

## Summary of Key Issues and Review of Alternatives

### Chapter 15 Air Quality Element

This Element seeks to improve air quality in the County and reduce greenhouse gas emissions.

Chapter 15 Air Quality Element				
Key Topics and Issues	Plan Update Approach (Alternative B)	Existing Framework Plan (Alternative D)	Alternative A	Alternative C
<p><b>Overall Air Quality</b> The county meets all federal standards for air quality and all state standards except for one pollutant—airborne particles that are 10 microns in diameter and smaller (PM<sub>10</sub>), which are from a variety of sources.</p> <p>Should the County actively seek to reduce PM<sub>10</sub> emissions?</p> <p>What policies, standards and implementation measures are most effective at reducing PM<sub>10</sub> emissions?</p> <p>More attention is being paid to air quality impacts from mining rock containing asbestos.</p> <p>Should the County adopt requirements to minimize air quality impacts from mining rock containing asbestos?</p>	<p>The proposed Plan seeks to reduce PM<sub>10</sub> emissions throughout the County by reducing the length and frequency of automobile trips (AQ-P1), coordinating with the North Coast Unified Air Quality Management District (NCUAQMD) in the review of projects that may have significant PM<sub>10</sub> emissions impacts (AQ-P4, P5, P-7, S1, S2, IM1, IM2), and supporting incentives to minimize PM<sub>10</sub> emissions from woodstoves and fireplaces (AQ-P3), and requiring a fugitive dust control plan for projects that involve grading of two (2) acres or more (AQ-S1).</p>	<p>The Framework General Plan had a policy to evaluate new commercial and industrial sources of emissions using analytical methods and significance criteria approved by the District. There was also reference to a possible future limit on wood burning fireplaces.</p>	<p>Alternative A requires fugitive dust control plans for projects with one (1) acre of disturbance.</p> <p>Alternative A includes an implementation measure to apply a Mineral Resources zone overlay to existing rock quarries mining and transporting rock containing asbestos. The standards will protect residential uses near the mining operations and along the haul routes from air quality impacts</p>	<p>Alternative C would control PM<sub>10</sub> emissions through the referral of projects requiring environmental review to the NCUAQMD for recommendations. Fugitive dust control measures would be consistent with those required by the NCUAQMD.</p>


Chapter 15 Air Quality Element				
Key Topics and Issues	Plan Update Approach (Alternative B)	Existing Framework Plan (Alternative D)	Alternative A	Alternative C
<p><b>Climate Change and Greenhouse Gas (GHG) Emission Reductions.</b> The state is requiring reductions in GHG emissions from local government actions. These actions include reducing energy use, waste, water use, transportation emissions, and improving energy efficiency in new development through siting and design considerations.</p> <p>Should the County take a leadership role to develop and implement a multi-jurisdictional Climate Action Plan to achieve reductions in greenhouse gas emissions?</p> <p>What GHG reduction measures should be included in the Climate Action Plan?</p> <p>Should the County implement measures to sequester carbon on forest and agricultural lands?</p>	<p>The proposed Plan would put the County in a leadership role in reducing GHG emissions. A centerpiece of the new Element is adoption of a Climate Action Plan (AQ-P9). Policy AQ-P10 proposes the County will reduce its 2020 GHG emissions from governmental operations to less than 2003 levels. Other proposed policies will increase solar-electric capacity of new development (AQ-P12), increase energy efficiency of new buildings (AQ-P13), and better accommodating electric vehicles (AQ-P14).</p> <p>The Element recognizes that increasing carbon storage on timber and agricultural lands may be the County's most effective means to combat global warming. Policy AQ-P11 would have the County provide incentives for increased carbon sequestration on forest lands and encourage the use of forest biomass for sustainable energy generation.</p>	<p>The existing plan does not contain any policies, standards or programs addressing climate change or GHG emissions. There are policies in the Housing Element encouraging energy efficient siting and construction techniques.</p>	<p>Alternative A takes the policies, standards and implementation measures of Alternative B a step further in reducing GHG emissions by evaluating the impacts of new large scale residential, commercial and industrial projects, and requiring feasible mitigation. Alternative A would also establish a voluntary Transfer of Development Rights program to reduce GHG emissions from new rural development by relocating it into areas with public water and sewer.</p>	





## Plan Alternatives Comparison Chart




### Chapter 15 Air Quality Element **updated 9-14-11**



**NOTE:** changes from draft document are highlighted in yellow with corresponding staff comments.







Plan Alternative				Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R, M, D
				<b>5.4 Goals</b>		
<b>A</b>	<b>B</b>			<b>AQ-G1. Improved Air Quality.</b> Air quality that exceeds minimum state and federal ambient air quality standards.	No specific goals in existing plan.	
				<b>COMMENTS:</b>		
		<b>C</b>		<b>AQ-G1. Improved Air Quality.</b> Air quality that <del>exceeds</del> <u>meets</u> minimum state and federal ambient air quality standards.	Minimize role in air quality management among existing and proposed sources.	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>AQ-G2. Particulate Emissions.</b> Successful attainment of California Ambient Air Quality Standards for particulate matter fewer than 10 microns (PM <sub>10</sub> ).		
				<b>COMMENTS:</b>		

Plan Alternative			Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
A	B	C	<b>AQ-G3. Greenhouse Gas Emissions.</b> Successful mitigation of greenhouse gas emissions associated with this Plan to levels of non-significance as established by the Global Warming Solutions Act and subsequent implementing legislation and regulations.		
			<b>COMMENTS:</b>		
			<b>15.4 Policies</b>		
A	B		<b>AQ-P1. Reduce Length and Frequency of Vehicle Trips.</b> Reduce the length and frequency of vehicle trips through land use and transportation policies by encouraging mixed-use development, compact development patterns in areas served by public transit, and alternative modes of travel.	Leg, QJ, AQ-IM1, AQ-IM3-5, C-P1, C-P2, C-P22-37, C-S7-9, C-IM7-8, C-IM11-12, 	
			<b>COMMENTS:</b>		
A	B		<b>AQ-P2. Reduce Localized Concentrated Air Pollution.</b> Reduce or minimize the creation of "hot spots" or localized places of concentrated automobile emissions.	Leg, QJ, AQ-P7	
			<b>COMMENTS:</b>		
	B		<b>AQ-P3. Fireplace and Woodstove PM<sub>10</sub> Emissions.</b> Support incentives to minimize PM <sub>10</sub> emissions from fireplaces and woodstoves.		
			<b>COMMENTS:</b>		

Plan Alternative			Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
A			<b>AQ-P3. Fireplace and Woodstove PM<sub>10</sub> Emissions.</b> Support incentives to Minimize PM <sub>10</sub> emissions from fireplaces and woodstoves.		
			<b>COMMENTS:</b>		
A	B	C	<b>AQ-P4. Construction and Grading Dust Control.</b> Dust control practices on construction and grading sites shall achieve compliance with NCAQMD fugitive dust emission standards.	QJ, Min, AQ-S1 	
			<b>COMMENTS:</b>		
A	B	C	<b>AQ-P5. Air Quality Impacts from New Development.</b> During environmental review of discretionary permits, reduce emissions of air pollutants from new commercial and industrial development by requiring feasible mitigation measures to achieve the standards of the NCAQMD.	QJ, AQ-S2 	
			<b>COMMENTS:</b>		
A	B		<b>AQ-P6. Buffering Land Uses.</b> During environmental review of discretionary commercial and industrial projects, consider the use of buffers between new sources of emissions and adjacent land uses to minimize exposure to air pollution.	QJ, AQ-S3 	
			<b>COMMENTS:</b>		
A	B	C	<b>AQ-P7. Interagency Coordination.</b> Coordinate with the NCAQMD 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	QJ, Min, AQ-S2 	

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			<p>containing material subject to National Emission Standards for Hazardous Air Pollutants (NESHAP); and</p> <p>C. Grading and mining operations subject to State Airborne Toxic Control Measures (ATCM) for naturally occurring asbestos.</p> <p>Rely on the air quality standards, permitting processes, and enforcement capacity of the NCAQMD to define thresholds of significance and set adequate mitigations under CEQA to the maximum extent allowable.</p>		
			<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>	<p><b>AQ-P8. Reduce Air Quality Impacts from Wildfires.</b> Support and encourage fire suppression of wildfires that may have an acute air quality health impact on local population centers.</p>	<p>Pol, AQ-IM6</p> 	
			<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>		<p><b>AQ-P9. County Climate Action Plan.</b> Working through the Redwood Coast Energy Authority (RCEA) and this Plan, develop and implement a multi-jurisdictional Climate Action Plan to achieve reductions in greenhouse gas emissions consistent with the state Global Warming Solutions Act and subsequent implementing legislation and regulations (current goal set at a 10% reduction in 2003 greenhouse gas emissions by the year 2020).</p>	<p>Prog, AQ-S4, AQ-IM3-5</p>  <p>Amended for clarity and current situation.</p>	
			<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>		<p><b>AQ-P10. County Government Greenhouse Gas Emission Reductions.</b> To lead by example, the County of Humboldt shall reduce its 2003 greenhouse gas emissions from governmental operations consistent with the state Global Warming Solutions Act and subsequent implementing legislation and regulations (current goal set at a 10% reduction in 2003 greenhouse gas emissions by the year 2020).</p>	<p>Prog, AQ-S4, AQ-IM3-5</p>  <p>Amended for clarity and current law.</p>	

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				<b>COMMENTS:</b>		
<b>A</b>				<b>AQ-Px. Review of Projects for Greenhouse Gas Emission Reductions.</b> The County shall evaluate the GHG emissions of new large scale residential, commercial and industrial projects, and require feasible mitigation measures to minimize GHG emissions.		
				<b>COMMENTS:</b>		
<b>A</b>				<b>AQ-Px. Transfer of Development Rights.</b> The County shall encourage the transfer of development rights from resource lands and other rural areas into areas served with public water and sewer to reduce GHG emissions from new development.		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>AQ-P11. Forest Sequestration and Biomass Energy.</b> Provide incentives for increased carbon sequestration on forest lands and encourage the <b>reduction of smoke production through the utilization</b> <del>use</del> of excess forest biomass for sustainable energy generation <b>and other uses.</b>	Pol, Prog, AQ-S4 AQ-IM3-5  <b>Change recommended by members of the FSC</b>	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>AQ-P12. Solar Electric System Capacity.</b> Encourage and provide incentives to increase solar-electric capacity in residential, commercial, and industrial sectors.	Pol, Prog, AQ-IM3-5 	

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				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>AQ-P13. Energy Efficient Building Design.</b> Encourage and provide incentives for construction of <b>LEED (Leadership in Energy and Environmental Design) certified (or equivalent)</b> buildings and energy saving measures beyond Title 24 requirements for residential and commercial projects.	Pol, Prog, AQ-IM3-5   State now has voluntary tiers beyond Title 24 similar to LEED	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>AQ-P14. Electric Vehicle Accommodations.</b> Encourage and provide incentives for commercial and residential design that supports the charging of electric vehicles.	Pol, Prog, AQ-IM3-5  	
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>			<b>AQ-P15. Preservation and Replacement of On-site Trees.</b> Projects requiring discretionary review should preserve large trees where possible and mitigate for carbon storage losses attributable to significant removal of trees.	QJ, AQ-S4 AQ-IM3-5  	
				<b>COMMENTS:</b>		
				<b>15.5 Standards</b>		
	<b>B</b>			<b>AQ-S1. Construction and Grading Dust Control.</b> Ground disturbing construction and grading shall employ fugitive dust control strategies to prevent visible emissions from exceeding NCAQMD opacity regulations and prevent public nuisance. Projects requiring discretionary review that result in ground disturbance exceeding two acres at any one time shall prepare a		



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				fugitive dust control plan.		
				<b>COMMENTS:</b>		
<b>A</b>				<b>AQ-S1. Construction and Grading Dust Control.</b> Ground disturbing construction and grading shall employ fugitive dust control strategies to prevent visible emissions from exceeding NCAQMD opacity regulations and prevent public nuisance. Projects requiring discretionary review that result in ground disturbance exceeding <del>two acres</del> <u>one acre</u> at any one time shall prepare a fugitive dust control plan.		
				<b>COMMENTS:</b>		
		<b>C</b>		<b>AQ-S1. Construction and Grading Dust Control.</b> Ground disturbing construction and grading shall employ fugitive dust control strategies to prevent visible emissions from exceeding NCAQMD opacity regulations and prevent public nuisance. <del>Projects requiring discretionary review that result in ground disturbance exceeding two acres at any one time shall prepare a fugitive dust control plan.</del>		
				<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>		<b>AQ-S2. Evaluate Air Quality Impacts.</b> During environmental review of discretionary projects, evaluate new commercial and industrial sources of emissions using analytical methods and significance criteria used or recommended by the NCAQMD.		
				<b>COMMENTS:</b>		

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A			<b>AQ-Sx. Evaluate Greenhouse Gas Emission Impacts.</b> During environmental review of large scale residential, commercial and industrial projects, include an assessment of the project's GHG emissions, and require feasible mitigation consistent with best practices documented by the California Air Pollution Control Officers Association in their 2008 white paper "CEQA & Climate Change".		
			<b>COMMENTS:</b>		
A	B		<b>AQ-S3. Buffering Land Uses.</b> When considering buffers between new commercial and industrial sources of emissions and adjacent land uses follow the California Air Resources Board's <i>Air Quality and Land Use Handbook: A Community Health Perspective</i> and NCAQMD recommendations.		
			<b>COMMENTS:</b>		
A	B		<b>AQ-S4. Preservation and Replacement of On-site Trees.</b> Discretionary review projects which remove more than 50 trees of greater than 38 inch circumference measured at 4.5 feet height shall re-plant replacement trees on-site or provide offsetting carbon mitigations.		
			<b>COMMENTS:</b>		
			<b>15.6 Implementation Measures</b>		
A	B		<b>AQ-IM1. Review Future Monitoring Results.</b> Review local PM <sub>10</sub> emissions monitoring results from the California Air Resources Board to guide future General Plan Housing Element updates, and implement new land use and transportation policies and other regulatory controls to meet state and federal PM <sub>10</sub> emissions standards.		

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			<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>	<b>C</b>	<b>AQ-IM2. North Coast Air Quality Management Permitting Coordination.</b> The County shall maintain efficient and timely procedures for project referral to the North Coast Air Quality Management District for review and consultation.		
			<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>		<b>AQ-IM3. County-wide Climate Action Plan.</b> Through its association with the RCEA, The County shall <del>participate in the development and implementation of a multi-jurisdictional</del> develop and implement a Climate Action Plan that effectively mitigates the carbon emissions attributable to this Plan, consistent with the requirements of the state Global Warming Solutions Act and subsequent implementing legislation and regulations <del>(currently set at a 10% reduction in 2003 greenhouse gas emissions by the year 2020).</del>	See also AQ-IM5  Revised to reflect current approach and legal framework.	
			<b>COMMENTS:</b>		
<b>A</b>	<b>B</b>		<b>AQ-IM4. County Government Greenhouse Gas Emission Reductions.</b> The County shall prepare a Climate Action Plan for its governmental operations consistent with the Countywide Climate Action Plan that seeks emission reductions in the following areas:  <ul style="list-style-type: none"> <li>A. Energy Efficiency and Conservation</li> <li>B. Green Building</li> <li>C. Waste Reduction and Recycling</li> <li>D. Climate-Friendly Purchasing</li> <li>E. Renewable Energy and Low-Carbon Fuels</li> <li>F. Efficient Transportation</li> <li>G. Offsetting Carbon Emissions</li> <li>H. Promoting Community and Individual Action</li> </ul>		

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A	B		<b>AQ-IM5. Greenhouse Gas Emissions.</b> Update the General Plan and Land Use Ordinances as appropriate to reflect the adopted countywide Climate Action Plan and new state laws and regulations for greenhouse gas emissions when they become available.		
			<b>COMMENTS:</b>		
A			<b>AQ-IMx. Review of Greenhouse Gas Emissions Impacts of New Development.</b> Modify the Zoning and Subdivision Ordinances to assess GHG emissions of large scale residential, commercial and industrial projects, and require feasible mitigation.		
A			<b>AQ-IMx. Transfer of Development Rights Program.</b> The County shall develop a voluntary transfer of development rights program which provides incentives to transfer entitlements from resource lands and other rural areas into areas served with public water and sewer to reduce GHG emissions from new development.		
			<b>COMMENTS:</b>		
A	B		<b>AQ-IM6. Programs to Reduce Air Quality Impacts of Wildland Fires.</b> Support and encourage programs such as fuel reduction, prescribed fires, and vegetation management as recommended in the County's Fire Plan to reduce air quality impacts of wildfires.		
			<b>COMMENTS:</b>		
A			<b>AQ-IMx. Reduce Air Quality Impacts from Surface Mining of Rock Containing Asbestos.</b> Apply a Mineral Resources zone overlay to existing rock quarries which protects residential uses nearby and along the haul route from air quality impacts		

Plan Alternative				Chapter 15 Air Quality Element	Staff Remarks/ Implementation	Position R,M,D
				of mining and transporting rock containing asbestos.		
				<b>COMMENTS:</b>		