinance parking regulations and eliminate nonconforming structures requirements in the downtown area. On June 5, 2014 and August 7, 2014 the Council held a Study Session, with Planning Commission members, to review draft amendments. The attached draft has been revised to incorporate input provided at those Study Sessions.

In conjunction with the off-street parking regulation amendments, the city wants to consider amending the Zoning Ordinance §12.01 Non-conforming Uses, pertaining to multi-family use and buildings within the historic district (see Attachment A). The historic district area referenced in Zoning Ordinance §12.01.8 is shown on the Historic District Area Map (see Attachment D).

ENVIRONMENTAL REVIEW: At this time, based on a review of the proposed draft amendments, staff expects that adoption of the proposed ordinance would not constitute a project subject to CEQA pursuant to Title 14, California Code of Regulations, Sections 15060(c)(2), as the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment.

Attachments:

A. Draft Ordinance 2014-06 Amending Zoning Ordinance Off-street Parking Regulations and Non-conforming Uses
B. Current Parking Regulations (Excerpt from Zoning Ordinance 02-02)
C. Draft Exempted Parking Area Map
D. Historic District Area Map

ORDINANCE NO 2014-06

AN ORDINANCE OF THE CITY OF FERNDALE, STATE OF CALIFORNIA, AMENDING ZONING ORDINANCE 02-02 SECTIONS PERTAINING TO OFF-STREET PARKING REGULATIONS & NON-CONFORMING USES

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THE CITY COUNCIL OF THE CITY OF FERNDALE DOES ORDAIN AS FOLLOWS:

Article 1 Short Title and Purpose

§1.1 **Short Title:** This Ordinance shall be known and cited as "Amending Zoning Ordinance 02-02 Off-street Parking Regulations & Non-conforming Uses."

§1.2 **Purpose:** The purpose of this Ordinance is to amend Zoning Ordinance 02-02 to update off-street parking requirements and non-conforming uses.

Article 2 Statutory Authority

§2.1 The statutory authority for this Ordinance is California Government Code §65000 et seq., §65850(d), §65852.25 et seq., and other applicable State laws.

Article 3 General Provisions

§3.1 The following changes shall be made to Section 7.16 of Zoning Ordinance 02-02. The section noted shall read as follows:

§7.16 Parking and Loading Facilities: Except as provided for in §7.16.6 ~~and~~ through §7.16.~~7~~ 8 of this Ordinance, off-street parking and loading spaces shall be provided in all zones in conformity with Americans with Disabilities Act (ADA) design regulations and the following:

7.16.1 Each parking space shall be not less than eight (8) feet wide and sixteen (16) feet long with seven (7) feet of vertical clearance, and each loading space shall be not less than ten (10) feet wide, twenty (20) feet long with fourteen (14) feet of vertical clearance.

7.16.2 Each parking space shall be located on the same parcel, or a contiguous parcel under the same ownership, as the use it serves.

7.16.3 When the number of off-street parking spaces required for a structure or use is based on the number of employees, it shall be based upon the shift or employment period during which the greatest number of employees are present.

7.16.4 When a building contains two or more uses, the total required number of off-street parking spaces shall be the sum of the requirements for all uses. Off-street parking spaces for one use may not be considered as providing required off-street parking spaces for other uses unless a shared parking plan is submitted and

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approved in accordance with §7.16.~~7~~ 8 of this Ordinance.

7.16.5 Parking spaces shall be provided per subsections a-h and j. Loading spaces shall be provided per subsections i and j:

a. Dwellings: one (1) for each dwelling unit.
b. Hotels, motels, inns, bed and breakfast inns, boarding houses: one (1) for each individual living quarter or dwelling unit.
c. Hospitals: one (1) for each bed and one (1) additional for each three (3) staff members.
d. Emergency Shelters: one (1) space for every 5 beds and one (1) additional for each three (3) staff members.
e. Offices and retail establishments: one (1) for each 500 square feet of floor area. In addition to providing one parking space for each 500 square feet of floor area, Medical and dental offices shall provide one (1) parking space for each staff member.
f. Restaurants and Department of Alcoholic Beverage Control (ABC) licensed premises: one (1) for each 300 square feet of floor space or maximum capacity as determined by the fire marshal, whichever is greater, including outdoor patios and spaces receiving food or ABC licensed service.
g. Wholesale, industrial and public utility buildings: one (1) for each three (3) employees.
h. Recreation, education, and public assembly uses, including churches and theaters: one (1) for each 500 square feet of floor area.
i. Every commercial use occupying more than 5,000 square feet of floor area in any building shall provide one (1) loading space. One additional loading space shall be provided for every 20,000 square feet of floor area in excess of 5,000 square feet.
j. All off-street parking areas shall be accessible from a public street, alley, or driveway. A ten (10) foot wide unobstructed vehicular access lane shall be maintained.

7.16.6 Any reconstruction or change in use of any structure after the effective date of these amendments, that is located in the commercial zone on Main Street from Eugene Street to Lewis Court and which structure extends one (1) lot deep, shall be exempt from off-street parking requirements provided that said reconstruction or change:

a. Occurs within the ~~building envelope as~~ existing square footage as of ~~on~~ the effective date of these amendments and,
b. Does not result in an increase in lodging or residential units.

The re-establishment of residential or lodging units which were in place at the effective date of these amendments shall be exempt from these requirements if the same or fewer number of units are re-established.

7.16.7 Any reconstruction or change in use which results in additional square footage after the effective date of these amendments, located in the commercial zone on Main Street from Eugene Street to Lewis Court and which structure extends one (1) lot deep, may be subject to parking requirements set forth in Section 7.16.5.

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~~7.16.7~~7.16.8 Alternative parking arrangements

a. Alternatives to the parking requirements of this Ordinance may be approved by City staff if an applicant provides the following:
   i. The required amount of parking spaces are provided in an approved off-site location in compliance with Subsection b, below; or
   ii. A shared parking plan is submitted and approved in compliance with Subsection c, below; or
   iii. Some other parking arrangement is provided and authorized by the Planning Commission as a Use Permit.
   iv. Alternatives unable to be approved by staff will be submitted for review by Planning Commission. Approved alternatives will go on record as an entitlement on the property deed, submitted through the city clerk.
   ~~iii.~~v. Any change in land use affecting alternative parking arrangement agreements must be approved through city staff, or the Planning Commission.

b. Parking may be located offsite in compliance with the following:
   i. Offsite parking must be located within 300 feet of the structure in which the proposed use is located.
   ii. Required parking spaces that are approved offsite shall be committed by a lease or other agreement and filed at City Hall.
   iii. The owner/operator of a business that uses approved offsite spaces to satisfy parking requirements shall immediately notify City staff of a change of ownership or use of the property for which the spaces are required, and of termination or default of the agreement between the parties.
   iv. Upon notification that a lease for required offsite parking has terminated, one of the following shall occur:
      (a). Substitute parking shall be provided; or
      (b). The size or capacity of the use shall be reduced so that the number of spaces provided comply with this Ordinance.

c. Parking spaces may be shared by two or more adjacent uses in compliance with the following:
   i. Up to one hundred percent (100%) of the parking spaces serving a use may be shared by other uses not normally open or operated during similar hours. The applicant must show that the peak parking demand and principal operating hours for each use are suitable for a common parking facility.
   ii. A written agreement defining the shared parking shall be executed by all parties concerned and filed at City Hall.
   iii. Any subsequent change in land uses for which the shared parking proposal was approved, and which results in the need for additional parking spaces, shall require a new application under this subsection.

7.16.9 Parking requirement compliance as set forth in this Ordinance shall be approved by contract City Planner. Approved parking requirement adherence documentation

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will become part of the City's property record.

§3.2 The following changes shall be made to Section 12.01 of Zoning Ordinance 02-02. The section noted shall read as follows:

§12.01 Non-Conforming Uses: Any use, building or structure, existing on the date a zoning ordinance amendment rendered the use or structure nonconforming, may be continued, even though such use, building or structure may not conform with the provisions of this chapter, except as provided herein:

12.01.1 No such use or building shall be enlarged, increased or structurally altered, nor be extended to occupy a greater area than that existing on the effective date of the application of these regulations to the subject property.

12.01.2 Any use for which a use permit is required by these regulations shall be considered a non-conforming use until a use permit is obtained.

12.01.3 If any such use or building after the effective date of the application of these regulations to the subject property is destroyed to the extent of 60% or more, then the subject property shall become subject to the regulations applicable to the subject property, and any subsequent use or buildings shall be in accordance with such regulations.

12.01.4 Any interruption of a non-conforming use, or the use of a non-conforming building which continues for 12 months or more, shall be deemed to be an abandonment of such use, and subsequent use of buildings shall be in accordance with the regulations applicable to the subject property.

12.01.5 Ordinary maintenance and repair may be made to any non-conforming use or building, provided that such maintenance and repair does not exceed 25% of the actual value in any one year.

12.01.6 Any use coming within the provisions of Section 7.04, concerning domestic animals appurtenant to residential uses shall, after the expiration of 6 months from the effective date of these regulations, conform to the provisions of Section 7.04.

12.01.7 Sections 12.01.3 through 12.01.5 are subject to Government Code §65852.25 when applicable to Multifamily Dwellings that are involuntarily damaged or destroyed by fire, other catastrophic event, or the public enemy.

12.01.8 Buildings within the Historic District shall be exempt from sections 12.01.3 and 12.01.5, provided any reconstruction, repair or restoration occurs within the building ~~envelope~~ square footage as existing on the effective date of these amendments

Article 4 ENACTMENT

§4.1 **Severability.** If any section, sub-section, paragraph, sentence, or word of this ordinance shall be held to be invalid, either on its face or as applied, the invalidity of such provision shall not affect the other sections, sub-sections, paragraphs, sentences and words of this Ordinance, and the applications thereof; and to that end the sections, sub-sections, paragraphs, sentences and words of this Ordinance shall be deemed to be severable.

§4.2 **Effective Date.** This Ordinance shall become effective 30 days after the date of its enactment.

PASSED AND ADOPTED on this __ day of October 2014 by the following vote:

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AYES:
NOES:
ABSTAIN:
ABSENT:

Attest:

Jennifer Church, City Clerk

Stuart Titus, Mayor

First Reading:		Amended:	
Second Reading:			
Enacted:			
Amended:			

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ATTACHMENT B – CURRENT PARKING REGULATIONS

(Excerpt From City Of Ferndale Zoning Ordinance 02-02)

§7.16 Parking and Loading Facilities: Off street parking and loading spaces shall be provided in all zones in conformity with the following:

7.16.1 Each parking space shall not be less than eight (8) feet wide, eighteen (18) feet long and seven (7) feet high, and each loading space shall not be less than ten (10) feet wide, twenty-five (25) feet long and fourteen (14) feet high.

7.16.2 Parking spaces shall be provided as follows:

a. Dwellings: one (1) for each dwelling unit.
b. Hotels, motels, inns, bed and breakfast inns, boarding houses: one (1) for each individual living quarter or dwelling unit.
c. Hospitals: one (1) for each bed and one (1) additional for each three (3) staff members.
d. Offices and retail establishments: one (1) for each 300 square feet of floor area, with a minimum of four (4) for each office building. Medical and dental offices shall provide one (1) additional for each staff member.
e. Restaurants and licensed premises: one (1) for each four (4) seats or one (1) for each 200 square feet of floor space, whichever yields the greatest number of spaces required.
f. Wholesale, industrial and public utility buildings: one (1) for each three (3) employees on duty at any one time.
g. Public assembly, including churches and theaters: one (1) for each six (6) seats.

7.16.3 Every commercial use occupying more than 5,000 square feet of floor area in any building shall provide one (1) loading space and one (1) additional loading space for every 20,000 square feet of floor area in excess of 5,000 square feet.

7.16.4 No building shall be constructed closer to any traveled way than will provide adequate space for the traffic movement and the standing of vehicles which may be incidental to the use of the building.

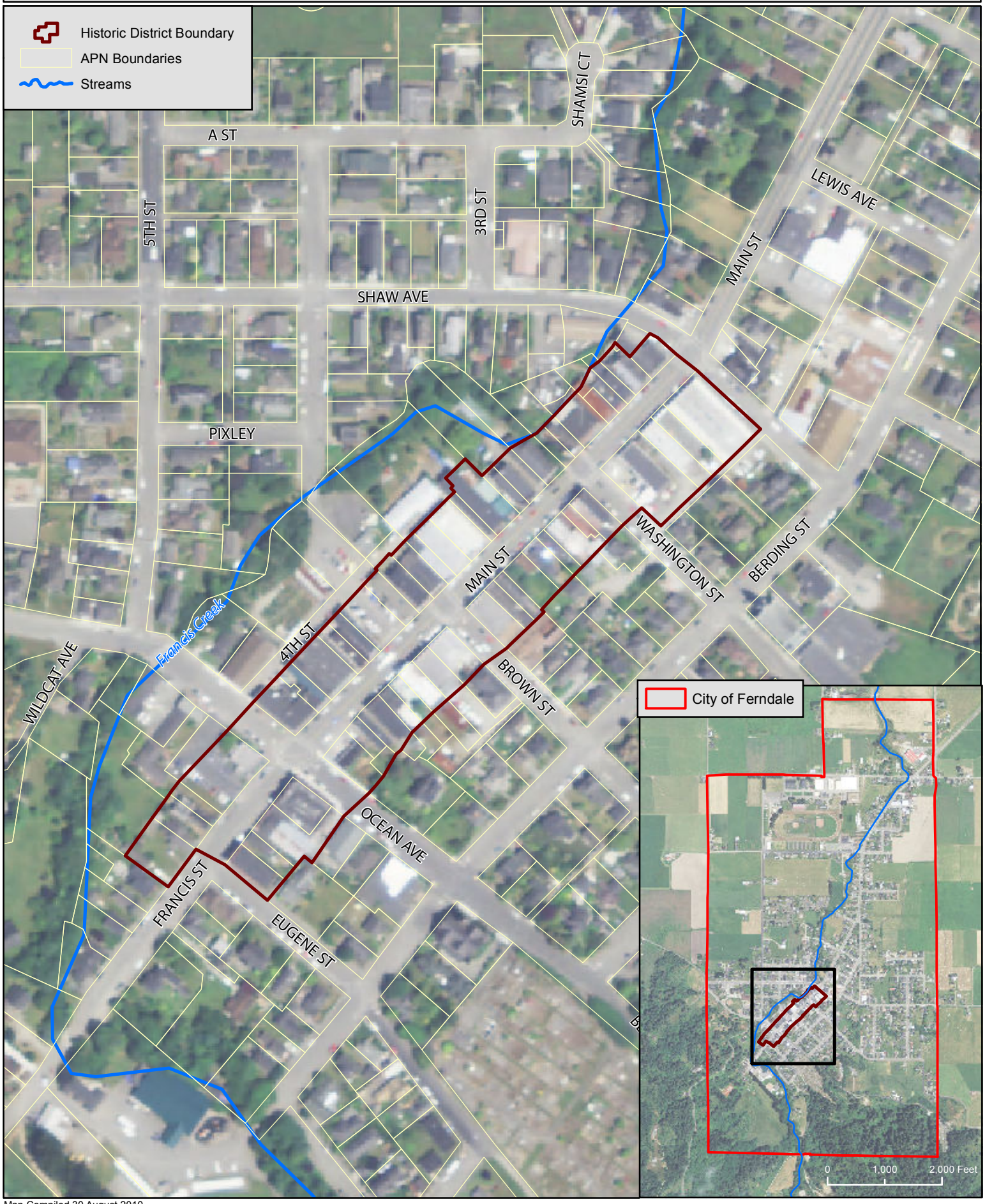
DRAFT Area Exempt from Parking Requirements

Map compiled July 2014 by GIS Tech C. Wile
Imagery: esri 2014, Parcels: Humboldt Co. GIS
Parking Exempt Area: Planwest Partners

0 125 250 500 Feet

PLANWEST PARTNERS, INC.

Ferndale Main Street Historic District



Map Compiled 30 August 2010
Source: Imagery - 2009 USDA NAIP Imagery
City Limits - Planwest Partners Inc.
Historic District - Planwest Partners Inc.
Streams - CA FRAP (frap.cdf.ca.gov)

0 200 400 Feet

PLANWEST PARTNERS, INC.

Meeting Date:	October 15, 2014			Agenda Item Number		6.2
Agenda Item Title:	General Plan Update - Noise & Air Quality Element Draft					
Presented By:	Contract City Planner					
Type of Item:		Action	X	Discussion		Information
Action Required:	Discuss and review Draft Noise & Air Quality Element					

RECOMMENDATION: Discuss and Review the following Draft Noise & Air Quality Element Update, provide input, and direct Staff on further changes.

BACKGROUND: The Ferndale City Council has allocated funds and the Planning Commission has guided a multi-year General Plan Update process. The Housing Element Update and new Historical & Cultural Resources Element are complete and adopted. The Safety Element Update is complete and awaiting environmental review. At their September 5th, 2013 meeting, the City Council concurred with the Planning Commission recommendation on the next Element for the General Plan update, Noise & Air Quality. The existing City of Ferndale General Plan Noise Element is included with the Public Safety and Scenic Highway Elements from 1975. The City currently has no Air Quality Element.

DISCUSSION: The Noise Element is one of the seven mandated general plan elements per the State Office of Planning and Research (OPR) Guidelines. Air Quality is considered an optional element in the OPR Guidelines. This new element is referred to as the Noise & Air Quality Element. These two topics address quality of life issues for the community. The Noise & Air Quality Element will address ways to improve air quality and reduce noise, especially for sensitive receptors such as: schools, medical facilities, and certain residential uses.

The Noise component of the Element will also define types of noise including, but not limited to, mobile sources (primarily vehicle noise) and stationary sources (primarily commercial and industrial). The Noise and Air Quality Element will include a noise contour map for State Route 211 (Main Street) through Ferndale, using available County and Caltrans trip volume and noise contour data.

The air quality data and analysis will include an Emissions Reduction Plan to reduce greenhouse gas emissions. AB 32 calls for emission level rollbacks which can be accomplished by reducing both stationary and mobile levels. While AB 32 doesn't require cities to complete Climate Action or Emissions Reduction Plans, the Attorney General's Office has confirmed that such plans constitute acceptable mitigation for cities conducting General Plan Updates. When prepared in conjunction with a General Plan Update and incorporated into each Element, Climate Action or Emission Reduction Plans expedite CEQA review.

During Element preparation, the city will collaborate with agencies, districts, and organizations including but not limited to the North Coast Unified Air Quality Management District, Caltrans and the Redwood Coast Energy Authority. The Element will be reviewed for consistency with other relevant plans such as the North Coast Unified Air Quality Management District's (NCUAQMD) Particulate Matter Attainment Plan and Humboldt County Noise Element Update and Air Quality Element Update. The City will rely on existing studies and available data for the Element. The NCUAQMD may have funding opportunities for projects identified in this element. The element will make extensive use of web links and internet source references to maximize the utility of the element while keeping the text version as concise as possible.

Public involvement is an integral part of the General Plan update process through Planning Commission and City Council study sessions and public hearings. In addition, General Plan consultation is an

important part of element preparation. The City will be contacting Native American governments based on a state maintained list and commenting agencies.

ENVIRONMENTAL REVIEW: An Environmental Impact Report (EIR) was prepared in 1986 for the Ferndale General Plan. At minimum, this document must be supplemented to comply with the California Environmental Quality Act (CEQA). Environmental review for the Element update may be coordinated with other General Plan Element Updates, including the Safety Element Update and/or other related discretionary actions of the City.

FISCAL IMPACT: Budgeted item.

Attachments:

A. Noise and Air Quality Element Scope
B. Draft Noise and Air Quality Element

Noise & Air Quality Element Scope:

Introduction
This section will discuss the Noise & Air Quality Element purpose and introduce the organization and content of the entire Element. The introduction will also address how the Noise & Air Quality Element will be internally consistent with other General Plan element, goals, policies and implementation programs. All General Plan Elements are interdependent and related to each other. No single Plan element of should be used in isolation without consideration of all other component elements as an integrated General Plan. The Noise & Air Quality Element directly correlates to the Land Use, Circulation, and Housing Elements.

Definitions
This section will provide definitions of terms used throughout the Element.

Setting & Context
This Element section will include identification and overview of noise and air quality conditions in the Ferndale Planning Area. Conditions in the greater Eel River Valley will also be discussed. Applicable regional air basin, state, and federal standards will be listed for context. For air quality, criteria pollutants (i.e., particulate matter smaller than or equal to 10 microns (PM10)) will be identified. For noise, threshold measurements used by the state (community noise equivalent level (CNEL) and Day Night Average Sound Level (LDN) will also be identified for context and use in setting applicable noise levels in the element. Applicable legislation will be referenced.

Noise Characteristics and Sources
This section will include a noise contour map for State Route 211, identification of major noise sources, analysis of the local noise environment, definition and identification of sensitive receptors, and a discussion of ways to minimize noise exposure.

Air Quality Characteristics
This section will include a description of local and regional air quality conditions, a discussion of the area's current air quality designation, a summary of applicable federal and state standards and laws, a summary of air pollution sources in the Planning Area, and an emissions inventory. RCEA is developing inventories for a climate change action plan for each city and the county. Applicable inventory benchmarks and sources will be documented as characteristics.

Air Basin Requirements - This section will discuss the North Coast Unified Air Quality Management District's (NCUAQMD) regulations, plans and programs, including the PM-10 attainment plan adopted in 1995 and the most current basin plan. A summary of applicable rules, such as those for Greenhouse Gas Mitigation & Control with appropriate web links, will be provided.

Emissions Reduction Plan – A Greenhouse Gas Emissions Reduction Plan often comprises the first phase of an overall Climate Action Plan. The Emissions Reduction Plan will lay the basis for a City-wide Climate Action Plan and will involve the following tasks:

1. Develop Outline, Review Emissions Inventories & Determine Reduction Target.
2. Identify and Evaluate Emission Reduction Measures.
3. Disclose Costs/Benefits /Challenges of Various Emission Reduction Measures.
4. Refine Emission Reduction Measures.
5. Prioritize Measures and Develop Implementation Timeline.

6. Develop Greenhouse Gas Reduction Monitoring and Verification Recommendations.
7. Prepare Draft Emissions Reduction Plan & Hold Public Hearings.
8. Respond to Comments & Prepare Final Emissions Reduction Plan.
9. Adopt Emissions Reduction Plan as part of the Noise & Air Quality Element.

City staff will work with RCEA and incorporate appropriate climate action plan components.

Goals, Policies and Implementation Programs

The contract planner and City staff will work with the Planning Commission and City Council to craft goals, policies, and implementation programs providing a policy basis for measures Ferndale can take to reduce noise exposure and improve air quality. A broad set of goals will be developed to reduce harmful emissions and noise levels in the community.

Noise policy topics proposed for the element will include:

- Overall noise reduction – mobile and stationary sources
- Land Use
- Design review & construction
- Transportation
- Monitoring

Air quality policy topics proposed for the element will include:

- Overall emissions reduction – area and stationary sources
- Land Use
- Energy conservation
- Transportation and circulation
- Hazardous materials
- Temporary measures - construction
- Monitoring

Implementation programs will be developed for each policy topic, consistent with the format used in other elements.

Study Sessions and Public Hearings

Public involvement is an integral part of the General Plan update process. City staff will work with the Planning Commission to organize and schedule study sessions and public hearings to gather public input for integration into the Element.

Environmental Compliance

An Environmental Impact Report (EIR) was prepared in 1986 for the Ferndale General Plan. At minimum, this document must be supplemented to comply with the California Environmental Quality Act (CEQA). Environmental review for the Element update may be coordinated with other General Plan Element Updates, including the Safety Element Update and/or other related discretionary actions of the City.

City of Ferndale

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Noise & Air Quality Element

October 2014

City of Ferndale

NOISE & AIR QUALITY ELEMENT

Adopted by Resolution No. 2014-XX

XXXXXXX, 2014

City Council:

Stuart Titus, Mayor
Ken Mierzwa
John Maxwell
Michael Sweeney
Daniel Brown

Planning Commission:

Jorgen Von Frausing-Borch, Chair
Lino Mogni
Dean Nielsen
Doug Brower
Michael Warner

City Staff:

Jay Parrish, City Manager
Jennifer Church, City Clerk
Kristene Tavares, Deputy City Clerk

Prepared by:

PLANWEST PARTNERS, INC.

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City of Ferndale
Noise & Air Quality Element

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1.0 Introduction

The effects of noise on quality of life is of sufficient community concern to warrant a Noise Element in the City of Ferndale General Plan. It is one of the seven mandated General Plan elements per the State Office of Planning and Research (OPR) General Plan Guidelines (OPR 2003). The existing Ferndale Plan Noise Element is included with the Public Safety and Scenic Highway Elements from 1975. Updated Element goals, policies and implementation measures will help minimize the community's exposure to current noise issues, as well as shield the community from noise created by community activity and development. Identifying existing and projected noise sources can also be an effective way to guide decisions on land use patterns.

Land use can result in noise increases directly (e.g., from zoning of additional community noise sources) and indirectly (e.g., from vehicle trips associated with future uses). Transportation improvements (such as road widening and extensions) could bring traffic noise sources closer to existing or planned receptors. Sensitive receptors (such as schools and health care facilities,) are more vulnerable to noise impacts.

The OPR Guidelines require that the Noise Element provide a basis for comprehensive local programs to control and abate environmental noise and to protect citizens from excessive exposure. The Element is required to identify and appraise noise in the community and follow the guidelines adopted by the Office of Noise Control in the State Department of Health Services. Local governments must analyze and quantify noise levels, and the extent of noise exposure, through actual measurements or the use of noise modeling. The Noise component of the Element defines types of noise including mobile sources and stationary sources and uses projections, contour mapping and analysis to ensure that City noise standards are met.

While Air Quality is not a required element, it is included in the Ferndale General Plan in recognition of the significant value the community places on clean air. For this reason, it is among the more common optional elements included in General Plans throughout California. There is state level guidance for this important topic, included in General Plan Guidelines for the Conservation Element, which considers air quality as a resource (OPR 2003). Several of the mandatory elements have effects on air quality and emission sources, including the Land Use, Circulation, Conservation and Open Space Elements that the City of Ferndale intends to update subsequent to this element. Including an Air Quality Element component now will facilitate the updating of these elements in the future.

The Air Quality component is a focus for General Plan air quality policy, integrating related land use, transportation and circulation, transit, safety, and energy issues. The Air Quality component's policies and programs are intended to improve air quality and encourage cooperation with other jurisdictions involved in regional air quality improvement efforts.

In addition to general air quality issues, this component discusses climate change. The potential effects of climate change are extensive, have been well publicized, and are generally accepted by the scientific community. Although actions taken on a local level cannot resolve this global issue, the Noise & Air Quality Element contains policies that address energy and resource conservation and compact community design. These policies reduce greenhouse gas emissions, counteract global warming, and help reduce the potential adverse effects of global warming.

The air quality data and analysis includes an Emissions Reduction Plan to reduce greenhouse gas emissions. AB 32 calls for emission level rollbacks which can be accomplished by reducing both stationary and mobile levels. While AB 32 doesn't require cities to complete Climate Action or Emissions Reduction Plans, the Attorney General's Office has confirmed that such plans constitute acceptable mitigation for cities conducting General Plan Updates. When prepared in conjunction with a General Plan Update and incorporated into each Element, Climate Action or Emission Reduction Plans expedite California Environmental Quality Act (CEQA) review.

Public involvement is an integral part of the General Plan update process. Study sessions and public hearings were held by both the Planning Commission and City Council. In addition, General Plan consultation is an important part of element preparation. The City contacted Native American governments and solicited input on the Noise & Air Quality Element.

During Element preparation, the City collaborated with agencies, districts, and organizations including the North Coast Unified Air Quality Management District (NCUAQMD), Caltrans and the Redwood Coast Energy Authority. The Element was reviewed for consistency with relevant plans such as the NCUAQMD's Particulate Matter Attainment Plan and Humboldt County Noise Element and Air Quality Element updates. The NCUAQMD may have funding opportunities for projects identified in this element. The element makes extensive use of web links and internet source references to maximize the utility of the element while keeping it as concise as possible.

It is the overall goal of the Noise & Air Quality Element to protect the health and welfare of the community by promoting development that is compatible with noise and air quality standards, and reflects the City's commitment to sustainable practices. This Element's noise and air quality goals and policies will address the provisions for maintaining acceptable community noise levels and continued improvement to air quality in Ferndale and the surrounding air basin.

RELATIONSHIP TO THE REST OF THE GENERAL PLAN

All General Plan element goals and policies must be internally consistent and are interdependent and related to each other. No single element of the plan should be used in isolation without consideration of all other component elements as an integrated General Plan. The Noise & Air Quality Element directly correlates to the Land Use, Circulation, and Housing Elements, and was reviewed for consistency with all Ferndale General Plan Elements.

Land Use Element - The Land Use Element includes policies that promote land use patterns intended to make efficient use of land, preserve open space, and provide adequate services. These policies support sustainability. When updated, the Land Use Element will show acceptable land uses in relation to existing and projected noise contours.

Circulation Element - The updated Circulation Element may include polices to reduce congestion and encourage bicycle and pedestrian travel. These measures help ensure that greenhouse gas emissions from vehicle sources are reduced or minimized. Noise exposure data will also influence the location and design of transportation facilities.

Open Space and Conservation Element - The updated Open Space and Conservation Element may include policies that support open space acquisition, emphasizing an interconnected open space system with bicyclist and pedestrian connections between residential development and schools, employment, and commercial areas.

Public Facilities Element - The updated Public Facilities Element may include policies that address energy-efficiency and renewable energy, water conservation, maximizing the use of recycled water, and solid waste source reduction and recycling.

Safety Element - The safety element includes policies intended to minimize the potential for loss of life and property due to flooding, which has been identified as a potential impact of climate change.

Housing Element - The Housing Element includes policies to promote energy conservation educational programs and sustainable building techniques such as construction waste recycling and energy efficient retrofits, as well as to explore ways to incorporate energy saving features and materials, and energy efficient systems and designs into residential development and retrofits. These policies support sustainable development. Noise exposure information provided in the Noise component must be considered when planning the location of new housing.

2.0 Definitions

This section provides definitions of terms used throughout the Element.

ADT: Average daily trips (vehicles).

Ambient Noise: The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Attenuation: A decrease in sound level. The most common cause of attenuation is increased distance between a source and receiver (typically, sound decreases by 3 to 6 dB per doubling of distance). Attenuation can also be caused by barriers (e.g., walls, hills, dense vegetation) located between a source and receiver.

A-Weighted Level: See dBA.

CAPCOA: California Air Pollution Control Officers Association; represents all 35 local air quality agencies in the state.

CARB: California Air Resources Board, a department within the California Environmental Protection Agency.

CNEL: Community Noise Equivalent Level. The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7 p.m. to 10 p.m. and after addition of 10 decibels to sound levels in the night from 10 p.m. to 7 a.m.

dBA: A-weighted sound level. The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.

Decibel (dB): A unit of measurement describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

Intrusive Noise: That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence, and tonal or informational content as well as the prevailing noise level.

Ldn: Day-Night Average Level. The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m. (Note: CNEL and Ldn represent daily levels of noise exposure averaged on an annual or daily basis, while Leq represents the equivalent energy noise exposure for a shorter time period, typically one hour.)

Leq: Equivalent energy level. The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. Leq is typically computed over 1-, 8-, and 24-hour sample periods.

Noise: Unwanted sound.

Noise Contours: Lines drawn about a noise source indicating equal levels of noise exposure. CNEL and Ldn are the metrics utilized herein to describe annoyance due to noise and to establish land use planning criteria for noise.

Noise Impacted Areas: Land areas that are located on the Noise Contour Map within the Noise Contour Bands of 60 Ldn or greater.

Noise Measurement: The measurement of the noise level at a given location. It is usually desirable to indicate both the intensity of the noise at the given location, and the distance between the noise source and the location at which the measurement is made. For example, one would report that a diesel truck generates 88 dBA of noise, as measured at a distance of 50 feet.

3.0 Setting and Context

The City of Ferndale is located on the southern edge of the Eel River Valley, roughly 4½ miles from the Pacific Ocean. Prevailing winds averaging 5 miles per hour sweep from the north across the alluvial plain in the summer, carrying cool, moist air from the Pacific Ocean. In the winter, winds prevail from the south.

Considered the northern gateway to California's Lost Coast, the City is surrounded by forested mountains to the south and flat agricultural lands to the west, north and east. California State Route 211 runs west from U.S. Route 101 directly through the middle of town, connecting to Petrolia and the Lost Coast via Mattole Road.

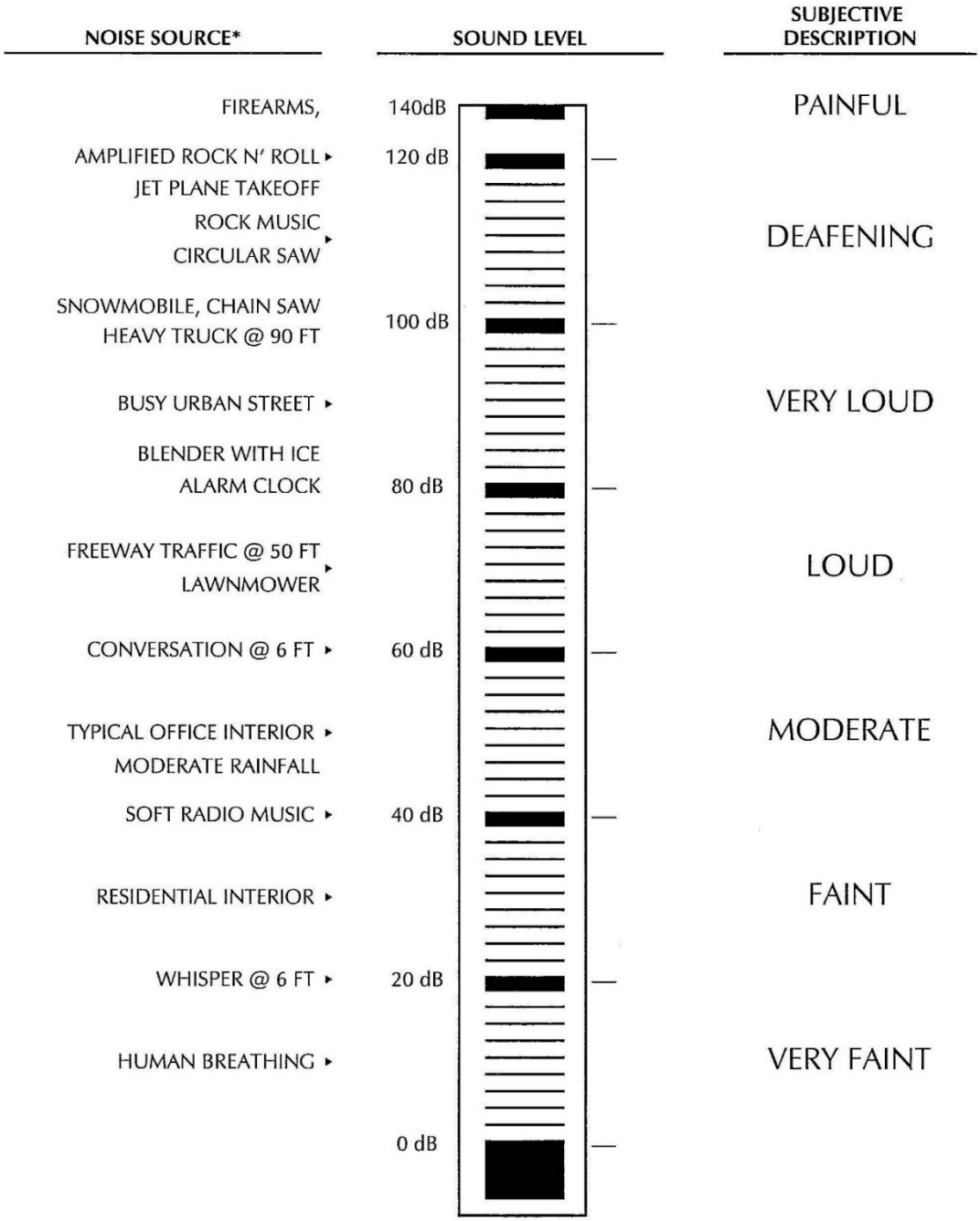
General Noise Characteristics and Regulation

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Sound is characterized by various parameters that include the rate of oscillation of sound waves, the speed of propagation, and the pressure level or energy content. Sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The unit of sound pressure expressed as a ratio to the faintest sound detectable by a human ear is called a decibel (dB). The U.S. Environmental Protection Agency (EPA) has established 70 dB as the point at which noise begins to harm hearing (EPA 1974).

The dB scale is used to quantify sound intensity. Because sound pressure can vary enormously within the range of human hearing, noise measurements are weighted more heavily within those frequencies of maximum human sensitivity in a process called "A-weighting," referred to as dBA. In general, a difference of more than 3 dBA is a perceptible change in environmental noise; an increase of 10 dBA is perceived by people as a doubling of loudness (EPA 1974). Figure 1 compares some common sounds and how they are perceived by the average human.

As sound levels can vary markedly over time, several methods for describing the average character of sound have been devised. A commonly used noise metric is the Community Noise Equivalent Level (CNEL). The CNEL penalizes noise levels during periods of greater noise sensitivity to create an artificially weighted 24-hour exposure. It is calculated by adding a 5 decibel penalty to sound levels in the evening (7:00 p.m. to 10:00 p.m.), and a 10 decibel penalty to sound levels in the night (10:00 p.m. to 7:00 a.m.) to compensate for the increased sensitivity to noise during the quieter late evening and nighttime periods. Thus, the CNEL noise metric provides a 24-hour average of A-weighted noise levels at a particular location, with an evening and a nighttime adjustment, which reflects increased sensitivity to noise during these times of the day. The Day Night Level (Ldn) similarly averages sound levels over 24 hours, with 10dB added to nighttime sound levels. Ldn and CNEL values rarely differ by more than 1 dB. As a matter of practice, Ldn and CNEL values are considered to be equivalent and are treated as such in this assessment.

Figure 1 Perception of Sounds



*Unless otherwise noted, noise levels are measured at the source

Noise is commonly defined as unwanted sound. In general, noise is not a significant issue in Ferndale. The primary noise source affecting sensitive receptors (homes, schools) in the City is traffic on State Route 211. Some commercial and agricultural uses are also identified as noise contributors, although such sources have not generally been identified as significant noise

problems. Potential noise sources affecting development in the City are described in more detail in Chapter 4.0 Noise Characteristics and Sources.

According to OPR's General Plan Guidelines, the fundamental goals of a noise element are:

- To provide sufficient information concerning the community noise environment so that noise may be effectively considered in the land use planning process. In so doing, the necessary groundwork will have been developed so that a community noise ordinance may be utilized to resolve noise complaints.
- To develop strategies for abating excessive noise exposure through cost-effective mitigating measures in combination with zoning, as appropriate, to avoid incompatible land uses.
- To protect those existing regions of the planning area whose noise environments are deemed acceptable and also those locations throughout the community deemed "noise sensitive."
- To utilize the definition of the community noise environment in the form of Community Noise Equivalent Level (CNEL) or Day Night Average Level (Ldn) noise contours as provided in the noise element for local compliance with the State Noise Insulation Standards. These standards require specified levels of outdoor to indoor noise reduction for new multifamily residential constructions in areas where the outdoor noise exceeds CNEL (or Ldn) 60 decibels (dB) (OPR 2003).

Government Code Section 65302(f) requires that noise elements identify and appraise noise problems in the community. The noise element must recognize the guidelines established by the State Department of Health Services Office of Noise Control and analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for each of the following:

- Highways and freeways.
- Primary arterials and major local streets.
- Passenger and freight on-line railroad operations and ground rapid transit systems.
- Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.
- Local industrial plants, including, but not limited to, railroad classification yards.
- Other ground stationary sources identified by local agencies as contributing to the community noise environment.

Noise contours must be shown for each of these sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (Ldn) (OPR 2003). Chapter 4.0 Noise Characteristics and Sources presents the noise contour map and guidelines for noise-compatible land use. Chapter 6 Goals, Policies and Implementation presents mitigation to reduce noise impacts to the community.

GENERAL AIR QUALITY CHARACTERISTICS AND REGULATIONS

Ferndale is located within the North Coast Unified Air Quality Management District (NCUAQMD), which consists of Del Norte, Humboldt, and Trinity Counties. The California and Federal Clean Air Acts establish air quality standards for several pollutants, including particulate matter, carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and lead, and require jurisdictions for areas that violate these standards to prepare and implement plans to achieve the standards. The NCUAQMD meets all federal air quality standards, but exceeds the maximum limits for state standards relating to particulate matter smaller than or equal to 10 microns in diameter (PM_{10}). Significant sources of PM_{10} include motor vehicle exhaust, road dust, construction and demolition activities, and wood-burning stoves and fireplaces.

CC Image courtesy of **Carodean Road Designs** on Flickr

According to the Environmental Protection Agency (EPA), the federal agency regulating air quality, particulate pollution consists of microscopic solids or liquid droplets small enough to pass through the nose and throat and penetrate deep into the lungs, causing serious health problems. Scientists have linked particulate matter to a variety of problems, including asthma, decreased lung function, irregular heartbeat, and increased respiratory symptoms (EPA 2013). Particulate matter has a greater effect on people with heart or lung diseases, children and older adults (EPA 2013).

The California Clean Air Act of 1988 places primary responsibility for improving Humboldt County's air quality on the NCUAQMD. In 1995, the NCUAQMD prepared a Particulate Matter (PM_{10}) Attainment Plan draft report to identify major sources of PM_{10} in the District and strategies to reduce particulate pollution and achieve the state standard for PM_{10}. These include strategies to reduce emissions from both stationary and mobile sources.

The California Environmental Quality Act (CEQA) requires cities to identify the potentially significant effects on the environments of projects over which the city has discretionary authority. A city approving a project is also required to mitigate significant effects whenever feasible. To determine whether a project would have a potentially significant effect on air quality, the project's potential effects are compared to the local air district's thresholds of significance. The NCUAQMD has not formally adopted significance thresholds; the District instead uses the Best Available Control Technology (BACT) emission rates for stationary sources and recommends the use of the latest version of the California Air Pollution Control Officer's Association (CAPCOA)'s "Health Risk Assessments for Proposed Land Use Project" for new development (NCUAQMD 2013).

GLOBAL CLIMATE CHANGE

Global climate change is defined as the progressive gradual rise of the Earth's average surface temperature thought to be caused in part by increased concentrations of greenhouse gases (GHGs) in the atmosphere. The change in the average weather of the earth can be measured by wind patterns, storms, precipitation, and temperature. It is exacerbated by GHGs, which trap heat in the atmosphere (thus the “greenhouse” effect). GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_20), hydroflourocarbons (HFCs), perflourocarbons (PFCs), and sulfur hexafluoride (SF_6), and are emitted by both natural processes and human activities.

The projected effects of climate change cover a broad spectrum of impact areas:

Human health:

- Exposure to air pollution
- Exposure to infectious diseases due to changing ecosystems and climate
- Weather-related mortality (flooding)

Water Resources:

- Changing rainfall and snow pack issues
- Hydrology change in rivers and Delta
- Increasing sea level Biological Resources:
- Changing habitat and species distribution

Chapter 5.0 Air Quality Characteristics includes a description of local and regional air quality conditions, a discussion of the area’s current air quality designation, a summary of applicable federal and state standards and laws, a summary of air pollution sources in the Planning Area, and an emissions inventory.

4.0 Noise Characteristics and Sources

NOISE SOURCES

The main source of noise in Ferndale is from vehicular traffic travelling Route 211 through the center of town. The two lane highway leaves U.S. Route 101, crosses the Eel River over Fernbridge, and extends southwest across the flat alluvial plain before turning into Main Street within City limits. The speed limit is lowered from 55 mph to 35 mph just outside of City limits, and again to 25 mph approximately a quarter mile into the City. [PP1]

Classified as a Rural Major Collector, Route 211 primarily provides transportation to and from the City of Ferndale, although residents of Petrolia, Capetown, and Honeydew use the route to connect from Mattole Road to Highway 101 (Caltrans 1999). According to the most recent Route Concept Report, Caltrans does not plan to increase the capacity of the route (Caltrans 1999).

Other Rural Major Collectors within City Limits include Arlington Ave, 5th Street, Ocean Ave, Wildcat Ave, Bluff Street, and Grant Ave. There are no roads classified as Arterials in Ferndale. Market Street, Herbert Street, Shaw Ave and Rose Ave are classified as Minor Collectors; all other roads within the City are classified as Local Roads (Caltrans 2012 and 2013). See Figures 2 and 3 (to come).

The extent of traffic noise depends primarily on traffic speed and compilation. The main source of noise from automobiles is high-frequency tire noise, which increases with speed. Trucks and older automobiles also produce engine and exhaust noise, and trucks generate wind noise. For regulation of general motor traffic, the CA State Vehicle Code states that all vehicles must be equipped with an adequate muffler to prevent excessive noise from the exhaust system. It also prohibits the operation of a passenger vehicle (other than a motorcycle), or a truck with a Gross Vehicle Weight Rating (GVWR) of less than 6,000 pounds, that has an exhaust noise level greater than 95 decibels. A noise limit of 92 decibels applies to any motorcycle manufactured before 1970, and a noise limit of 80-88 decibels applies to motorcycles manufactured 1970-present, depending on the year of manufacture.

Noise abatement, related to truck noise specifically, at a city level is enforced by the City of Ferndale Traffic Ordinance 04-01, which states that motor truck travel for vehicles exceeding a maximum gross weight limit of three tons, are restricted to the following truck route: beginning on Ocean Avenue where the Wildcat Road intersects Ocean Avenue; thence easterly to where Ocean Avenue intersects Main Street; thence along Main Street to the easterly boundary line of the City of Ferndale. This limits truck related noise exclusively to the aforementioned route through town.

In actuality, there are at least three different ambience conditions in Ferndale. The first ambience level is during peak morning and late afternoon traffic. The second ambience level is during the remaining daylight hours of the day. Field measurements of ambience were taken, and it was

found that the ambient level on Main Street was about 52 dB(A) which is at least 20 dB(A) lower than during the peak traffic flow. At 5th and Shaw Streets the reading was 45 dB(A) - about 15 dB(A) lower than the peak traffic period ambience level. In outlying areas the peak traffic and normal daytime levels differ very little. Developing contours of the usual daytime ambience would be difficult since the lowest and highest readings were 45 and 52 decibels respectively which is very quiet for a community during the day. The third ambience level is during the night when ambience levels are approximately 10 dB(A) lower than the usual daytime levels. The very low level of background noise in the community increases the contrast with loud single event noises and single event noise is consequently more noticeable and objectionable.

Stationary sources of noise within City limits are limited. The Humboldt County Fairgrounds generates noise during events, but is not a constant source of noise. The nearest airport is Rohnerville Airport, a small, one-runway airport located about 6.5 miles southeast of Ferndale; the airport is not audible within the City.

Single Event Noises occasionally occur within the city of Ferndale. Diesel delivery trucks generate the loudest single event noises in the planning area. At 50 feet, a truck generates a noise level of 88 decibels and at 100 feet the level is 82 decibels. Single event sounds in the 75 to 85 decibel range are distracting to most people and sounds over 85 decibels are often disturbing and can cause hearing loss if exposure is frequent. For persons inside a building, these noise levels would be perceived at about 20 decibels less with the windows closed and 10 decibels less with them open. Single event impacts from other sources which generate noises of above 75 decibels, such as chain saws, lawn mowers and barking dogs, are not mapped because they occur at random or in scattered locations. Field measurements of a chain saw that registered 108 dB (A) at the operator and a tractor which registered at 93 dB (A) at the driver suggests that Ferndale experiences the usual occurrences of loud single event noises. In recent years there has been considerable reduction of truck noise on Main Street as a result of reduced logging activity and as a result of State and Federal requirements for quieter trucks.

According to conversations with Chief of Police Bret Smith, noise complaints are uncommon in Ferndale and although fielded by the Police Department, complaints are not tracked separately from other service calls.

SENSITIVE RECEPTORS

Sensitive receptors are land uses or users that are interrupted (rather than simply impacted) by relatively low levels of noise. Such receptors include hospitals, convalescent homes, schools, churches, and sensitive wildlife habitat.

Ferndale's sensitive receptors include Ferndale Elementary and High Schools, Ferndale Community Church, St. Mary's Episcopal Church, Assumption Catholic Church, Our Saviors Lutheran Church, St. Mark's Lutheran Church, and Living Waters Foursquare Church. There are no hospitals, convalescent homes, or sensitive wildlife habitats within the City.

NOISE STANDARDS

The EPA has concluded that maintaining environmental noise below a 24-hour exposure level of 70 decibels will prevent any measurable hearing loss over a lifetime. Likewise, levels of 55 decibels outdoors and 45 decibels indoors are identified as preventing activity interference and annoyance. These levels of noise are considered those which will permit spoken conversation and other activities such as sleeping, working and recreation, which are part of the daily human condition.

Figure 4 presents the California Department of Health, Office of Noise Control noise compatibility guidelines for various land uses. The table illustrates the ranges of community noise exposure in terms of what is "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable." These guidelines may be used to assess whether or not noise poses a conflict with land development. Figure 5 provides adjustment factors to correct for seasonal variations in noise source levels, existing outdoor ambient noise levels, previous exposure to the source, community attitudes, and tonal characteristics of the source. Adjusting the noise exposure values according to Figure 5 will provide a more accurate assessment of locally acceptable noise exposure.

In 2006 the City of Ferndale adopted Nuisance Ordinance 06-04, with Section 7.04 designated specifically for Noise. It outlines restrictions for noise, both vehicular and non-vehicular, within the city limits. A noise-based curfew is set for the hours of 10:00 p.m. through 7:00 a.m., and a construction-related noise-based curfew is set for the hours of 7 a.m. and 7 p.m. on weekdays, or between 8 a.m. and 7 p.m. on Saturday and Sunday (City of Ferndale Nuisance Ordinance 06-04 §7.04).

ANALYSIS OF LOCAL NOISE ENVIRONMENT

Estimated existing noise contours from SR 211 are shown on Figure 6. It should be noted that the contours presented are outdoor noise levels and only account for attenuation due to distance, not from sound wall structures or other noise barriers. The contours are intended to show generally where higher noise levels may occur.

FUTURE CONDITIONS

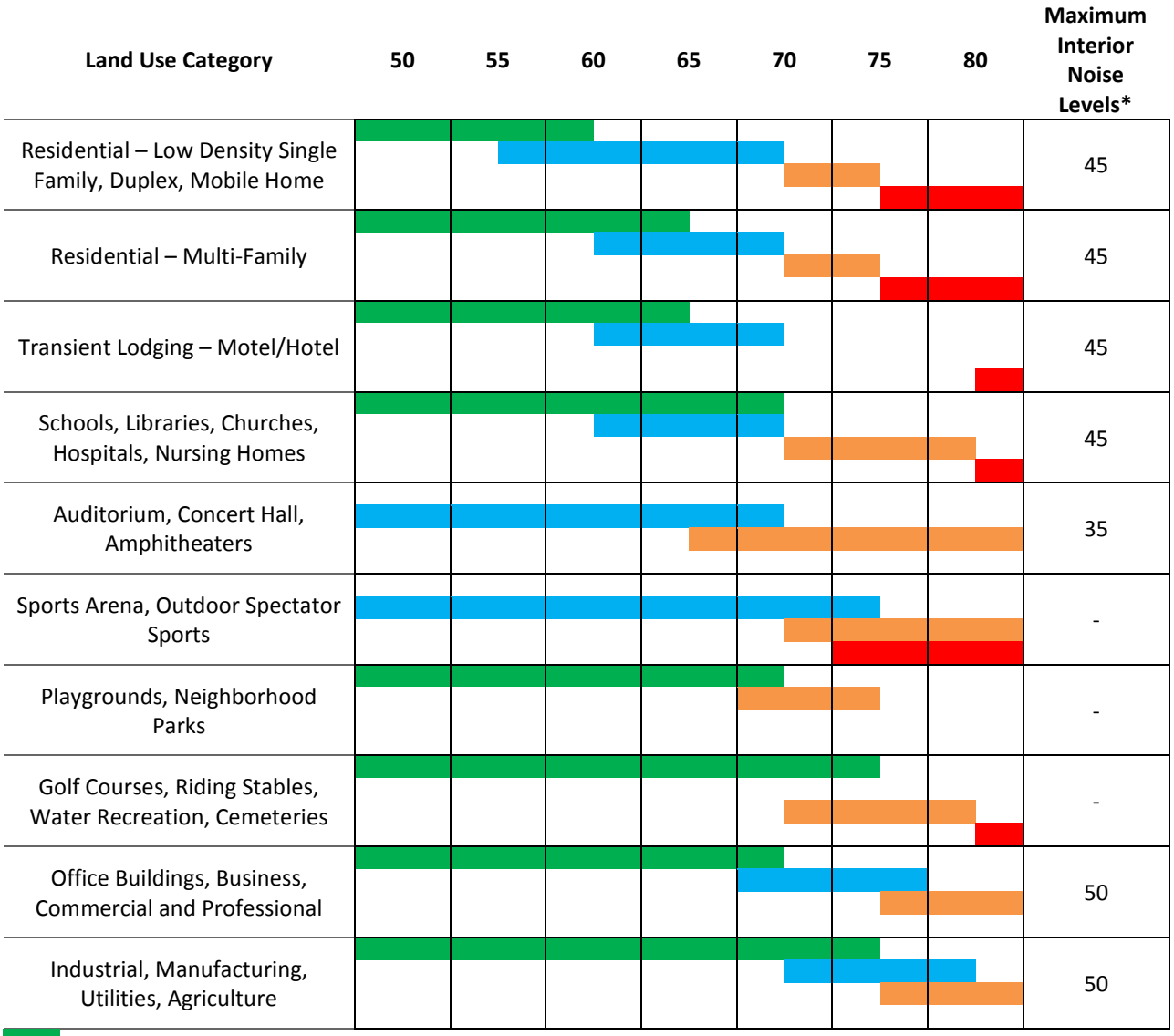
Community noise levels can increase with development. With a static rate of growth experienced over the past 13 years, Ferndale's development trends have remained equally static. According to the 2012 General Plan Housing Element, three new subdivisions were approved between 2004 and 2009. The total new buildable parcels proposed are 13. These are all located in single-family zones. There is limited land available in Ferndale because the City has maintained its one square mile of city limits. At this time, the City does not plan to annex additional land. Noise levels within the City are not expected to increase significantly due to development.

ATTENUATION

Existing and potential incompatible noise levels in problem areas can be reduced through land use planning, subdivision review, building code enforcement, and other administrative means.

Chapter 6 Goals, Policies and Implementation Programs contains attenuation measures to reduce noise impacts to the Ferndale community.

Figure 4 Community Noise Exposure
Ldn or CNEL, dB



NORMALLY ACCEPTABLE – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction but with closed windows and fresh air supply system or air conditioning will normally suffice.

NORMALLY UNACCEPTABLE – New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and need noise insulation features included in the design

CLEARLY UNACCEPTABLE – New construction or development should generally not be undertaken.

*Due to exterior sources

Source: Office of Planning and Research. 2003. State of California General Plan Guidelines

Figure 5 Noise Exposure Adjustment Factors

Type of Correction	Description	Amount of Correction to be Added to Measured CNEL in dB
Seasonal Correction	Summer (or year-round operation).	0
	Winter only (or windows always closed).	-5
Correction for Outdoor Residual Noise Level	Quiet suburban or rural community (remote from large cities and from industrial activity and trucking).	+10
	Quiet suburban or rural community (not located near industrial activity).	+5
	Urban residential community (not immediately adjacent to heavily travelled roads and industrial areas).	0
	Noise urban residential community 9near relatively busy roads of industrial areas).	-5
	Very noisy urban residential community.	-10
Correction for Previous Exposure and Community Attitudes	No prior experience with the intruding noise.	+5
	Community has had some previous exposure to intruding but little effort is being made to control the noise. This correction may also be applied in a situation where the community has not been exposed to the noise previously, but the people are aware that bona fide efforts are being made to control the noise.	0
	Community has had considerable previous exposure to the intruding noise and the noise maker's relations with the community are good.	-5
	Community aware that operation causing noise is very necessary and it will not continue indefinitely. This correction can be applied for an operation of limited duration and under emergency circumstances.	-10
Pure Tone or Impulse	No pure tone or impulsive character.	0
	Pure tone or impulsive character present.	+5

Source: Office of Planning and Research. 2003. State of California General Plan Guidelines

Insert Figure 6

5.0 Air Quality Characteristics

This section includes a description of local and regional air quality conditions, a discussion of the area's current air quality designation, a summary of applicable federal and state standards and laws, a summary of air pollution sources in the Planning Area, and an emissions inventory and reduction plan.

OVERALL AIR QUALITY

The Humboldt County General Plan Update Background Report Chapter 9 Air Quality provides an in-depth examination of the overall countywide climate, regulatory setting, and air quality conditions and trends. The document also examines the impact of climate and atmospheric conditions on the movement and dispersal of air pollutants.

Ferndale's climate and wind patterns are typical of the low-lying coastal areas of Humboldt County. In general, the Background Report characterizes the coastal climate as having cool summers with frequent fog and mild winters with lots of rain. The proximity of the ocean moderates coastal temperatures, while inland areas tend to experience the extremes of hot, dry summers and mild, wet winters.

Lost Coast Fog
Original image available under Public License
Courtesy of scupperssfr

Winds control the rate and dispersion of local pollutant emissions. Horizontal air movement spreads pollutants over a wider area. Coastal Humboldt County winds exhibit a seasonal pattern. In the summer, strong north to northwesterly winds are common; during the winter, an increasing percentage of winds are from southerly quadrants. Offshore and onshore flows are also common along the coast and are associated with pressure systems in the area. Onshore flows frequently bring foggy cool weather to the coast, while offshore flows often blow fog away from the coast and bring sunny warm days.

Vertical air movement spreads pollutants through a thicker layer of air. Upward dispersion of pollutants is hindered when the atmosphere is stable; that is, when warm air overlies cooler air below. This situation is known as an inversion. Inversions affect the dispersion of pollutants by altering the vertical depth of the atmosphere through which pollutants can be mixed. The County General Plan Update Background Report discusses inversions and their effects on pollutant dispersal in greater detail.

Unlike more urban areas, Humboldt County's air quality concerns tend to focus on industrial emission sources. The California Air Resources Board (CARB) operates a regional network of air pollution monitoring stations that provide information on ambient concentrations of criteria air pollutants and toxic air contaminants. NCUAQMD measures PM_{10} at sites in Crescent City, Eureka, and Weaverville. Data for Humboldt County is collected at an air quality station in

Eureka, which also monitors for PM_{10} and $PM_{2.5}$. Data from the monitoring station indicate that the air quality in Eureka is improving, and that PM levels have been reduced to nearly below state standards.

Ferndale's air quality is similar to that of the rest of rural Humboldt County. EPA's Envirofacts site lists the naval facility at Centerville Beach as the only nearby stationary source of air pollution regulated by a federal, state or local air pollution agency. The facility is regulated and listed as compliant for asbestos (EPA 2011). The nearest air quality monitoring station to Ferndale is located on Humboldt Hill. The station monitors CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and ozone. According to the EPA, since 2009 lead has been measured and reported in Total Suspended Particulates and PM_{10} in local conditions (EPA 2013). The County General Plan Update background report on air quality contains an in-depth look at existing levels and regulation of these pollutants, as well as toxic air contaminants, within the county.

AIR BASIN REQUIREMENTS

The North Coast Air Basin must submit to standards outlined in the NCUAQMD Air Quality Control Rules covering visible emissions, particulate matter, fugitive dust emissions, sulfur oxide and sulfides, and geothermal emissions. Emissions are also subject to General Plan policies and programs if the project requires discretionary City approval. Environmental review of such projects requires coordination between NCUAQMD and the City to ensure that the project will be carried out in a manner consistent with state air quality laws and reduce any project impacts to below levels of significance. NCUAQMD also requires coordination on projects involving demolition of commercial structures containing asbestos and for surface mining and grading in areas containing naturally occurring asbestos.

CLIMATE CHANGE LEGISLATION

Executive Order S-3-05 (2005)

Executive Order S-3-05 (EO-S-3-05) states that California is vulnerable to the effects of climate change, including reduced snowpack in the Sierra Nevada Mountains, exacerbation of California's existing air quality problems, and sea level rise. To address these concerns, the executive order established statewide targets to reduce greenhouse gas emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

AB 32 (2006)

California Assembly Bill 32 (AB 32), the Global Warming Solutions Act, requires the state Air Resources Board (ARB) to adopt regulations by January 1, 2008 to require reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with that program. The bill requires the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions, and adoption of a "Scoping Plan" that provides a detailed pathway to achieve by 2020 of statewide greenhouse gas emissions limit equivalent to 1990 emissions.

AB 811 (2007)

AB 811 authorizes all local governments in California, if they so choose, to establish special districts that can be used to finance energy efficiency, solar, or other renewable energy

improvements to homes and businesses in their jurisdiction. As a result of opposition by Fannie Mae and Freddie Mac, federal regulators have effectively put most of the local programs dealing with residential properties on hold. It may take additional federal legislation to get residential programs fully back on track, although programs designed for commercial properties face no similar roadblocks. A handful of programs in California are continuing but at the time of publication, uncertainty remains.

SB 97 (2007)

SB 97 acknowledges that climate change is a prominent environmental issue that requires analysis under the California Environmental Quality Act (CEQA). Pursuant to SB 97, the State CEQA Guidelines were updated in 2010 to include provisions for mitigating greenhouse gas emissions and/or the effects of greenhouse gas emissions. The amended CEQA Guidelines (Section 15183.5) allow jurisdictions to analyze and mitigate the significant effects of greenhouse gases at a programmatic level by adopting a plan for the reduction of greenhouse gas emissions. Later, as individual projects are proposed, project specific environmental documents may tier from and/or incorporate by reference that existing programmatic review in their cumulative impacts analysis. This CAP has been developed specifically for this purpose.

SB 375 (2008)

Senate Bill (SB) 375 aligns regional transportation planning efforts, regional greenhouse gas reduction targets, and land use and housing allocations to reduce vehicle emissions. The State has assigned passenger vehicle per capita greenhouse gas reduction targets to each Metropolitan Planning Organization· (MPO). Within the Sacramento Area Council of Governments (SA COG) region, these targets are a 7% reduction by 2020 and a 16% reduction by 2030 compared to 2005 baseline levels of 23.0 lbs of C02 per capita per weekday. This effort was not applicable to Humboldt County.

International Council for Local Environmental Initiatives

The International Council for Local Environmental Initiatives (ICLEI,), is a worldwide membership organization of local governments and their associations working to achieve tangible improvements in global environmental and sustainable development conditions. ICLEI's Cities for Climate Protection program (CCP) began working with local governments in 1993 to reduce local sources of greenhouse gas emissions. ICLEI developed software to quantify greenhouse gas emission reduction efforts, providing tools to inventory, categorize, and quantify past, present and future conditions. The software helps identify opportunities and priorities for reducing greenhouse gas emissions. The County has used this software to develop a greenhouse gas emissions baseline for 1990 and to assess the current level of greenhouse gas emissions for compliance with AB 32.

California Environmental Quality Act

CEQA requires public agencies to evaluate whether a project that requires discretionary approval may have significant environmental effects and, if so, to impose feasible mitigation measures. In general, when it determines in the first instance that a project may have a significant effect on the environment, the public agency must prepare an environmental impact report (EIR). While air quality modeling software (URBEMIS 2007) provides a methodology for estimating a project's

carbon dioxide emissions, there are no established thresholds or standards for determining whether a project's greenhouse gas emissions are significant.

ATTENUATION

Area-wide and mobile source emissions may be reduced through policies that target specific sources. Transportation policies may be designed to reduce area-wide PM_{10} levels by reducing both the number of vehicle miles traveled and the number of vehicle trips. Grading and road maintenance policies may reduce particulates in dust. Incentives for energy efficient building construction may help reduce emissions related to residential and commercial energy consumption, including woodstove emissions. Maintaining efficient and timely procedures for project referral to the NCUAQMD for review and consultation will help reduce emissions caused by demolition.

Ferndale, CA
Original image available under Public License
Courtesy of jerseygal2009

Chapter 6 Goals, Policies and Implementation Programs contains attenuation measures to improve air quality and reduce greenhouse gas emissions in the City.

GREENHOUSE GAS EMISSIONS

The Redwood Coast Energy Authority (RCEA) is a Joint Powers Authority whose members include the County, the seven cities within, and the Humboldt Bay Municipal Water District. RCEA's purpose is to develop and implement sustainable energy initiatives that reduce energy demand, increase energy efficiency, and advance the use of clean, efficient and renewable resources available in the region (RCEA 2013).

RCEA produced the Humboldt County Comprehensive Energy Action Plan, consisting of implementation measures specific to the functions of RCEA as the regional energy authority for the County, including working with local jurisdictions to complete greenhouse gas inventories, set greenhouse gas reduction targets, and developing climate action plans (RCEA 2013).

Local government operations, including facilities, vehicle fleets, street lights, traffic signals, water systems, wastewater plants, and solid waste generation release greenhouse gases into the atmosphere. RCEA, in conjunction with ICLEI Institute for Local Governments, completed a Greenhouse Gas Inventory for Ferndale. The inventory measures greenhouse gas emissions resulting specifically from Ferndale’s government operations, and addresses where and what quantity of emissions are generated through various government activities.

The intent of the analysis is to enable Ferndale to tailor effective greenhouse gas emission reduction strategies. Potential strategies identified by RCEA include increasing energy efficiency in facilities and vehicle fleets, utilizing renewable energy sources, reducing waste, and supporting alternative modes of transportation for employees. In performing these actions, the City would benefit with lower energy bills, improved air quality, and more efficient government operations. The City would also be mitigating local and global climate change impacts while saving taxpayer money through more efficient government operations (RCEA 2012).

The following Emissions Reduction Plan is based largely on the Ferndale 2005 Government Operations Greenhouse Gas Emissions Inventory.

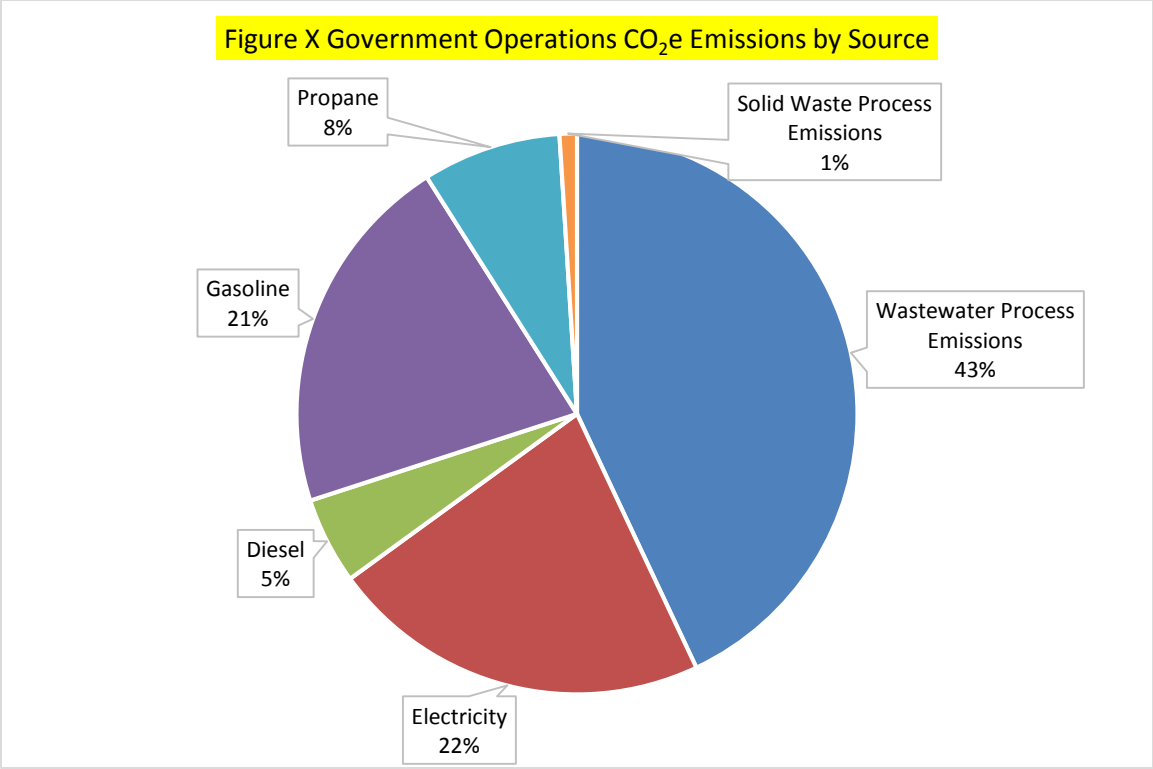
EMISSIONS INVENTORIES AND REDUCTION TARGET

The six internationally recognized greenhouse gases (Carbon Dioxide, Methane, Nitrous Oxide, Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride) may be combined in a unit called carbon dioxide equivalent (CO_2e). Since equal quantities of each greenhouse gas have more or less influence on the greenhouse effect, converting all emissions to a standard metric allows apples-to-apples comparisons amongst quantities of all six emissions types (RCEA 2012). Greenhouse gas emissions are reported in this inventory as metric tons of CO_2e ($MTCO_2e$).

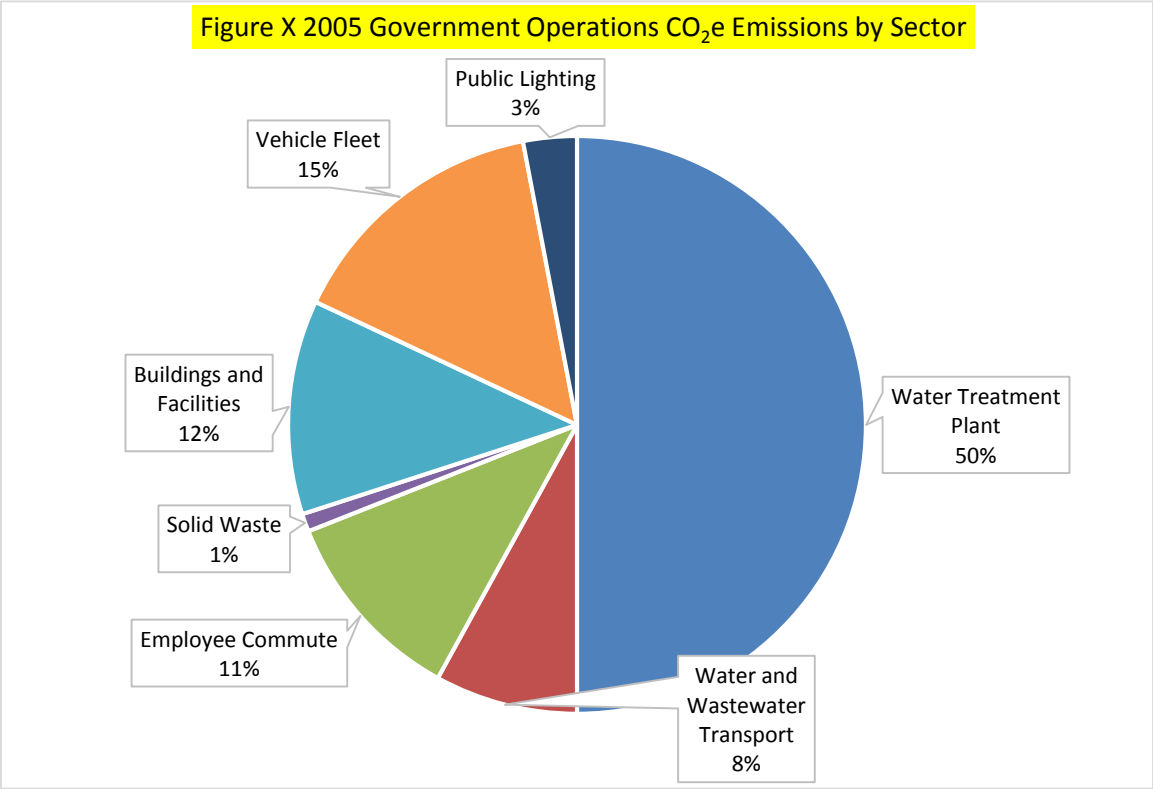
In 2005, Ferndale's greenhouse gas emissions from government operations totaled 320 metric tons of CO_2e. The majority of greenhouse gases emitted by government operations come from the Wastewater Treatment Facility, followed by vehicles, buildings and facilities, and employee commute, and water and wastewater transport. Public lighting and solid waste contribute a small portion of CO_2e by sector (see Figure X). The biggest source of CO_2e emissions is the wastewater treatment process, followed by electricity, gasoline, propane, diesel, and finally solid waste processing (see Figure X).

The 2005 Greenhouse Gas Emission Inventory contains a more detailed breakdown of emissions, a discussion of the methodology, and an in-depth analysis of emissions by sector and source. This inventory provides an emissions baseline that can be used to set emissions reduction targets for Ferndale's municipal operations.

A greenhouse gas emissions reduction target is a goal to reduce emissions to a certain percentage below base year levels by a chosen planning horizon year. A target provides an objective toward which to strive and against which to measure progress. It allows the City to quantify its commitment to reducing its contribution to global greenhouse gases while becoming more efficient. An emissions reduction target should strike a balance between scientific necessity, ambition, and what is realistically achievable (RCEA 2012)."



Source: Redwood Coast Energy Authority. 2012. City of Ferndale 2005 Government operations Greenhouse Gas Emissions Inventory.



Source: Redwood Coast Energy Authority. 2012. City of Ferndale 2005 Government operations Greenhouse Gas Emissions Inventory.

ICLEI recommends that Ferndale establish short term and long term emissions reduction targets. A long term target will allow the City enough time to implement emissions reduction measures. Short term interim targets for every two- to three-year period will facilitate additional support and accountability and ensure continued momentum. ICLEI recommends that interim targets be guided by the long-term goal of reducing emissions by 80 percent to 95 percent from the 2005 baseline level by the year 2050, noting that this won't be possible without the assistance of state and federal policy changes that create new incentives and new sources of funding for emissions reduction projects and programs (RCEA 2012).

An integral component of the State of California's climate protection approach has been the creation of three core emissions reduction targets at the community level. While these targets are specific to the community-scale, they can be used to inform emissions targets for government operations as well. On June 1, 2005, California Governor Schwarzenegger signed Executive Order S-3-05 establishing climate change emission reductions targets for the State of California.

The California targets are an example of near-, mid- and long-term targets:

- Reduce emissions to 2000 levels by 2010
- Reduce emissions to 1990 levels by 2020
- Reduce emissions to 80 percent below 1990 levels by 2050

The AB 32 Scoping Plan also provides further guidance on establishing targets for local governments; specifically the Plan suggests creating an emissions reduction goal of 15 percent below "current" levels by 2020. This target has informed many local government's emission reduction targets for municipal operations—most local governments in California with adopted targets have targets of 15 to 25 percent reductions under 2005 levels by 2020 (RCEA 2012).

Using this guidance and ICLEI's recommendations, Ferndale has set the following targets for greenhouse gas emissions due to government operations:

- Reduce emissions to 10% below 2005 levels by 2020
- Reduce emissions to 80% below 2005 levels by 2050

EMISSION REDUCTION MEASURES AND IMPLEMENTATION TIMELINE

Ferndale's greenhouse gas inventory identifies the major sources of emissions from government operations. Sectors and sources responsible for the highest emissions should be targeted for emissions reductions activities in order to make significant progress toward the short-term emission reduction target. Since electricity consumption was a major source of emissions from Ferndale's operations, it may be possible for the City to meet its 2020 target by implementing a few major actions on the major electricity consumers (RCEA notes that, although Ferndale's Wastewater Treatment Facility is a major emissions source, the vast majority of CO_2e emissions are from methane emissions; emissions reduction options for the facility are likely extremely expensive). Long-term (2050) targets will require major reductions in all sectors.

Given the results of the inventory, ICLEI recommends that Ferndale focus on the following tasks in order to significantly reduce emissions from its government operations:

- Comprehensive municipal retrofit of existing buildings targeting reduction in both electricity and propane
- Change procurement policy to specify high fuel efficiency for each vehicle class
- Increase office recycling, e.g. paper, cardboard, cans, toner cartridges
- Encourage PG&E to switch their outdoor lights from incandescent bulbs to Light Emitting Diodes (LEDs)

Ferndale has already begun planning to reduce energy consumption. In 2013, the City prepared an Energy Assurance Plan (EAP) in conjunction with the California Energy Commission sponsored California Local Energy Assurance Planning project. The aim of the EAP is to help Ferndale become more resilient to energy supply interruptions during an emergency, ensuring that critical facilities within the community continue to function.

The energy profile in the EAP provides a basic understanding of the sources of energy supplies and how they are consumed in the Ferndale community as well as for specific city-owned facilities. This information guided policies and actions the city can take to protect its key assets from extended energy disruptions, as well as several energy-reducing actions, that were incorporated in the Humboldt Operational Area Multi-Agency Multi-Hazard Mitigation Plan 2013 Update (HMP), which was in turn incorporated into the General Plan 2013 Safety Element Update. These actions included the following:

> Initiative #F5—Investigate the viability of renewable and distributed generation technologies that can be city-owned and serve a dual purpose of primary and stand-by power/energy. Work with the California Energy Commission and other sources to identify advanced technologies, systems, and financing options.
>
> Initiative #F6— Investigate low-no cost energy efficiency and conservation measures and innovative technologies such as micro-turbines for key assets and other city-owned/operated assets in order to decrease their energy footprint, thus reducing energy bills and the scale of needed back-up power. Also look into higher cost, advanced technologies such as micro-grids.

Using these initiatives as well as strategies recommended by ICLEI, Ferndale has outlined the following overall emissions reductions strategy.

Figure X Emissions Reduction Measures and Timeline

Measure 1	Establish data collection systems for GHG data as part of normal City operations.	
	Timeline	Establish by 2015; ongoing
Measure 2	Investigate the viability of renewable and distributed generation technologies that can be city-owned and serve a dual purpose of primary and stand-by power/energy. Work with the California Energy Commission and other sources to ID advanced technologies, systems, and financing options.	
	Timeline	
Measure 3	Investigate low-no cost energy efficiency and conservation measures and innovative technologies such as micro-turbines for KA and other city-owned/operated assets in order to decrease their energy footprint thus reducing energy bills and the scale of needed back-up power. Also look into higher cost, advanced technologies such as micro-grids.	
	Timeline	
Measure 4	Comprehensive municipal retrofit of existing buildings targeting reduction in both electricity and propane	
	Timeline	
Measure 5	Change procurement policy to specify high fuel efficiency for each vehicle class	
	Timeline	
Measure 6	Increase office recycling, e.g. paper, cardboard, cans, toner cartridges	
	Timeline	
Measure 7	Encourage PG&E to switch their outdoor lights from incandescent bulbs to Light Emitting Diodes (LEDs)	
	Timeline	
Measure 8		
	Timeline	
Measure 9		
	Timeline	

GREENHOUSE GAS REDUCTION MONITORING AND VERIFICATION

As the emissions reduction measures are implemented, regular emissions monitoring is required to ensure that the City is on track to meet its targets. ICLEI recommends that Ferndale re-inventory its emissions every three to five years and has created various tools to assist the City towards this goal. RCEA plans to conduct a greenhouse gas inventory based on 2012 data, and may assist the City with future inventories (RCEA 2012).

During the RCEA inventory process, Ferndale staff identified the following gaps in data:

- Direct tracking of refrigerants recharged into HVAC and refrigeration equipment
- Direct tracking of fire suppressants recharged into fire suppression equipment
- Clear labeling of vehicle make and model in gas logs
- Odometer readings of individual vehicles
- Fuel consumption by mobile equipment make and model
- Refrigerants recharged into vehicles in the vehicle fleet
- Tracking of propane consumption by facility and by volume

- Tracking and inventorying of contracted services

ICLEI advises that Ferndale establish data collection systems for this data as part of normal operations. In this way, when staff are ready to re-inventory for a future year, they will have the proper data to make a more accurate emissions estimate. This has been incorporated into the emissions reduction strategy.

Measures from the emissions reduction strategy, along with attenuation for general air quality issues, have been incorporated into Chapter 6. Goals, Policies and Objectives as actions the City will take to improve air quality and to limit future impacts of climate change.

6.0 Goals, Policies and Implementation Programs

Goals, Policies and Implementation Programs

Noise & Air Quality Element goals and policies provide a policy basis for measures Ferndale can take to reduce noise exposure and improve air quality. The contract planner and City staff worked with the Planning Commission, City Council, and agency representatives to craft policies and implementation strategies for reduction of harmful emissions and noise levels in the community through land use planning.

Goals are general statements of community values or aspirations. They define the ends toward which the City will address its efforts.

Policies are more precise expressions of the community's position on particular issues, or how particular goals can be reached. Polices may include guidelines, standards, objectives, maps, diagrams, or a combination of these components.

Implementing Programs present specific actions that the City or other identified entity will undertake to address policy issues and move closer to the community's goals. These might include ongoing programs sponsored by the City, discrete time-specific actions, or further planning action.

SECTION 1. NOISE

Goals

Goal 1.1 *Maintain acceptable community noise levels compatible with Ferndale's rural and small-town setting.*

Goal 1.2 *Develop noise policies for Overall Noise Reduction, Land Use, Design Review and Construction, Transportation, and Monitoring.*

Goal 1.3 *Promote noise mitigation techniques in noise receptor and noise generator design.*

Policies

Overall Noise Reduction

Policy 1.1 **Excessive Noise**. The City should bring all noise sources into compliance with noise guidelines set forth in the Ferndale Nuisance Ordinance 06-04 Section 7.04.

Policy 1.2 **Minimize Noise from Stationary and Mobile Sources**. The City should apply appropriate standards for average and short-term noise levels during permit review and subsequent monitoring to minimize stationary noise sources and noise emanating from temporary activities.

Land Use

Policy 1.3 **Noise Compatibility Standards**. The City should ensure compatibility with adjacent and noise-sensitive land uses by adopting noise standards by land use type.

Design Review and Construction

Policy 1.4 **New Construction**. The City should strive to limit exterior noise levels for existing and future dwellings in residential areas to levels of 60 dBA Ldn and interior noise levels of 45 dBA Ldn.

Policy 1.5 **Noise Barriers**. The City should consider the use of noise barriers, if all other practical design-related noise mitigation measures do not attenuate to noise standards.

Transportation

Policy 1.6 **Noise Reduction Design**. The City should lessen noise increases along the city's arterial and collector roads through street design, including providing buffers and screening, coordination of routing, and other traffic control measures. The City should encourage the use of berms and increased building setbacks, or both, in the design of noise-sensitive land uses that are adjacent to major roads, commercial, or industrial areas.

Monitoring

Policy 1.7 **Noise Problem Areas**. The City should identify and evaluate areas exceeding noise standards on a continuing basis.

Implementation Programs

Overall Noise Reduction

Program 1.a **Ferndale Nuisance Ordinance 06-04 Section 7.04**. The City should protect persons from existing or future excessive levels of noise which interfere with sleep, communication, relaxation, health or legally permitted use of property by regulating noise sources through the implementation of the Nuisance Ordinance 06-04 Section 7.04.

Land Use

Program 1.b **Land Use/Noise Compatibility Matrix**. The City should develop Land Use/Noise Compatibility Standards to be used as a guide to ensure compatibility of land uses. Development may occur if design or mitigation measures can reduce indoor noise levels to "Maximum Interior Noise Levels" and outdoor noise levels to the maximum "Normally Acceptable" value for the given Land Use Category.

Program 1.c **Noise Compatibility Implementation**. The City should only permit new land uses that meet noise compatibility standards at either existing adjacent land uses or new noise-sensitive land uses.

Program 1.d **Noise Source Isolation**. The City should require uses that generate high levels of noise and ground-borne vibration to be separated or shielded from sensitive receptors, such as:

- single and multi-family residential homes,
- schools and other learning institutions,
- libraries, places of worship or public assembly,
- and similar uses as may be determined by the City.

Design Review and Construction

Program 1.e **Uniform Building Code**. The City should apply the Uniform Building Code as adopted for California (CCR, Title 24, Appendix Chapter 12) for determining building separation requirements.

Transportation

Program 1.f **Highways Noise Contours.** The City should monitor CalTrans for updates to current and projected noise contours for Highway 211. The City should consider contracting to model current and projected noise contours in and surrounding the City of Ferndale.

Monitoring

Program 1.g **Environmental Review Process**. The City should utilize the environmental review process required by the California Environmental Quality Act to generate the required analysis and determine the appropriate mitigation per Plan and state standards for noise sensitive locations where noise contours do not exist.

Program 1.h **Noise Study Requirements**. The City should utilize the Noise Guidebook published by the U.S. Department of Housing and Urban Development, or its equivalent, to guide analysis and mitigation recommendations for proposed projects. When a discretionary project has the potential to generate noise levels in excess of Plan standards, a noise study together with acceptable plans to assure compliance with the standards should be required. The noise study should measure Community Noise Equivalent Level (CNEL) and Maximum Noise Level (Lmax) levels at property lines and, if feasible, receptor locations. Noise studies should be prepared by qualified individuals using calibrated equipment under currently accepted professional standards and include an analysis of the characteristics of the project in relation to noise levels, all feasible mitigations, and projected noise impacts.

SECTION 2. AIR QUALITY

Goals

Goal 2.1 *Improve Ferndale and surrounding air basin air quality.*

Goal 2.2 *Improve Ferndale and surrounding air basin particulate emissions through attainment of California Ambient Air Quality Standards for particulate matter.*

Goal 2.3 *Improve Ferndale and surrounding air basin for Other Criteria Pollutants by maintaining attainment of Ambient Air Quality Standards for ozone and other criteria pollutants.*

Goal 2.4 *Mitigate impacts to air quality for: Overall Emissions Reduction, Land Use, Energy Conservation, Transportation, Hazardous Materials, Temporary Measures Pertaining to Construction, and Monitoring.*

Policies

Overall Emissions Reduction

Policy 2.1 **Reduce Localized Concentrated Air Pollution**. The City should reduce or minimize the creation of "hot spots" or localized places of concentrated emissions.

Land Use

Policy 2.2 **Buffering Land Uses**. The City should minimize exposure to air pollution by requiring the use of buffers between new sources of emissions and adjacent land uses.

Energy Conservation

Policy 2.3 **Energy Conservation Incentives**. The City should consider local, state and federal incentive programs to minimize energy usage in Ferndale, including programs to reduce PM10 emissions and increase solar-electric capacity in residential, commercial and industrial sectors.

Transportation

Policy 2.4 **Reduce Length and Frequency of Vehicle Trips**. The City should develop plans to reduce the length and frequency of vehicle trips through land use and transportation policies by encouraging mixed-use and compact development, and encourage active modes of travel.

Policy 2.5 **Alternative Fuel Vehicle Accommodations**. The City should encourage and provide incentives for commercial and residential design that supports the maintenance of vehicles with alternative fuels.

Hazardous Materials

Policy 2.6 **Interagency Coordination**. The City should coordinate with the North Coast Unified Air Quality Management District (NCUAQMD) early in the permit review process to identify expected regulatory outcomes and minimize delays for projects involving:

A. CEQA environmental review;

B. Building demolition projects that may involve removal of asbestos containing material subject to National Emission Standards for Hazardous Air Pollutants (NESHAP); and

C. Grading and mining operations subject to State Airborne Toxic Control Measures (ATCM) for naturally occurring asbestos.

The City should rely on the air quality standards, permitting processes and enforcement capacity of the NCUAQMD to define thresholds of significance and set adequate mitigations under CEQA to the maximum extent allowable.

Construction

Policy 2.7 **Mitigate Impacts from New Construction**. The City should mitigate impacts to Air Quality from new construction through measures for dust control, energy efficient building standards, preservation of on-site trees, etc.

Monitoring

Policy 2.8 **Develop a Monitoring Program for Air Quality**. The City should develop a monitoring program for Air Quality in conjunction with NCUAQMD standards, and enlist RCEA for assistance in the monitoring process.

Implementation Programs

Overall emissions reduction

Program 2.a **North Coast Air Quality Management Permitting Coordination**. The City should maintain efficient and timely procedures for project referral to the North Coast Air Quality Management District for review and consultation.

Land Use

Program 2.b **Land Use Buffers.** The City should consider the use of buffers between new sources of emissions and adjacent land uses to minimize exposure to air pollution during environmental review of discretionary commercial and industrial projects.

Energy conservation

Program 2.c **Fireplace and Woodstove PM10 Emissions**. The City should promote incentives to minimize PM10 emissions from fireplaces and woodstoves, such as the NCUAQMD's Wood Stove Incentive Replacement Program, or other state and federal incentive programs.

Transportation and circulation

Program 2.d **Alternative Fuel Vehicle Accommodations**. The City should encourage and provide incentives for commercial and residential design that supports the charging of electric vehicles, or refueling of alternative fuel vehicles (ethanol, biodiesel, hydrogen, etc.)

Hazardous materials

Program 2.e **Reduce Air Quality Impacts from Surface Mining.** The City should develop procedures to reduce air quality impacts from asbestos and other pollutants and refer all discretionary review actions for rock quarries and other surface mining activities to the North Coast Air Quality Management District for review and recommendations.

Construction

Program 2.f **Construction and Grading Dust Control**. The City should require dust control practices on construction and grading sites in compliance with NCUAQMD fugitive dust emission standards.

Program 2.g **Air Quality Impacts from New Development**. The City should reduce emissions of air pollutants from new commercial and industrial development during environmental review of discretionary permits by requiring feasible mitigation measures to achieve the standards of the NCUAQMD.

Program 2.h **Energy Efficient Building Design**. The City should encourage and provide incentives for construction of buildings with Leadership in Energy and Environmental Design (LEED) Standards and energy saving measures beyond Title 24 requirements for residential and commercial projects.

Program 2.i **Preservation and Replacement of On-site Trees**. The City should consider requiring projects to preserve large trees where possible and mitigate for carbon storage losses attributable to significant removal of trees.

Monitoring

Program 2.j **Air Quality Monitoring Program**. The City should work with Redwood Coast Energy Authority (RCEA) and NCUAQMD to develop a monitoring program for citywide Air Quality.

SECTION 3. GREENHOUSE GAS EMISSIONS

Goals

Goal 3.1 *Reduce Greenhouse Gases according to the following targets:*
Reduce emissions to 10% below 2005 levels by 2020
Reduce emissions to 80% below 2005 levels by 2050

Goal 3.2 *Implement successful mitigation of greenhouse gas emissions to levels of non-significance as established by the Global Warming Solutions Act and subsequent implementing legislation and regulations.*

Policies

Policy 3.1 **Greenhouse Gas Emission Reductions**. The City should lead by example and reduce its greenhouse gas emissions from governmental operations

consistent with the state Global Warming Solutions Act and subsequent implementing legislation and regulations.

Policy 3.2 **Review of Projects for Greenhouse Gas Emission Reductions**. The City should evaluate the GHG emissions of new residential, commercial and industrial projects, and require feasible mitigation measures to minimize GHG emissions.

Implementation Programs

Program 3.a **City Government Greenhouse Gas Emission Reductions**. The City should seek grant funding to prepare a Climate Action Plan for its governmental operations consistent with the Countywide Climate Action Plan that seeks emission reductions in the following areas:

A. Energy Efficiency and Conservation
B. Green Building
C. Waste Reduction and Recycling
D. Climate-Friendly Purchasing
E. Renewable Energy and Low-Carbon Fuels
F. Efficient Transportation
G. Offsetting Carbon Emissions
H. Promoting Community and Individual Action

Program 3.b **Establish data collection systems for GHG data as part of normal City operations.** The City should re-inventory its emissions every three to five years per ICLEI recommendations, and coordinate with RCEA for the inventory process.

Program 3.c **Greenhouse Gas Emissions Standards**. The City should update the General Plan and Land Use Ordinances as appropriate to reflect the Climate Action Plan and Emissions Reduction Plan, and new state laws and regulations for greenhouse gas emissions when they become available.

Program 3.d **Review of Greenhouse Gas Emissions Impacts of New Development**. The City should modify the Zoning and Subdivision Ordinances to require an assessment for GHG emissions of large scale residential, commercial and industrial projects, and require feasible mitigation.

Program 3.e **Investigate the viability of renewable and distributed generation technologies.** The City should consider renewable and distributed generation technologies that can be city-owned and serve a dual purpose of primary and stand-by power/energy. The City should work with the California Energy Commission and other sources to identify advanced technologies, systems and financing options.

Program 3.f **Investigate low-no cost energy efficiency and conservation measures.** The City should consider innovative technologies such as micro-turbines for key assets and other city-owned/operated assets in order to decrease their energy footprint, thus reducing energy bills and the scale of needed back-up power. The City should also research the feasibility of higher cost, advanced technologies such as micro-grids.

Program 3.g **Reduce Electricity and Propane Use.** The City should consider including a comprehensive municipal retrofit of existing buildings targeting reduction in both electricity and propane in the Capital Improvement Plan.

Program 3.h **Obtain High Fuel Efficiency Vehicles.** The City should change procurement policy to specify high fuel efficiency for each vehicle class for City Government vehicles.

Program 3.i **Increase office recycling.** The City should implement programs to increase recycling of paper, cardboard, cans, toner cartridges, etc.

Program 3.j **Energy Reduction Efforts.** The City should switch from incandescent bulbs to Light Emitting Diodes (LEDs) in City-owned and operated infrastructure.

Program 3.k **Collaborate with PG&E in Energy Reduction Efforts.** The City should work with and encourage PG&E to switch outdoor lights from incandescent bulbs to Light Emitting Diodes (LEDs).

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Section 7: BUSINESS

Business Item 7.1 - Building and Land Use Permits

BUSINESS ITEM		*September 10, 2014 –October 8, 2014*
Building Permits		
546	Berding	Install Gas Heater/Water Heater
207	Francis	Create Opening in Wall
427	Main	Solar Install
951	Van Ness	Water Heater/Gas Lines
1467	Main	Replace rot in bathroom
1400	Main	Install Fire Suppression System
553	Main	Install Fire Suppression System

NOTE: Staff will bring the Building Permit Book to the Planning Commission meetings so that any of the commissioners, or public, can view any permits that have been issued.

Meeting Date:	October 15, 2014			Agenda Item Number		7.2
Agenda Item Title	Design Review Committee Report & Minutes					
Presented By:	Kristene Tavares, Deputy City Clerk					
Type of Item:		Action	x	Discussion		Information
Action Required:	x	No Action		Voice Vote		Roll Call Vote

RECOMMENDATION:

Receive and file report from Design Review Committee members.

BACKGROUND:

Chairman Von Frausing-Borch and staff have discussed having the two Design Review Committee members report on items of interest. This will be an on-going item on the agenda.

ATTACHMENTS:

1. Minutes of Design Review Committee Meeting on 09/04/2014

City of Ferndale, Humboldt County, California USA

Design Review Minutes for the 09/04/14 - 8:30am meeting

Chairman Mark Giacomini opened the meeting at 8:31 a.m. Committee Members Paul Gregson and Lino Mogni were present along with Deputy City Clerk Kristene Tavares. Committee Member Doug Brower was not present.

There were no Modifications to the Agenda.

There were no Public Comments.

614 Main Street: The Design Review Committee was presented with pictures of the building and a sketch of the new deck. Staff also provided pictures of the proposed materials. **MOTION** to make the required findings of fact listed in Attachment A to **APPROVE** the Design Review Use Permit, subject to the conditions of approval listed in Attachment B, to build a 16'X14' deck in front of the building for ADA compliance as well as use for outdoor dining using the approved materials. **(Mogni/Gregson) Unanimous**

There was no Correspondence.

Committee Member Comments: Chair Giacomini advised Committee and Staff that he had spoken with the property owner of DR1333 and that project is scrapped. Property Owner will reapply when he is ready to start the project. Chair Giacomini also advised that DR1339 was finalized. Staff will update the Sign-Off sheet for the next Regular Meeting.

Meeting adjourned at 8:40 a.m.

Respectfully submitted,

Kristene Tavares, Deputy City Clerk
City of Ferndale

Section 8: CORRESPONDENCE

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY EDMUND G. BROWN JR., Governor
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF HOUSING POLICY DEVELOPMENT
2020 W. El Camino Avenue, Suite 500
Sacramento, CA 95833
(916) 263-2911 / FAX (916) 263-7453
www.hcd.ca.gov

September 19, 2014

Mr. Jay Parrish, City Manager
City of Ferndale
P. O. Box 1095
Ferndale, CA 95536

Dear Mr. Parrish:

RE: Ferndale's 5th cycle (2014-2019) Adopted Housing Element

Thank you for submitting Ferndale's housing element adopted September 4, 2014 that was received for review on September 16, 2014. Pursuant to Government Code (GC) Section 65585(h), the Department is reporting the results of its review.

The Department is pleased to find the adopted housing element in full compliance with State housing element law (GC, Article 10.6). The adopted element was found to be substantially the same as the revised draft element the Department's July 3, 2014 review determined met statutory requirements.

Please note, Ferndale now meets specific requirements for several State funding programs designed to reward local governments for compliance with State housing element law. For example, the Housing Related Parks and Local Housing Trust Fund Programs both include housing element compliance either as a threshold or competitive factor in rating and ranking applications. Please see the Department's website for specific information about these and other State funding programs at http://www.hcd.ca.gov/hpd/hrc/plan/he/loan_grant_hecompl011708.pdf.

The Department appreciates the dedication and cooperation that Ms. Melanie Rheaume and Ms. Leslie Marshall, Planwest Partners, provided throughout the course of the housing element review. The Department wishes Ferndale success in implementing its housing element and looks forward to following its progress through the General Plan annual progress reports pursuant to GC Section 65400. If the Department can provide assistance in implementing the housing element, please contact Robin Huntley, of our staff, at (916) 263-7422.

Sincerely,

Glen A. Campora

Glen A. Campora
Assistant Deputy Director

Section 9: COMMISSIONER COMMENTS

Section 10: STAFF REPORTS

Section 11: ADJOURNMENT