

3.12 Population and Housing

This section describes the regulatory and environmental setting for population and housing in the Program and individual project areas. It also describes impacts on these resources that could result from implementation of the Program and the two individual projects.

3.12.1 Existing Conditions

Regulatory Setting

Federal

There are no relevant federal regulations for population and housing.

State

There are no relevant state regulations for population and housing other than the California Department of Housing and Community Development's (HCD) Regional Housing Needs Assessment, which is discussed below.

Local

Association of Bay Area Governments Regional Housing Need Allocation

The Regional Housing Need Assessment (RHNA) process addresses the need for housing across a range of incomes and in all communities throughout the state. To ensure that adequate housing is available for all income groups, HCD is responsible for determining this regional need in coordination with the Association of Bay Area Governments (ABAG). ABAG is required to distribute the region's share of statewide need to the cities and counties within its jurisdiction.

The purpose of the RHNA is to allocate to cities and counties their *fair share* of the Bay Area's projected housing need by household income groups, which are categorized as very low, low, moderate, and above moderate. The RHNA allocates 1,769 units to unincorporated Alameda County (Association of Bay Area Governments 2013). Alameda County is required to adopt a housing element in compliance with this allocation.

East County Area Plan

The ECAP contains goals and policies related to population and housing (Alameda County 2000). Policies related to population and housing are listed below. For additional analysis of program consistency with ECAP goals and policies, refer to Section 3.10, *Land Use and Planning*.

Policy 14: The County shall promote an approximate balance between jobs and housing within East County and shall further promote a range of housing types reflecting the income distribution of the local employment base.

Policy 15: The County shall evaluate all proposed major projects for their effect on the East County jobs/housing ratio and the provision of housing affordable to East County workers as well as the potential impacts on adjacent counties, especially in terms of in-commuting. To the extent feasible,

the County shall impose measures on projects in the unincorporated County to reduce potential impacts arising from inadequate provision of housing, and shall encourage the cities to do the same.

Environmental Setting

Population

The population of Alameda County in 2010 was 1,510,271 (Association of Bay Area Governments 2010). During the 20-year period from 1990 to 2010, the County's population increased by approximately 18%. During the 20-year period from 2010 to 2030, the population in unincorporated Alameda County is expected to increase by 17.2% to 171,500, with an average growth rate of 4.0% every 5 years. Table 3.12-1 presents the anticipated growth for both the unincorporated County and the County as a whole.

Table 3.12-1. Unincorporated Alameda County and Countywide Population Growth Projections 2010–2030

Year	Unincorporated Alameda County Population	Percent Change		Alameda County Population	Percent Change	
		Incremental	Cumulative		Incremental	Cumulative
2010	146,300	–	–	1,510,271 ^a	–	–
2015	151,700	3.7	3.7	1,626,100	7.7	7.7
2020	158,700	4.6	8.5	1,705,900	4.9	13.0
2025	164,900	3.9	12.7	1,787,300	4.8	18.3
2030	171,500	4.0	17.2	1,874,600	4.9	24.1

Source: Association of Bay Area Governments 2009.

^a Data for 2010 Alameda County is from the 2010 U.S. Census (Association of Bay Area Governments 2010).

Housing

Housing Units

In 2010, there were 50,022 housing units in unincorporated Alameda County (Table 3.12-2). This is an increase of 1,430 from 2000. Approximately 95.1% of the housing units were occupied in 2010, compared with 97.9% in 2000. In Alameda County as a whole, there were 540,183 housing units in 2000 and 582,549 housing units in 2010. Approximately 96.9% percent of the housings units were occupied in 2000 and 93.6% were occupied in 2010.

Table 3.12-2. Unincorporated Alameda County and Countywide Housing Units 2000, 2010

	2000	2010
Unincorporated Alameda County		
Total housing units	49,595	50,022
Change in housing units	-	+1,430
Occupied housing units	48,529	48,516
Change in occupied housing units		-13
Percent occupied	97.9	95.1
Alameda County		
Total housing units	540,183	582,549
Change in housing units	-	+42,366
Occupied housing units	523,366	545,138
Change in occupied housing units	-	+21,772
Percent occupied	96.9	93.6

Source: Association of Bay Area Governments 2010.

Households

There are some scattered rural-residential areas and agricultural housing areas located within the program area. Between 2000 and 2010, the number of households in the county and in the Bay Area¹ increased by approximately 4.1% and 5.8%, respectively. As shown in Table 3.12-3, ABAG projects that the number of households in unincorporated Alameda County will increase by approximately 17.8% by 2030, with an average increase of approximately 4.2% every 5 years.

Table 3.12-3. Unincorporated Alameda County and Countywide Household Growth Projections 2010–2030

Year	Unincorporated Alameda County Households	Percent Change		Alameda County Households	Percent Change	
		Incremental	Cumulative		Incremental	Cumulative
2010	51,700			545,138 ^a	-	-
2015	53,910	4.3	4.3	585,400	7.4	7.4
2020	56,310	4.5	8.9	615,470	5.1	12.9
2025	58,620	4.1	13.4	645,680	4.9	18.4
2030	60,910	3.9	17.8	676,280	4.7	24.1

Source: Association of Bay Area Governments 2009.

^a Data for 2010 is from the 2010 U.S. Census (Association of Bay Area Governments 2010).

¹ The Bay Area consists of nine counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma.

Employment

ABAG estimates that Alameda County will experience an approximately 36% increase in jobs, from 712,850 jobs in 2010 to 970,490 jobs in 2030. Table 3.12-4 summarizes the projected 5-year incremental increases in jobs in the county as a whole from 2010 to 2030.

Table 3.12-4. Alameda County Jobs and Employed Resident Projections

	2010	2015	2020	2025	2030
Total jobs	712,850	761,270	825,070	897,810	970,490
Employed residents	725,200	778,900	868,800	950,800	1,025,100
Jobs per employed resident	0.98	0.98	0.95	0.94	0.95

Source: Association of Bay Area Governments 2009.

Since 2010, Alameda County has had more employed residents than jobs (Table 3.12-4), which means that workers are commuting out of Alameda County. This trend is expected to continue through 2030. By 2015, Alameda County is projected to have 761,270 jobs and 778,900 employed residents, a ratio of 0.98 jobs for every employed resident. This ratio is expected to decrease to 0.94:1 or 0.95:1 until 2030 (Association of Bay Area Governments 2009).

In 2010, there were approximately 54,000 construction jobs in Alameda County. This was an increase of approximately 2,200 from 2000 (Association of Bay Area Governments 2009). The State of California estimates there will be 2,520 job openings for construction workers in Alameda and Contra Costa Counties during the 2010–2020 time period (California Employment Development Department 2012).

In 2010, there were approximately 85,900 unemployed persons in Alameda County, an unemployment rate of approximately 11.3%. By 2012, the unemployment rate had fallen to approximately 9.0% (California Employment Development Department 2013).

3.12.2 Environmental Impacts

Methods for Analysis

Identifying the proposed program's and projects' impacts on population and housing involves a review of program and project information, ABAG's *Projections 2009*, and the ECAP.

Determination of Significance

In accordance with Appendix G of the State CEQA Guidelines, Program Alternative 1, Program Alternative 2, the Golden Hills project, or the Patterson Pass project would be considered to have a significant effect if it would result in any of the conditions listed below.

- Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure).
- Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere.

- Displace a substantial number of people, necessitating the construction of replacement housing elsewhere.

Impacts and Mitigation Measures

Impact POP-1a-1: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)—program Alternative 1: 417 MW (no impact)

Program Alternative 1 would not create any housing and would, therefore, not result in a direct increase in population. Indirect population growth is discussed below.

Construction

As described in Chapter 2, *Project Description*, the duration of construction for a repowering project depends on the number of turbines repowered and the ease of access to the site. Not all repowering projects would be initiated simultaneously. Construction would result in a temporary increase in construction-related job opportunities in the local area. However, construction workers can be expected to be drawn from the construction employment labor force already residing in the region.

The opportunities provided by construction of the various repowering projects would not likely result in household relocation by construction workers to the program area because these jobs would be temporary; consequently, Alternative 1 is not expected to change the current ratio of 0.98 jobs per employed resident. Employment opportunities provided by construction under Alternative 1 would not generate population growth. There would be no impact. No mitigation is required.

Operation and Maintenance

Operation and maintenance of the repowered wind turbines would be similar to operation and maintenance of the existing windfarms. Activities would be conducted year-round, with operation, monitoring, and control of wind turbines performed continuously. Operation and maintenance would require full-time, skilled workers. It is expected that these workers would be sourced from the existing pool of personnel that is employed for operation and maintenance of the existing windfarms. Therefore, operation and maintenance of the repowered wind turbines would not create new jobs and would not induce population growth or an increased demand for housing.

Program implementation would result in the construction of new service roads and electrical infrastructure. The service roads would provide access to various project facilities within the program area, including wind turbines and substations. The purpose of the new electrical infrastructure would be to transfer power generated by the turbines to the regional electrical grid. The roads and electrical infrastructure would be privately owned and would neither extend offsite nor provide convenient connection points for potential offsite development. Therefore, any new infrastructure installed in the program area would not encourage new development or induce population growth.

The proposed program would allow for generation of electricity for distribution to the electrical grid. The generation of wind energy is necessary to meet the legal requirement for investor-owned utilities, electric service providers, and community choice aggregators to procure 33% of energy from renewable resources by 2020. The Program would replace the existing wind turbines with new, current-generation wind turbines. Moreover, wind energy is intended to reduce reliance on gas-fired power plants in the region. Because the results of repowering would not exceed the

existing energy generation cap of 417 MW in the program area, Alternative 1 is not considered growth-inducing. There would be no impact. No mitigation is required.

Impact POP-1a-2: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)—program Alternative 2: 450 MW (no impact)

Program Alternative 2 would not create any housing and would, therefore, not result in a direct increase in population. Indirect population growth is discussed below.

Construction

As described in Chapter 2, *Project Description*, the duration of construction for a repowering project depends on the number of turbines repowered and the ease of access to the site. Not all repowering projects would be initiated simultaneously. Construction would result in a temporary increase in construction-related job opportunities in the local area. However, construction workers can be expected to be drawn from the construction employment labor force already residing in the region.

The opportunities provided by construction of the various repowering projects would not likely result in household relocation by construction workers to the program area because these jobs would be temporary and, thus, the proposed program is not expected to change the current ratio of 0.98 jobs per employed resident. Therefore, employment opportunities provided by construction under the program would not generate population growth. There would be no impact. No mitigation is required.

Operation and Maintenance

Operation and maintenance of the repowered wind turbines would be similar to operation and maintenance of the existing windfarms. Activities would be conducted year-round, with operation, monitoring, and control of wind turbines performed continuously. Operation and maintenance would require full-time, skilled workers. It is expected that these workers would be sourced from the existing pool of personnel that is employed for operation and maintenance of the existing windfarms. Therefore, operation and maintenance of the repowered wind turbines would not create new jobs and would not induce population growth or an increased demand for housing.

Program implementation would result in the construction of new service roads and electrical infrastructure. The service roads would provide access to various project facilities within the program area, including wind turbines and substations. The purpose of the new electrical infrastructure would be to transfer power generated by the turbines to the regional electrical grid. The roads and electrical infrastructure would be privately owned and would neither extend offsite nor provide convenient connection points for potential offsite development. Therefore, any new infrastructure within the program area would not encourage new development or induce population growth.

The proposed program would allow for generation of electricity for distribution to the electrical grid. The generation of wind energy is necessary to meet the legal requirement for investor-owned utilities, electric service providers, and community choice aggregators to procure 33% of energy from renewable resources by 2020. Alternative 2 would replace the existing wind turbines with new, current-generation wind turbines. Moreover, wind energy is intended to reduce reliance on gas-fired power plants in the region. Although this alternative would result in an 8% increase over the currently permitted generation capacity of the program area, it is unlikely that an additional 33

MW would constitute a substantial stimulus to regional growth. Therefore, program Alternative 1 is not considered growth-inducing. There would be no impact. No mitigation is required.

Impact POP-1b: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)—Golden Hills Project (no impact)

The Golden Hills Project would not create any housing and would, therefore, not result in a direct increase in population. Indirect population growth is discussed below.

Construction

Construction of the Golden Hills Project is expected to occur in phases, with a typical phase anticipated to last from 8 months up to 1 year. The majority of the activities, primarily wind turbine installation, would take place during a four-month period. Construction would result in a temporary increase in construction-related jobs in the local area. However, the new jobs provided by construction of the Golden Hills Project would be temporary and, therefore, would not likely result in household relocation by construction workers to the project vicinity.

Construction workers can be expected to be drawn from the construction employment labor force already residing in the region. The construction jobs would not be permanent and are not expected to change the current ratio of 0.98 jobs per employed resident. Therefore, employment opportunities provided by construction of the Golden Hills Project would not generate population growth. There would be no impact. No mitigation is required.

Operation and Maintenance

Operation and maintenance of the Golden Hills Project would be similar to operation and maintenance of the existing NextEra windfarm. Activities would be conducted year-round, with operation, monitoring, and control of wind turbines performed continuously. Operation and maintenance would require full-time, skilled workers. It is expected that these workers would be sourced from the existing pool of personnel that is employed for operation and maintenance of the existing NextEra windfarm. Therefore, operation and maintenance of the Golden Hills Project would not create new jobs and would not induce population growth or an increased demand for housing.

Project implementation would result in the construction of new service roads and electrical infrastructure. The service roads would provide access to various project facilities within the project area, including wind turbines and substations. The purpose of the new electrical infrastructure would be to transfer power generated by the turbines to the regional electrical grid. The roads and electrical infrastructure would be privately owned and would neither extend offsite nor provide convenient connection points for potential offsite development. Therefore, any new infrastructure within the project area would not encourage new development or induce population growth.

The Golden Hills Project would allow for generation of electricity for distribution to the electrical grid. The generation of wind energy is necessary to meet the state legal requirement for investor-owned utilities, electric service providers, and community choice aggregators to procure 33% of energy from renewable sources by 2020. The Golden Hills Project would repower the existing first- and second-generation turbines with current-generation turbines. Repowering would result in only a minor exceedance of the existing 81.5 MW nameplate capacity of the Golden Hills Project. Therefore, it is not considered growth-inducing. There would be no impact. No mitigation is required.

Impact POP-1c: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)—Patterson Pass Project (no impact)

The Patterson Pass Project would not create any housing and would, therefore, not result in a direct increase in population. Indirect population growth is discussed below.

Construction

Construction of the Patterson Pass Project would take between 6 and 9 months. Construction would result in a temporary increase in construction-related job opportunities in the local area. However, the new jobs provided by construction of the Patterson Pass Project would be temporary and, therefore, would not likely result in household relocation by construction workers to the project area.

Construction workers can be expected to be drawn from the construction employment labor force already residing in the region. These jobs would not be permanent and are not expected to change the current ratio of 0.98 jobs per employed resident. Therefore, employment opportunities provided by construction of the Patterson Pass Project would not generate population growth. There would be no impact. No mitigation is required.

Operation and Maintenance

Operation and maintenance of the Patterson Pass Project would be similar to operation and maintenance of the existing EDF wind farms. Activities would be conducted year-round, with operation, monitoring, and control of wind turbines performed continuously. Operation and maintenance would require full-time, skilled workers. It is expected that these workers would be sourced from the existing pool of personnel that is employed for operation and maintenance of the existing EDF windfarms. Therefore, operation and maintenance of the Patterson Pass Project would not create new jobs and would not induce population growth or an increased demand for housing.

Project implementation would result in the construction of new service roads and electrical infrastructure. The service roads would provide access to various project facilities within the project area, including wind turbines and substations. The purpose of the new electrical infrastructure would be to transfer power generated by the turbines to the regional electrical grid. The roads and electrical infrastructure would be privately owned and would neither extend offsite nor provide convenient connection points for potential offsite development. Therefore, any new infrastructure within the project area would not encourage new development or induce population growth.

The Patterson Pass Project would allow for generation of electricity for distribution to the electrical grid. The generation of wind energy is necessary to meet the legal requirement for investor-owned utilities, electric service providers, and community choice aggregators to procure 33% of energy from renewable sources by 2020. The Patterson Pass Project would repower the existing first- and second-generation turbines with current-generation turbines. Because repowering would result in a slight decrease of the existing 21.8 MW nameplate capacity of the Patterson Pass Project, it is not considered growth-inducing. There would be no impact. No mitigation is required.

Impact POP-2a-1: Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere—program Alternative 1: 417 MW (no impact)

The program area is currently developed as a windfarm with some scattered rural residences and commercial sites. Program implementation would not include the demolition or displacement of any existing housing. There would be no impact.

Impact POP-2a-2: Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere—program Alternative 2: 450 MW (no impact)

The program area is currently developed as a windfarm with some scattered rural residences and commercial sites. Program implementation would not include the demolition or displacement of any existing housing. There would be no impact.

Impact POP-2b: Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere—Golden Hills Project (no impact)

The Golden Hills project area is currently developed as a windfarm, with some scattered rural residences. The project would not include the demolition or displacement of any existing housing. There would be no impact.

Impact POP-2c: Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere—Patterson Pass Project (no impact)

The Patterson Pass project area is currently developed as a windfarm. Because no housing exists on the project site, the project would not include the demolition or displacement of any existing housing. There would be no impact.

Impact POP-3a-1: Displace a substantial number of people, necessitating the construction of replacement housing elsewhere—program Alternative 1: 417 MW (no impact)

The program area is currently developed as a wind farm with some scattered rural residences and commercial sites. Because there would be no demolition of any housing, program implementation would not displace any people. There would be no impact.

Impact POP-3a-2: Displace a substantial number of people, necessitating the construction of replacement housing elsewhere—program Alternative 2: 450 MW (no impact)

The program area is currently developed as a wind farm with some scattered rural residences and commercial sites. Because there would be no demolition of any housing, program implementation would not displace any people. There would be no impact.

Impact POP-3b: Displace a substantial number of people, necessitating the construction of replacement housing elsewhere—Golden Hills Project (no impact)

The Golden Hills project area is currently developed as a windfarm with some scattered rural residences. Because there would be no demolition of any housing, the project would not displace any people. There would be no impact.

Impact POP-3c: Displace a substantial number of people, necessitating the construction of replacement housing elsewhere—Patterson Pass Project (no impact)

The Patterson Pass project area is currently developed as a wind farm. Because no housing exists in the project area, the project would not displace any people. There would be no impact.

3.12.3 References Cited

Alameda County. 2000. *East County Area Plan*. Adopted May 1994. Oakland, CA. Modified by passage of Measure D, effective December 22, 2000.

Association of Bay Area Governments. 2009. *Projections 2009: Alameda County*. Microsoft Excel spreadsheet.

———. 2010. *Bay Area Census: Alameda County*. Available:
www.bayareacensus.ca.gov/counties/AlamedaCounty.htm. Accessed: May 15, 2013.

———. 2013. *Regional Housing Need Plan for the San Francisco Bay Area: 2014–2022*. Available:
http://www.abag.ca.gov/planning/housingneeds/pdfs/2014-22_RHNA_Plan.pdf. Accessed:
January 28, 2014.

California Employment Development Department. 2013. *Alameda County Profile*. Available:
<http://www.labormarketinfo.edd.ca.gov>. Accessed: June 28, 2013.

———. 2012. *2010–2020 Occupations with the Most Job Openings: Oakland-Fremont-Hayward Metropolitan Divisions (Alameda and Contra Costa Counties)*. September 28.