

3.15 Environmental Justice

This section identifies minority and low-income populations that exist within the North Bay Water Recycling Program (NBWRP) area and evaluates whether the potential environmental impacts of each alternative would be disproportionately high and adverse on minority and low-income populations. The Impacts and Mitigation Measures section defines significance criteria used for the impact assessment and presents a discussion of potential project-related impacts. Determination of significance of impacts in this EIR/EIS apply only to CEQA, not to NEPA.

3.15.1 Affected Environment/Setting

LGVSD and Novato SD

Table 3.15-1 lists the demographics of the cities of Novato and San Rafael and Marin County from the 2000 U.S. Census. In 2000, over 75 percent of the population in Novato, San Rafael, and the County were white, approximately 2 to 3 percent were black, and about 5 percent were Asian. About 23 percent of San Rafael's population was Hispanic or Latino, which was more than double the County's percentage population of Hispanic or Latino. Novato's Hispanic or Latino population was approximately 13 percent, similar to that of the County.

**TABLE 3.15-1
DEMOGRAPHICS: CITIES OF NOVATO AND SAN RAFAEL AND MARIN COUNTY**

	Novato		San Rafael		Marin County	
	Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Total Population
Total Population	47,630	--	53,525	--	247,289	--
Race						
White	39,414	82.8	42,472	75.8	207,800	84.0
Black or African American	948	2.0	1,257	2.2	7,142	2.9
American Indian or Alaska Native	246	0.5	312	0.6	1,061	0.4
Asian	2,479	5.2	3,133	5.6	11,203	4.5
Native Hawaiian or other Pacific Islander	82	0.2	304	0.5	388	0.2
Some other Race	2,587	5.4	6,256	11.2	11,116	4.5
Two or more Races	1,874	3.9	2,538	4.5	8,579	3.5
Hispanic or Latino (of any race)						
Hispanic or Latino	6,229	13.1	13,070	23.3	27,351	11.1
Not Hispanic or Latino	41,401	86.9	42,993	76.7	219,938	88.9

SOURCE: U.S. Census Bureau, 2000.

Table 3.15-2 presents household income, per capita income, and poverty status for Novato, San Rafael, and Marin County in 1999. Median household income was \$63,453 in Novato, \$60,994 in San Rafael, and \$71,306 in Marin County. Between 3 and 6 percent of families and 5 and 10 percent of individuals were below the poverty level in the three areas. In 2000, the weighted average federal poverty threshold was \$8,794 for one person and \$13,738 for a three-person family.

**TABLE 3.15-2
INCOME AND POVERTY STATUS: CITIES OF NOVATO AND SAN RAFAEL AND MARIN COUNTY**

Income and Poverty Status (1999)	Novato		San Rafael		Marin County	
	Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Total Population
Households	18,554	--	22,378	--	100,736	--
Less than \$14,999	1,310	7.0	2,256	10.1	7,811	7.7
\$15,000 to \$24,999	1,373	7.4	1,899	8.5	6,854	6.8
\$25,000 to \$34,999	1,540	8.3	2,008	9.0	7,399	7.3
\$35,000 to \$49,999	2,618	14.1	3,024	13.5	12,151	12.1
\$50,000 to \$74,999	4,064	21.9	4,005	17.9	18,240	18.1
\$75,000 to \$99,999	2,632	14.2	2,949	13.2	12,947	12.9
\$100,000 to \$149,999	2,940	15.8	3,157	14.1	16,128	16.0
Greater than \$150,000	2,077	11.2	3,080	13.7	19,206	19.1
Median Household Income (\$)	63,453	--	60,994	--	71,306	--
Per Capita Income (\$)	32,402	--	35,762	--	44,962	--
Poverty Status – Families	--	3.1	--	5.6	--	3.7
Poverty Status – Individuals	--	5.6	--	10.2	--	6.6

SOURCE: U.S. Census Bureau, 2000

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Table 3.15-3 lists demographics of the City of Sonoma and Sonoma County from the 2000 Census. About 94 percent of the population in the City and 82 percent of the County was white. About 3 percent in the City and 6 percent in the County was black, American Indian, Asian, or Pacific Islander. About 7 percent of the population in the City was Hispanic or Latino, which was much lower than the County.

Table 3.15-4 presents household income, per capita income, and poverty status for the City and County in 1999. Median household income was \$50,505 in the City and \$53,076 in the County. Approximately 2 percent of families and 4 percent of individuals were below the poverty level in the City, which was less than the total County poverty status.

Napa SD

Table 3.15-5 lists demographics of the City of Napa and Napa County from the 2000 Census. About 80 percent of the population in both the City and County was white. About 3 percent in the City and 5 percent in the County was black, American Indian, Asian, or Pacific Islander. About 27 percent of the population in the City was Hispanic or Latino, which was generally similar to that of the County.

Table 3.15-6 presents household income, per Capita income, and poverty status for the City and County in 1999. Median household income was \$49,154 in the City and \$51,738 in the County. Approximately 6 percent of families and 9 percent of individuals in the City were below the poverty level, which was generally similar to total County poverty status.

**TABLE 3.15-3
DEMOGRAPHICS: CITY OF SONOMA AND SONOMA COUNTY**

	City of Sonoma		Sonoma County	
	Number	Percent of Total Population	Number	Percent of Total Population
Total Population	9,128	--	458,614	--
Race				
White	8,562	93.8	374,209	81.6
Black or African American	33	0.4	6,522	1.4
American Indian or Alaska Native	31	0.3	5,389	1.2
Asian	155	1.7	14,098	3.1
Native Hawaiian or other Pacific Islander	5	0.1	934	0.2
Some other Race	147	1.6	38,717	8.4
Two or more Races	195	2.1	18,745	4.1
Hispanic or Latino (of any race)				
Hispanic or Latino	625	6.8	79,511	17.3
Not Hispanic or Latino	8,503	93.2	379,103	82.7

SOURCE: U.S. Census Bureau, 2000

**TABLE 3.15-4
INCOME AND POVERTY STATUS: CITY OF SONOMA AND SONOMA COUNTY**

Income and Poverty Status (1999)	Sonoma		Sonoma County	
	Number	Percent of Total Population	Number	Percent of Total Population
Households	4,276	--	172,690	--
Less than \$14,999	570	13.3	17,775	10.3
\$15,000 to \$24,999	445	10.4	16,423	9.5
\$25,000 to \$34,999	510	11.9	18,620	10.8
\$35,000 to \$49,999	584	13.6	27,222	15.8
\$50,000 to \$74,999	854	20.0	38,103	22.1
\$75,000 to \$99,999	522	12.2	23,321	13.5
\$100,000 to \$149,999	479	11.2	20,364	11.8
Greater than \$150,000	315	7.4	10,862	6.3
Median Household Income (\$)	50,505	--	53,076	--
Per Capita Income (\$)	32,387	--	25,724	--
Poverty Status – Families	--	2.0	--	4.7
Poverty Status – Individuals	--	3.7	--	8.1

SOURCE: U.S. Census Bureau, 2000

**TABLE 3.15-5
DEMOGRAPHICS: CITY OF NAPA AND NAPA COUNTY**

	City of Napa		Napa County	
	Number	Percent of Total Population	Number	Percent of Total Population
Total Population	72,585	--	124,279	--
Race				
White	58,302	80.3	99,396	80.0
Black or African American	381	0.5	1,645	1.3
American Indian or Alaska Native	657	0.9	1,045	0.8
Asian	1,241	1.7	3,694	3.0
Native Hawaiian or other Pacific Islander	117	0.2	289	0.2
Some other Race	9,181	12.6	13,604	10.9
Two or more Races	2,706	3.7	4,606	3.7
Hispanic or Latino (of any race)				
Hispanic or Latino	19,475	26.8	29,416	23.7
Not Hispanic or Latino	53,110	73.2	94,863	76.3

SOURCE: U.S. Census Bureau, 2000

**TABLE 3.15-6
INCOME AND POVERTY STATUS: CITY OF NAPA AND NAPA COUNTY**

Income and Poverty Status (1999)	City of Napa		Napa County	
	Number	Percent of Total Population	Number	Percent of Total Population
Households	27,032	--	45,395	--
Less than \$14,999	2,650	9.8	4,397	9.7
\$15,000 to \$24,999	3,117	11.5	4,825	10.6
\$25,000 to \$34,999	3,395	12.6	5,247	11.6
\$35,000 to \$49,999	4,583	17.0	7,331	16.1
\$50,000 to \$74,999	5,557	20.6	9,147	20.1
\$75,000 to \$99,999	3,498	12.9	6,022	13.3
\$100,000 to \$149,999	2,760	10.2	5,062	11.2
Greater than \$150,000	1,472	5.4	3,364	7.5
Median Household Income (\$)	49,154	--	51,738	--
Per Capita Income (\$)	23,642	--	26,395	--
Poverty Status – Families	--	6.1	--	5.6
Poverty Status – Individuals	--	8.9	--	8.3

SOURCE: U.S. Census Bureau, 2000

3.15.2 Regulatory Framework

The federal, state, and local policies and regulations associated with impacts to environmental justice within the affected jurisdictions are presented below.

Federal

The 1994 Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires all federal agencies to conduct “programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin.” Section 1-101 of the Order requires federal agencies to identify and address “disproportionately high and adverse human health or environmental effects” of programs on minority and low-income populations (U.S. Environmental Protection Agency [USEPA], 1994).

The USEPA released the 1996 Environmental Justice Implementation Plan that provides a framework for developing specific plans and guidance for implementing Order 12898. The plan establishes a goal for the USEPA to review NEPA documents for effects to environmental justice and help establish environmental justice impact analysis methods (USEPA, 1996). In 1998, USEPA published Guidance for Incorporating Environmental Justice Concerns in the USEPA’s National Environmental Policy Act Compliance Analysis. This guidance presents procedures to evaluate disproportionately high and adverse effects on minority and low-income populations (USEPA, 1998).

State

California Government Code Section 65040.12(e) defines environmental justice as the “fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” Section 65040.12(a) designates the Governor’s Office of Planning and Research (OPR) as the coordinating agency in State government for environmental justice programs and directs the agency to coordinate with Federal agencies regarding environmental justice information. In 2001, Assembly Bill 1553 was signed into law requiring OPR to incorporate environmental justice considerations in General Plan Guidelines. AB 1553 specifies that local governments should address planning for equitable distribution of new public facilities and services, industrial facilities and uses, new schools and residential dwellings, and expanding opportunities for transit-oriented development.

In 2003, OPR published *Environmental Justice in California State Government*. The policy report provides a brief history on environmental justice, reports on OPR’s efforts, outlines environmental justice findings, goals, and policies for future environmental justice efforts within State government. OPR has also incorporated environmental justice into the 2003 General Plan Guidelines and is updating them for the 2007 edition (OPR 2003, OPR 2008). Many California

State agencies have made efforts to incorporate environmental justice into programs and activities, including, but not limited to, California Department of Water Resources, California Air Resources Board, California Bay Delta Authority, California Environmental Protection Agency, and the California Resource Agency. However, many agencies do not yet have guidance for incorporating environmental justice impact assessment into CEQA.

Local

The Association of Bay Area Governments (ABAG), a consortium of nine Bay Area counties, which includes Marin, Sonoma, and Napa Counties, addressed social justice and equity in its Smart Growth Strategy and developed a policy to improve conditions in disadvantaged neighborhoods, ensure environmental justice, and increase access to jobs, housing, and public services for all residents in the region (ABAG, 2004).

The 2007 *Marin Countywide Plan* addresses environmental justice issues. The plan identifies general environmental inequities in Marin based on both race and income level relating to access and exposure to healthy food, air, and soils and sets a goal to ensure that all persons in Marin live in a safe and healthy environment (County of Marin, 2007).

The General Plans for Napa and Sonoma Counties do not discuss environmental justice issues.

3.15.3 Environmental Consequences/ Impacts

This section describes environmental justice effects relative to both minority and low-income populations in the action area. According to the Federal Council of Environmental Quality (CEQ) guidelines for environmental justice analyses, minority population¹ should be identified where the minority population of the affected area exceeds 50 percent or the minority population percentage of the affected area is meaningfully greater than the majority population percentage of the general population (CEQ, 1997).

The CEQ guidelines do not specifically define low-income populations, but some agencies have developed thresholds for environmental justice impacts analysis. This analysis uses California Department of Water Resources (DWR) guidelines to evaluate impacts. DWR incorporated environmental justice into the Integrated Regional Water Management planning guidelines to receive state funding. The Proposition 50 guidelines required applicants to involve disadvantaged communities in the planning process and identify and address environmental justice needs and issues within the region. California Water Code § 79505.5(a) defines disadvantaged communities as those communities with an annual median household income less than 80 percent of the statewide annual median household income, which was \$47,493 in the 2000 Census (U.S. Census, Bureau 2000). The 80 percent threshold would be a median household income of \$37,944, which is rounded to \$38,000 for this analysis.

¹ Minority is defined as individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.

Information on racial composition, minority populations, and median household income was obtained from 2000 U.S. Census data to identify environmental justice populations. The analysis assumes that construction and operation of the project could affect populations within a one-half mile radius of the project components. If minority or low-income communities are predominant in the area, the analysis identifies potentially significant impacts to air quality, traffic, and noise from project construction and operation that may disproportionately affect minority or low-income communities. If potentially significant impacts to noise, air quality and traffic were to occur, there could be disproportionate environmental justice impacts and mitigation would be required. The analysis also discusses potential environmental justice impacts from increased water and sewer fees and changes in farm worker employment.

Identification of Disproportionately High and Adverse Environmental Effects

The NBWRP would result in a significant environmental justice impact if it would result in one or more of the following:

- An impact to the natural or physical environment that significantly and disproportionately adversely affects the identified minority or low-income population. Such effects may include ecological, cultural, human health, economic, or social impacts on the identified communities when those impacts are interrelated with impacts to the natural or physical environment.
- A significant environmental effect that would result in an adverse impact on the identified population that appreciably exceeds or is likely to appreciably exceed that impact on the general population or other appropriate comparison group.

Environmental Consequences/Impact Analysis

Impact 3.15.1: Project construction could result in air quality, noise, and/or other environmental impacts that could disproportionately affect nearby minority communities. (No Impact)

The NBWRP would include construction for pipeline installation, pump stations, storage reservoirs, and treatment plant upgrades. Earthmoving activities such as excavation, grading, soil stockpiling, and filling would occur during construction. Pipelines would be installed through trenching and jack-and-bore tunneling along the roadways. As discussed in **Sections 3.6** through **3.11** and **Section 3.14**, construction activities would result in short-term increases in traffic from construction vehicles, and increases in fugitive dust, equipment exhaust emissions, and noise levels. Construction would also cause temporary aesthetic and visual impacts. However, these impacts would be localized to a smaller construction area. The impacts discussed would be typical of construction projects and the magnitude of these impacts would be less than significant with mitigation measures listed in the individual sections. If the minority populations are larger than 50 percent of the total population in the affected area, whether the impact to the minority populations would be disproportionate is discussed further.

No Project Alternative

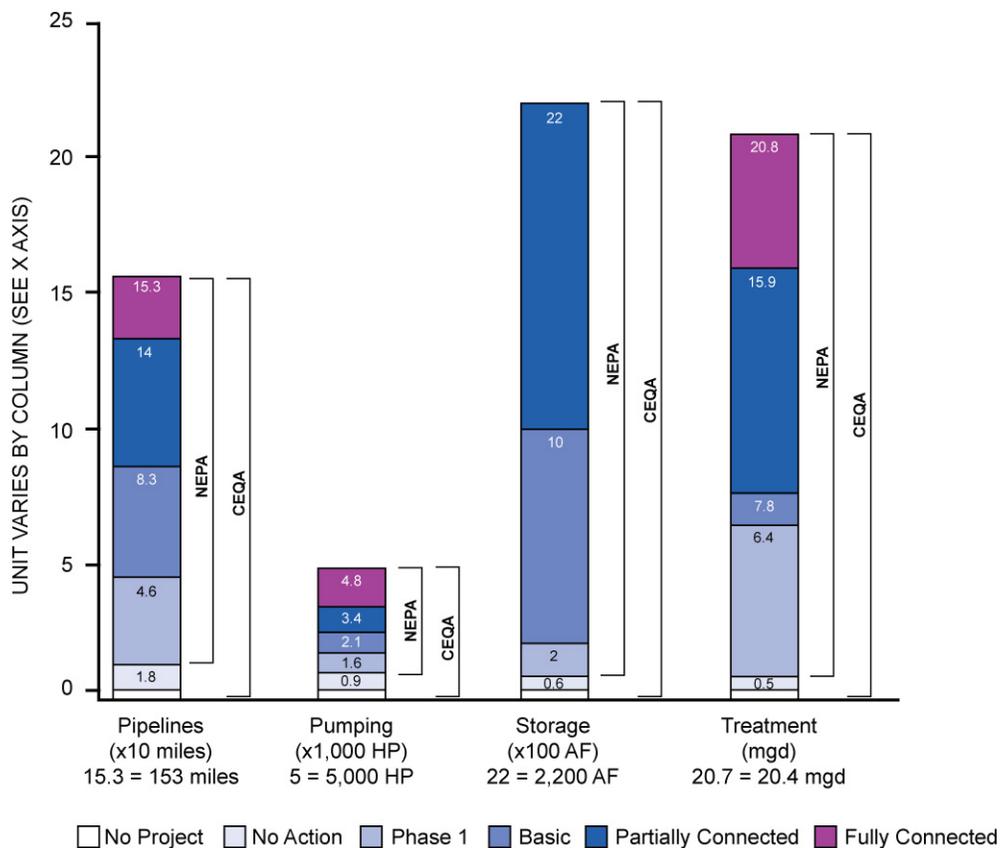
The NBWRP would not be implemented under the No Project Alternative, therefore no impacts would occur. For a discussion of the No Project under future conditions, see No Action Alternative below.

No Action Alternative

Under the No Action Alternative, which includes consideration of future conditions, it is likely that a subset of water recycling projects would be implemented by the Member Agencies on an individual basis, without the benefit of regional coordination or federal funding.

For comparison to the Action Alternatives, it is estimated that approximately 17.5 miles of new pipeline, 912 HP of pumping capacity, treatment facilities providing 0.5 mgd of tertiary capacity, and approximately 65 AF of storage would be constructed by Member Agencies on an individual basis (see **Chart 3.15-1, No Action**).

**CHART 3.15-1
COMPARISON OF NEPA AND CEQA BASELINES FOR PROPOSED FACILITIES, BY ALTERNATIVE**



SOURCE: CDM, 2009

Under future baseline (2020) conditions, the minority populations within the region are anticipated to change in accordance with anticipated development allowed under the approved General Plans within the region. A discussion of individual Member Agencies is provided below.

LGVSD/NMWD

There would be no project facilities constructed under the No Action Alternative, therefore no impact would occur.

Novato SD/NMWD

In Marin County, construction would only occur in the Novato North Service Area under the No Action Alternative. Project construction could cause adverse effects to traffic, air quality, and noise, as discussed in other sections of **Chapter 3**. The effects would occur in Census blocks 101100.1, 101200.1, 102100.3, 102201.1, and 102201.4 (see **Figure 3.15-1**). Most of the action area is predominantly white with small percentages of black, American Indian, Asian, and Native Hawaiian populations. The highest percentage of Hispanic population was 28.5 percent in Census block 102201.1 in Novato (U.S. Census Bureau, 2000). Census data shows that minorities are less than 50 percent of the population in any of the Census blocks and would not be disproportionately affected. No impact would occur to minority communities in San Rafael or Novato as a result of the No Project/No Action Alternative.

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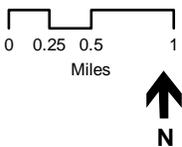
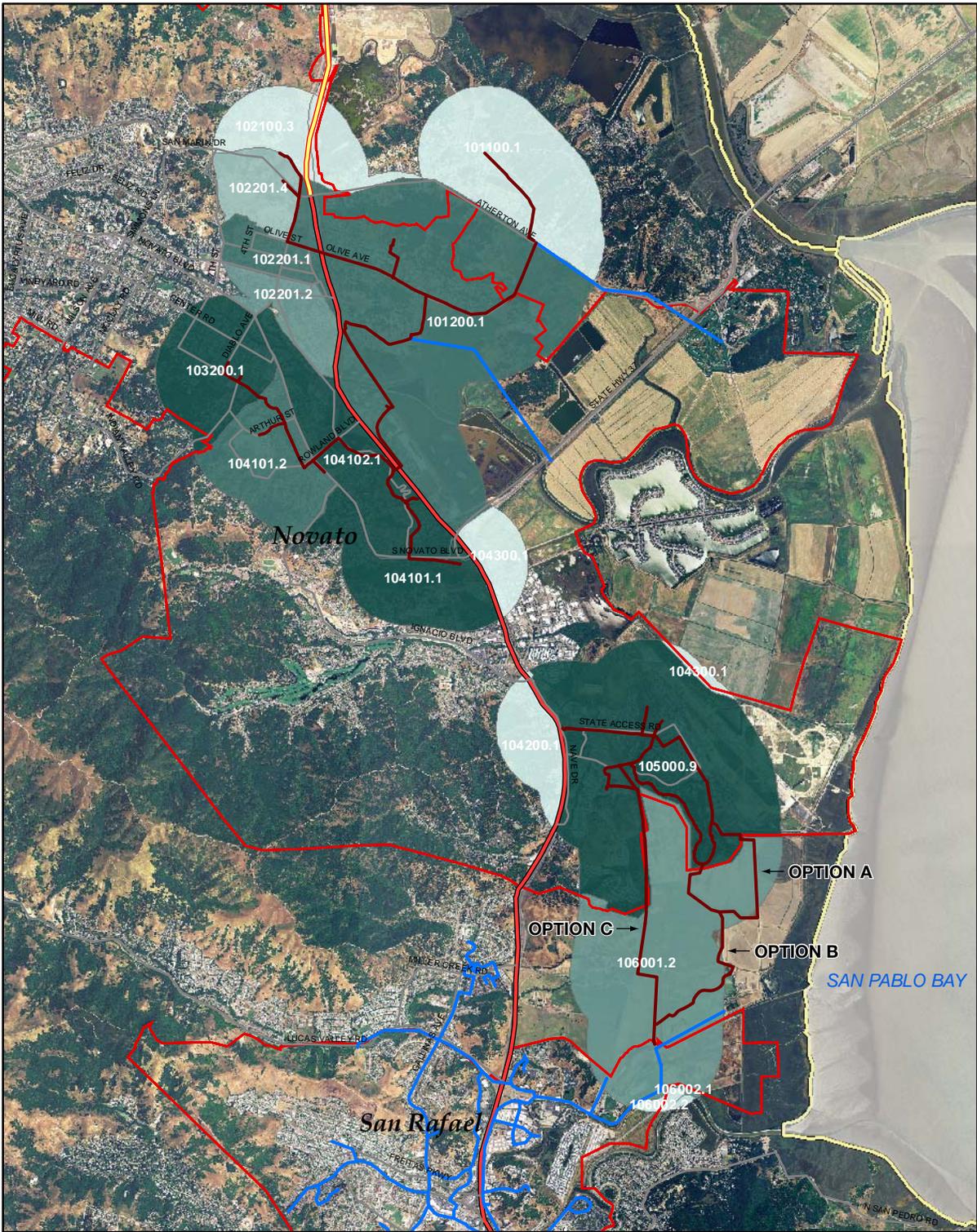
In Sonoma County, the Sonoma Valley Recycled Water Plan (SVRWP) Alignment 1A and the Napa Salt Marsh Restoration Project would be implemented under the No Action Alternative. This could affect Census blocks 150303.1, 150303.4, 150100.2, and 150606.1 (see **Figure 3.15-2**). Most of the action area is predominantly white with small percentages of black, American Indian, Asian, and Native Hawaiian, and other populations. The highest percentage of Hispanic population was 25 percent in Census block 150100.2 in 2000 (U.S. Census Bureau, 2000). Census data shows that minorities form less than 50 percent of the population in any of the Census blocks and would not be disproportionately affected. There would be no impacts to minority communities in Sonoma County as a result of the No Action Alternative.

Napa SD

There would be no project facilities constructed under the No Action Alternative, therefore no impact would occur.

Phase 1 (Project level)

Compared to the CEQA Baseline, Phase 1 projects would provide 46 miles of new pipeline, 1,655 HP of pumping capacity, treatment facilities providing 6.4 mgd of tertiary capacity, and 65 AF of storage. Compared to the No Action Alternative (NEPA Baseline), Phase 1 projects would provide 28 miles of new pipeline, 743 HP of pumping capacity, treatment facilities providing 5.9 mgd of tertiary capacity, and no additional storage.



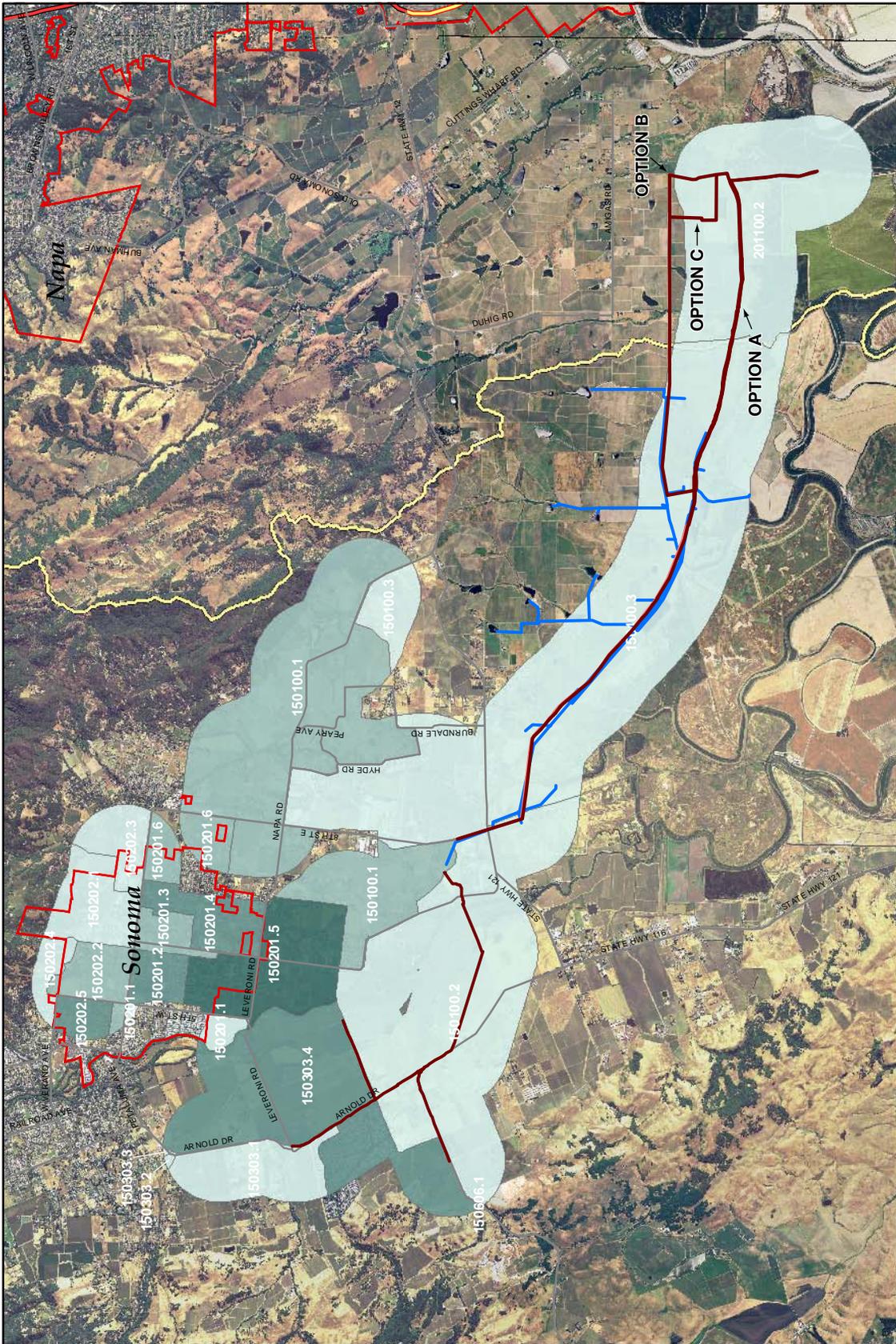
Total Population - Marin County

- Local Project Pipelines
- Existing Pipelines
- Urban Growth Boundary
- < 500
- 500 - 999
- 1,000 - 1,499
- 1,500 - 1,999
- > 2,000

SOURCE: CDM, 2008

NBWR North Bay Water Recycling Program . 206088.01

Figure 3.15-1
 Total Populations within Half-Mile of the
 Project Area in Marin County
 (Phase 1)



NBWRA North Bay Water Recycling Program, 206088
Figure 3.15-2
 Total Populations within Half-Mile of the
 Project Area in Sonoma County (Phase 1)

SOURCE: CDM

The impacts to minority populations under Phase 1 would be equivalent to and greater than the impacts discussed for the No Action Alternative, in proportion to the facilities constructed under this alternative. A discussion of impacts by Member Agency is provided below.

LGVSD/ NMWD and Novato SD/ NMWD

Figure 3.15-1 shows population and **Table 3.15-7** shows percentages of race and Hispanic origin within the one-half mile radius of the action area in San Rafael and Novato. Most of the area is predominantly white with small percentages of black, American Indian, Asian, and Native Hawaiian populations. The highest percentage of Hispanic population was 28.5 percent (between 1,000 and 1,499) in Census block 102201.1 in Novato. Census data shows that minorities are less than 50 percent of the population in any of the Census blocks and would not be disproportionately affected. There would be no environmental justice impacts to minority communities in San Rafael or Novato as a result of Phase 1 and thus no incremental effects as compared to the No Action Alternative.

**TABLE 3.15-7
RACE AND HISPANIC POPULATION WITHIN ONE-HALF MILE RADIUS OF
PIPELINE ALIGNMENTS IN MARIN COUNTY (IN PERCENTAGE)**

Census Block	Population within half-mile radius	White	Black	American Indian	Asian	Native Hawaiian	Other	Two or more races	Hispanic	Non-Hispanic
101100.1	256	91.6%	< 1%	< 1%	3.2%	< 1%	1.1%	2.8%	3.5%	96.5%
101200.1	1858	86.2%	< 1%	< 1%	6.6%	< 1%	2.6%	3.1%	8.7%	91.3%
102100.3	191	86.5%	1.2%	< 1%	4.1%	< 1%	3.8%	3.2%	7.2%	92.8%
102201.1	1831	71.7%	4.1%	1.2%	4.1%	< 1%	13.7%	5.2%	28.5%	71.5%
102201.2	1468	77.9%	2.6%	< 1%	5.6%	< 1%	9.1%	4.1%	20.7%	79.3%
102201.4	973	84.5%	2.0%	< 1%	7.0%	< 1%	2.8%	2.9%	8.2%	91.8%
103200.1	2451	83.3%	1.4%	< 1%	5.8%	< 1%	5.1%	3.8%	11.1%	88.9%
104101.1	2020	80.3%	1.6%	< 1%	6.1%	< 1%	6.8%	4.4%	14.3%	85.7%
104101.2	1757	85.8%	1.7%	< 1%	6.5%	< 1%	2.9%	2.9%	7.4%	92.6%
104102.1	4954	73.0%	3.5%	< 1%	5.8%	< 1%	10.7%	6.3%	22.4%	77.6%
104200.1	292	83.9%	1.6%	< 1%	3.9%	< 1%	6.1%	3.8%	16.5%	83.5%
104300.1	120	91.9%	< 1%	< 1%	2.9%	< 1%	1.9%	2.5%	4.9%	95.1%
105000.9	2248	80.8%	3.0%	< 1%	4.7%	< 1%	6.6%	3.6%	15.7%	84.3%
106001.2	1375	79.7%	3.8%	< 1%	7.7%	< 1%	3.1%	5.2%	7.2%	92.8%
106002.1	26	74.1%	2.8%	< 1%	8.2%	< 1%	8.1%	5.8%	18.6%	81.4%
106002.2	84	81.7%	4.5%	< 1%	6.7%	< 1%	1.5%	5.0%	8.3%	91.7%

SOURCE: U.S. Census Bureau, 2000

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Figure 3.15-2 shows population and **Table 3.15-8** shows percentages of race and Hispanic origin within a one-half mile radius of the proposed area in Sonoma County. As discussed above under No Action Alternative, most of the area is predominantly white with small percentages of black, American Indian, Asian, and Native Hawaiian populations. The highest percentage of Hispanic population was 25 percent (population of 500) in Census block 150100.2, which is less than

**TABLE 3.15-8
RACE AND HISPANIC POPULATION WITHIN ONE-HALF MILE RADIUS OF
PIPELINE ALIGNMENTS IN SONOMA COUNTY (IN PERCENTAGE)**

Census Block	Population within half-mile radius	White	Black	American Indian	Asian	Native Hawaiian	Other	Two or more races	Hispanic	Non-Hispanic
150100.1	769	92.2%	< 1%	1.2%	1.9%	< 1%	2.9%	1.7%	6.7%	93.3%
150100.2	136	84.9%	< 1%	1.2%	< 1%	< 1%	9.7%	2.8%	25.0%	75.0%
150100.3	106	86.4%	< 1%	< 1%	< 1%	< 1%	10.6%	2.3%	21.9%	78.1%
150201.1	464	94.8%	< 1%	< 1%	2.1%	< 1%	< 1%	1.4%	5.3%	94.7%
150201.2	1194	92.5%	< 1%	< 1%	3.1%	< 1%	< 1%	2.4%	9.5%	90.5%
150201.3	634	96.5%	< 1%	< 1%	< 1%	< 1%	< 1%	1.4%	5.8%	94.2%
150201.4	1145	95.6%	< 1%	< 1%	< 1%	< 1%	1.0%	1.8%	3.2%	96.8%
150201.5	1665	92.5%	< 1%	< 1%	1.9%	< 1%	3.1%	1.9%	8.8%	91.2%
150201.6	603	96.8%	< 1%	< 1%	1.1%	< 1%	< 1%	1.7%	4.4%	95.6%
150202.1	397	96.4%	< 1%	< 1%	< 1%	< 1%	< 1%	1.2%	3.0%	97.0%
150202.2	859	91.8%	< 1%	< 1%	1.6%	< 1%	3.1%	2.6%	8.4%	91.6%
150202.3	43	92.3%	< 1%	< 1%	3.0%	< 1%	2.1%	2.0%	6.7%	93.3%
150202.4	42	91.5%	< 1%	< 1%	1.9%	< 1%	4.0%	1.7%	9.9%	90.1%
150202.5	1089	89.5%	< 1%	< 1%	1.8%	< 1%	3.9%	3.9%	11.3%	88.7%
150303.1	58	95.6%	< 1%	1.1%	1.3%	< 1%	1.0%	< 1%	5.6%	94.4%
150303.2	1	92.6%	< 1%	< 1%	1.1%	< 1%	2.3%	3.5%	6.3%	93.7%
150303.3	5	92.0%	< 1%	< 1%	2.7%	< 1%	2.3%	2.5%	6.8%	93.2%
150303.4	1031	96.3%	< 1%	< 1%	1.8%	< 1%	< 1%	< 1%	5.2%	94.8%
201100.2	105	87.8%	< 1%	< 1%	1.8%	< 1%	7.2%	2.3%	15.2%	84.8%

SOURCE: U.S. Census Bureau 2000

50 percent of the population in any of the Census blocks. There would be no disproportionate impacts to minority communities in Sonoma County as a result of Phase 1, which would be similar to that discussed under No Action Alternative (see above).

A portion of the proposed pipeline for Option B (see Figure 3.15-2) falls outside the half-mile radius. Because of the agricultural nature of the area, the total population in the vicinity of the Option B pipeline is likely to be small. The inclusion of any additional population would not change the overall ethnic makeup of the affected area. White population would continue to be the majority of the population and minorities would remain less than 50 percent. There would be no environmental justice impacts as a result of implementing Option B.

Napa SD

Figure 3.15-3 shows population and Table 3.15-9 shows percentages of race and Hispanic origin within the one-half mile radius of the action area in Napa County. As discussed above under No Action Alternative, most of the area is predominantly white with small percentages of black, American Indian, Asian, and Native Hawaiian populations. The highest percentage of Hispanic population was 53.4 percent (between 500 and 999) in Census block 200300.5. In Napa County, project construction from the Locally Funded MST Option 1 would result in the impacts discussed above and would occur in Census blocks 200300.3, 200300.4, 200300.5, 200900.1,

**TABLE 3.15-9
RACE AND HISPANIC POPULATIONS WITHIN ONE-HALF MILE RADIUS OF
PIPELINE ALIGNMENTS IN NAPA COUNTY (IN PERCENTAGE)**

Census Block	Population within ½ mile radius	White	Black	American Indian	Asian	Native Hawaiian	Other	Two or more races	Hispanic	Non-Hispanic
200300.1	382	88.1%	< 1%	1.3%	1.7%	< 1%	4.4%	4.6%	7.9%	92.1%
200300.2	112	83.7%	< 1%	< 1%	1.4%	< 1%	8.3%	5.1%	17.4%	82.6%
200300.3	2075	67.8%	< 1%	1.3%	1.5%	< 1%	24.3%	4.1%	47.4%	52.6%
200300.4	1494	81.5%	< 1%	1.6%	1.5%	< 1%	11.3%	2.7%	25.0%	75.0%
200300.5	995	64.8%	< 1%	< 1%	< 1%	< 1%	27.8%	5.6%	53.4%	46.6%
200400.1	1087	93.9%	< 1%	< 1%	< 1%	< 1%	1.9%	2.9%	5.9%	94.1%
200400.2	88	80.6%	< 1%	1.0%	1.3%	< 1%	13.0%	3.5%	26.3%	73.7%
200802.3	90	89.5%	< 1%	< 1%	2.2%	< 1%	4.4%	2.4%	16.5%	83.5%
200900.1	912	68.1%	20.9%	1.5%	4.1%	< 1%	1.9%	3.2%	15.2%	84.8%
201002.1	61	85.1%	2.5%	1.4%	1.2%	< 1%	4.3%	4.9%	10.0%	90.0%
201100.2	105	87.8%	< 1%	< 1%	1.8%	< 1%	7.2%	2.3%	15.2%	84.8%
201400.2	819	93.5%	< 1%	1.1%	2.4%	< 1%	< 1%	2.4%	2.6%	97.4%
201400.4	485	94.1%	< 1%	< 1%	< 1%	< 1%	1.1%	2.8%	4.8%	95.2%
201400.5	1	93.9%	< 1%	< 1%	1.8%	< 1%	1.3%	2.0%	5.4%	94.6%
201400.6	668	93.4%	< 1%	< 1%	1.7%	< 1%	1.4%	2.5%	5.9%	94.1%

SOURCE: U.S. Census Bureau, 2000

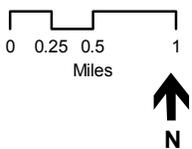
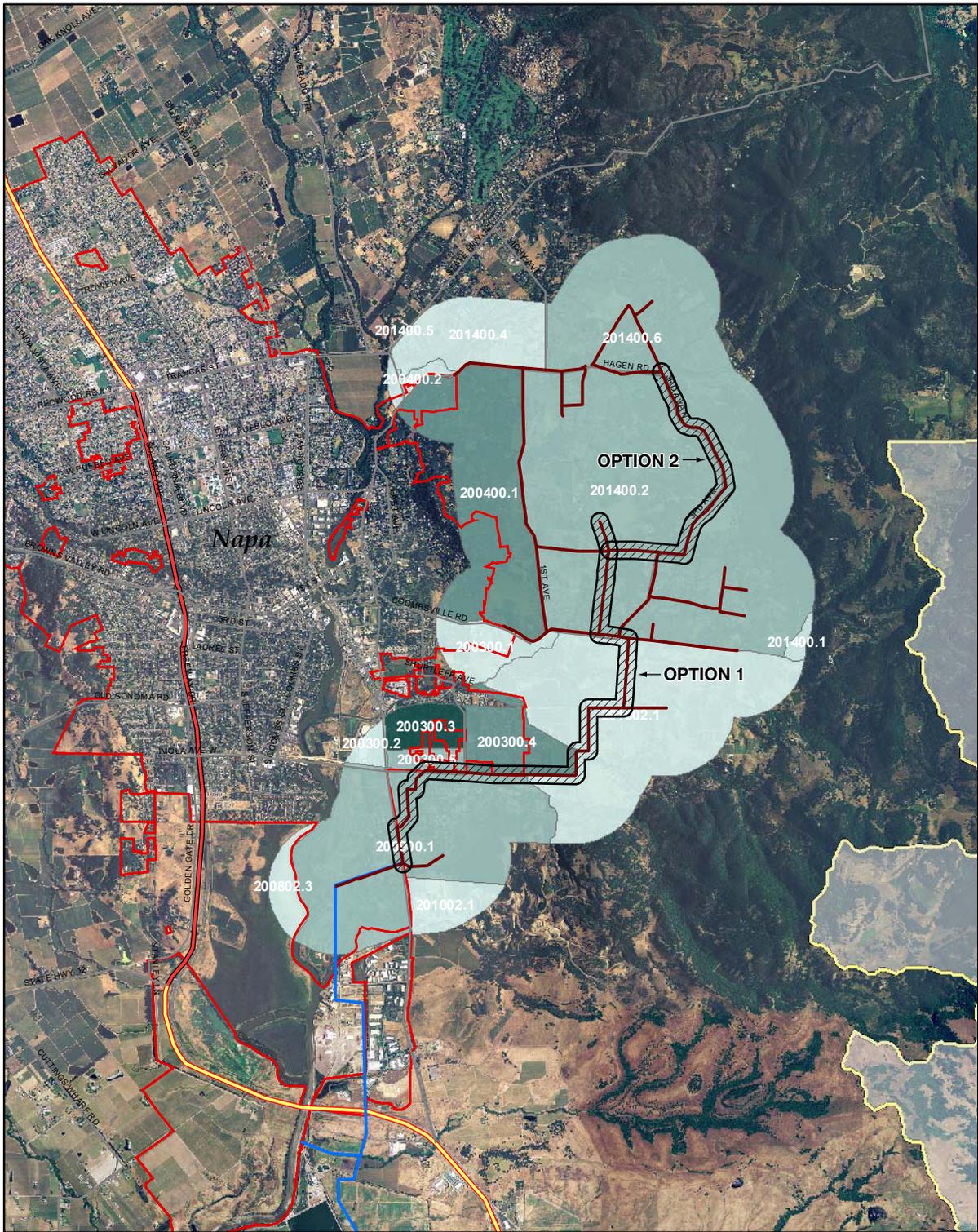
201002.1, and 201400.2 (see **Figure 3.15-3**). Most of the area is predominantly white with small percentages of black, American Indian, Asian, and Native Hawaiian populations. The highest percentage of Hispanic population was 53.4 percent in Census block 200300.5 (U.S. Census Bureau, 2000), however the proposed pipelines would extend through other areas and would not traverse through minority neighborhoods only. The impact would therefore apply to all neighborhoods and would not be disproportionate. No impact is expected.

Alternative 1: Basic System (Program level)

Compared to the CEQA Baseline, the Basic System projects would provide 83 miles of new pipeline, 2,158 HP of pumping capacity, treatment facilities providing 7.8 mgd of tertiary capacity, and 1,020 AF of storage. Compared to the No Action Alternative (NEPA Baseline), Basic System would provide 65 miles of new pipeline, 1,246 HP of pumping capacity, treatment facilities providing 7.3 mgd of tertiary capacity, and 955 AF of storage.

The impacts to minority populations under the Basic System would be equivalent to and greater than the impacts discussed for Phase 1, in proportion to the facilities constructed under this alternative. A discussion of impacts by Member Agency is provided below.

Because this is a program-level analysis, potential minority populations were identified for the whole census tracts in areas with the additional pipeline routes as compared to Phase 1.



Total Population - Napa County

- Local Project Pipelines
- Existing Pipelines
- Urban Growth Boundary
- < 500
- 500 - 999
- 1,000 - 1,499
- 1,500 - 1,999
- > 2,000

SOURCE: CDM, 2008

NBWR North Bay Water Recycling Program . 206088.01

Figure 3.15-3

Total Populations within Half-Mile of the Project Area in Napa County (Phase 1)

LGVSD/NMWD and Novato SD/NMWD

In Marin County, new proposed pipelines under the Basic System would extend through Census tract 1011. The white population alone made up about 93 percent of the population of 2,539. Black, American Indian, Asian, Native Hawaiian and other races each made up less than 3 percent of the population. Hispanic or Latino, of any race, was about 3 percent of the population (U.S. Census Bureau, 2000). Based on these percentages, project construction would not disproportionately affect minority populations in Marin County. There would be no impact.

SVCS

In Sonoma County, the proposed pipelines towards Central Sonoma Valley Service Area would extend through Census tracts 150302, 150303, and 1505. In Census tract 150302, the white population made up about 76 percent of the population of 9,227. Black, American Indian, Asian, Native Hawaiian each made up less than 1 percent of the population. Other race was about 16 percent. Hispanic or Latino, of any race, was about 41 percent of the population (U.S. Census, Bureau, 2000).

In Census tract 150303, the white population made up about 94 percent of the population in the Census tract of 4,456. Black, American Indian, Asian, Native Hawaiian, and other each made up less than 2 percent of the population. Hispanic or Latino, of any race, was about 6 percent of the population (U.S. Census Bureau, 2000).

In Census tract 1505, the white population made up about 90 percent of the population of 6,149. Black, American Indian, Asian, Native Hawaiian, and other each made up less than 3 percent of the population. Hispanic or Latino, of any race, was about 8 percent of the population (U.S. Census Bureau, 2000).

Given that the minority populations form only a small percentage in the action area in Sonoma County, project construction would not disproportionately affect minority populations. There would be no environmental justice impacts, which would be similar to that discussed under the No Action Alternative.

Napa SD

In Napa County, the proposed pipelines in the Carneros East Service Area would extend through Census tract 2011. The White population made up about 91 percent of the population of 4,186. Black, American Indian, Asian, Native Hawaiian and other races each made up less than 4 percent of the population. Hispanic or Latino, of any race, was about 10 percent of the population (U.S. Census Bureau, 2000). Given that the minority populations form only a small percentage in the action area in Napa County, project construction would not disproportionately affect minority populations. There would be no environmental justice impacts, which would be similar to that discussed under the No Action Alternative.

Alternative 2: Partially Connected System (Program level)

Compared to the CEQA Baseline, the Partially Connected System would provide 139 miles of new pipeline, 3,454 HP of pumping capacity, treatment facilities providing 15.9 mgd of tertiary

capacity, and 2,220 AF of storage. Compared to the No Action Alternative (NEPA Baseline), the Partially Connected System would provide 122 miles of new pipeline, 2,542 HP of pumping capacity, treatment facilities providing 15.4 mgd of tertiary capacity, and 2,155 AF of storage.

The impacts to minority populations under the Partially Connected System would be equivalent to and greater than the impacts discussed for the Basic System, in proportion to the facilities constructed under this alternative. A discussion of impacts by Member Agency is provided below.

LGVSD/NMWD and Novato SD/NMWD

In Marin County, the additional pipelines under the Partially Connected System would extend through Census tracts 106001, 106002, and 1082. In Census tract 106001, the white population made up about 81 percent of the population of 3,826. Black, American Indian, Asian, Native Hawaiian, and other each made up less than 7 percent of the population. Hispanic or Latino, of any race, was about 7 percent of the population (U.S. Census Bureau, 2000).

In Census tract 106002, the white population made up about 78 percent of the population of 5,745. Black, American Indian, Asian, Native Hawaiian, and other each made up less than 7 percent of the population. Hispanic or Latino, of any race, was about 2 percent of the population (U.S. Census Bureau, 2000).

In Census tract 1082, the white population made up about 82 percent of the population of 6,120. Black, American Indian, Asian, Native Hawaiian, and other each made up less than 3 percent of the population. Hispanic or Latino, of any race, was about 9 percent of the population (U.S. Census Bureau, 2000).

Given that the minority populations form only a small percentage in the action area in Marin County, project construction would not disproportionately affect minority populations. There would be no impacts, which would be similar to that discussed under the No Action Alternative.

SVCS

In Sonoma County, the proposed pipelines under the Partially Connected System would extend through new areas in Census tract 1501 and Census tract 150606. In Census tract 1501, the white population made up about 93 percent of the population of 2,670. Black, American Indian, Asian, Native Hawaiian and other races each made up less than 6 percent of the population. Hispanic or Latino, of any race, was about 15 percent of the population (U.S. Census Bureau, 2000).

In Census tract 150606, white alone made up about 85 percent of the population of 7,210. Black, American Indian, Asian, Native Hawaiian and other races each made up less than 6 percent of the population. Hispanic or Latino, of any race, was about 13 percent of the population (U.S. Census Bureau, 2000).

Project construction would not disproportionately affect minority populations in Sonoma County. There would be no impacts.

Napa SD

In Napa County, the additional pipelines under the Partially Connected System would extend through Census tracts 200801 and 200802. In Census tract 200801, the white population made up about 67 percent of the population of 7,491. Black, American Indian, Asian, and Native Hawaiian each made up less than 2 percent of the population. Other races were about 29 percent of total population. Hispanic or Latino, of any race, was about 45 percent of the population (U.S. Census Bureau, 2000).

In Census tract 200802, white alone made up about 84 percent of the population of 4,991. Black, American Indian, Asian, and Native Hawaiian and other races each made up less than 8 percent of the population. Hispanic or Latino, of any race, was about 22 percent of the population (U.S. Census Bureau, 2000).

Given that the minority populations form only a small percentage in the action area in Napa County, project construction would not disproportionately affect minority populations. There would be no environmental justice impacts, which would be similar to that discussed under the No Action Alternative.

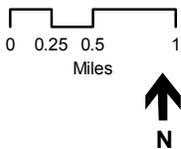
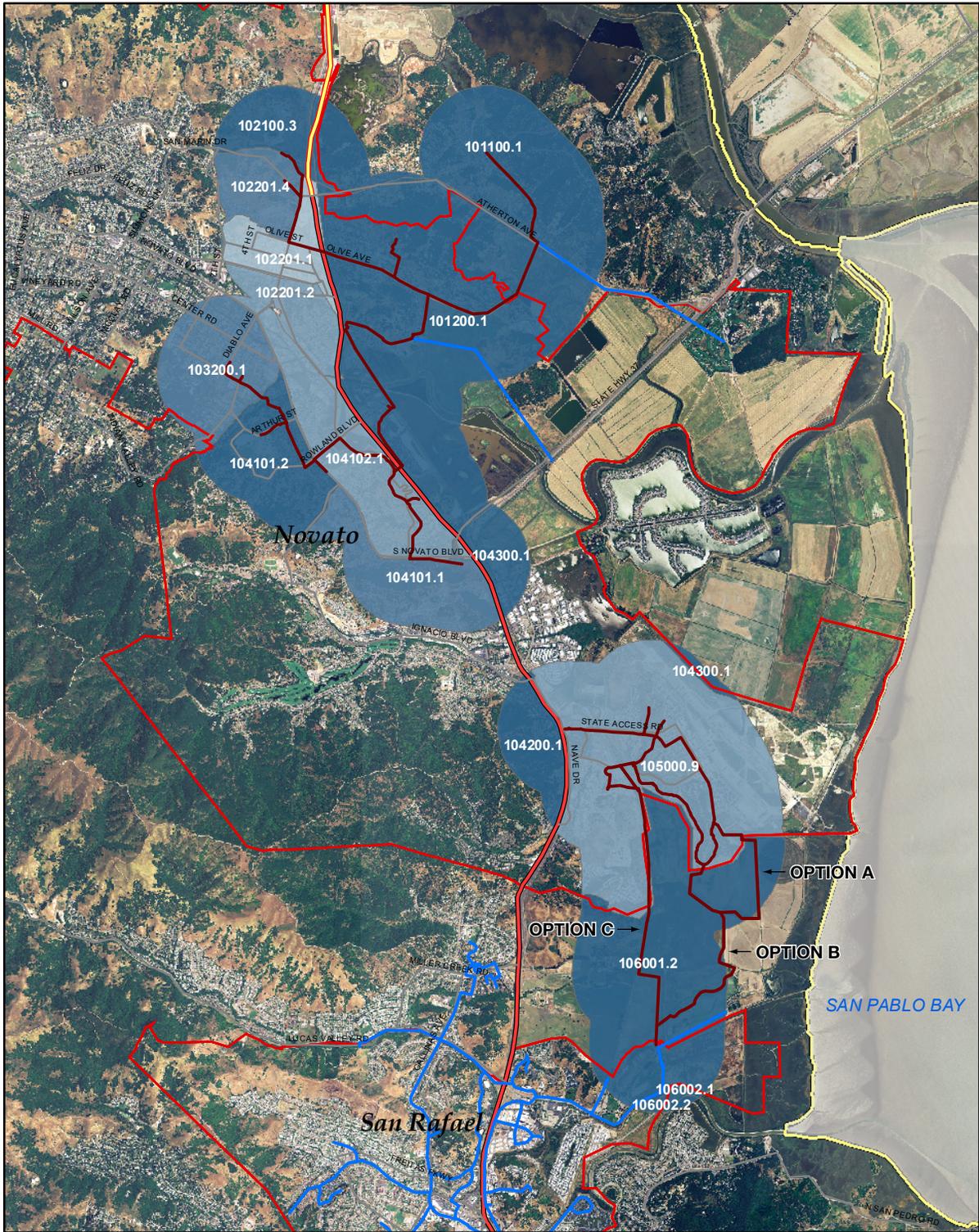
Alternative 3: Fully Connected System (Program level)

Compared to the CEQA Baseline, the Fully Connected System would provide 153 miles of new pipeline, 5,021 HP of pumping capacity, treatment facilities providing 20.8 mgd of tertiary capacity, and 2,220 AF of storage. Compared to the No Action Alternative (NEPA Baseline), the Fully Connected System would provide 135 miles of new pipeline, 3,907 HP of pumping capacity, treatment facilities providing 20.3 mgd of tertiary capacity, and 2,155 AF of storage.

The impacts associated with the Fully Connected System would be equivalent to the impacts discussed for the Partially Connected System. New pipelines under the Fully Connected System would extend through the same Census tracts as the Partially Connected System and affect similar percentages of minority populations at the Census tract level. There would be no additional environmental justice impacts. Please refer to the discussions above.

Impact 3.15.2: Project construction could result in environmental impacts that could disproportionately affect nearby low-income communities. (No Impact)

This analysis assumes the California Water Code definition for disadvantaged communities to identify potentially disproportionate impacts to low-income communities. Using the 2000 Census data, the statewide annual median household income for disadvantaged communities was \$37,944, rounded up to \$38,000 for this analysis. **Figure 3.15-4** shows median household incomes for Census blocks in the North Bay Area. Low-income communities were identified within a one-half-mile radius of the proposed pipeline alignments and compared to the threshold of \$38,000.



Median Household Income - Marin County

- Local Project Pipelines
- Existing Pipelines
- Urban Growth Boundary
- < \$38,000
- \$38,000 - \$44,999
- \$45,000 - \$54,999
- \$55,000 - \$64,999
- > \$65,000

SOURCE: CDM, 2008

NBWR North Bay Water Recycling Program . 206088.01

Figure 3.15-4
 Median Household Income
 within 1/2-Mile of Pipeline
 (Phase 1)

As discussed in **Sections 3.6** through **3.11** and **Section 3.14**, construction activities would result in short-term increases in traffic from construction vehicles, and increases in fugitive dust, equipment exhaust emissions, and noise levels. Construction would also cause temporary aesthetic and visual impacts however, these impacts would be localized to a smaller construction area. The impacts discussed would be typical of construction projects and the magnitude of these impacts would be less than significant with mitigation measures listed in the individual sections. If there are low-income communities in the affected area (i.e., if the median household income levels were less than the threshold of \$38,000 discussed above), whether the impact to the communities would be disproportionate is discussed further.

No Project Alternative

There would be no project facilities constructed under the No Action Alternative, therefore no impact would occur. For a discussion of the No Project under future conditions, see No Action Alternative below.

No Action Alternative

Under the No Action Alternative, which includes consideration of future conditions, it is likely that a subset of water recycling projects would be implemented by the Member Agencies on an individual basis, without the benefit of regional coordination or federal funding.

For comparison to the Action Alternatives, it is estimated that approximately 17.5 miles of new pipeline, 912 HP of pumping capacity, treatment facilities providing 0.5 mgd of tertiary capacity, and approximately 65 AF of storage would be constructed by Member Agencies on an individual basis (see **Chart 3.15-1, No Action**).

Under future baseline (2020) conditions, the low-income populations within the region is anticipated to change in accordance with anticipated development allowed under the approved General Plans within the region. A discussion of individual Member Agencies is provided below.

LGVSD/NMWD

There would be no project facilities constructed under the No Action Alternative, therefore no impact would occur.

Novato SD/NMWD

In Marin County, construction would only occur in the Novato North Service Area under the No Action Alternative. Project construction could cause environmental impacts discussed under No Action Alternative (see above). The impacts would occur in Census blocks 101100.1, 101200.1, 102100.3, 102201.1, and 102201.4. According to the Census data, median household income for Census block 102201.1 was \$38,571, which is slightly higher than the threshold and the remaining Census blocks had a median household income over \$50,000. However the proposed pipelines would extend through other areas and would not traverse only through low-income neighborhoods. The impact would therefore apply to all neighborhoods and would not be disproportionate. No impact is expected.

SVCS

Project construction impacts would occur in Census blocks 150303.1, 150303.4, 150100.2, and 150606.1, and 201100.2. All Census blocks have median household incomes greater than the median income threshold. There would be no impacts to low-income communities in Sonoma County.

A portion of the proposed pipeline for Option B falls outside the half-mile radius. The median income of the affected area is greater than \$65,000. The inclusion of any additional population would not substantially change median income of the affected area. It would continue to be greater than the threshold for low income communities. There would be no environmental justice impacts as a result of implementing Option B.

Napa SD

There would be no project facilities constructed under the No Action Alternative, therefore no impact would occur.

Phase 1 (Project level)

Compared to the CEQA Baseline Phase 1 projects would provide 46 miles of new pipeline, 1,655 HP of pumping capacity, treatment facilities providing 6.4 mgd of tertiary capacity, and 65 AF of storage. Compared to the No Action Alternative (NEPA Baseline), Phase 1 projects would provide 28 miles of new pipeline, 743 HP of pumping capacity, treatment facilities providing 5.9 mgd of tertiary capacity, and no additional storage.

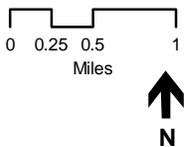
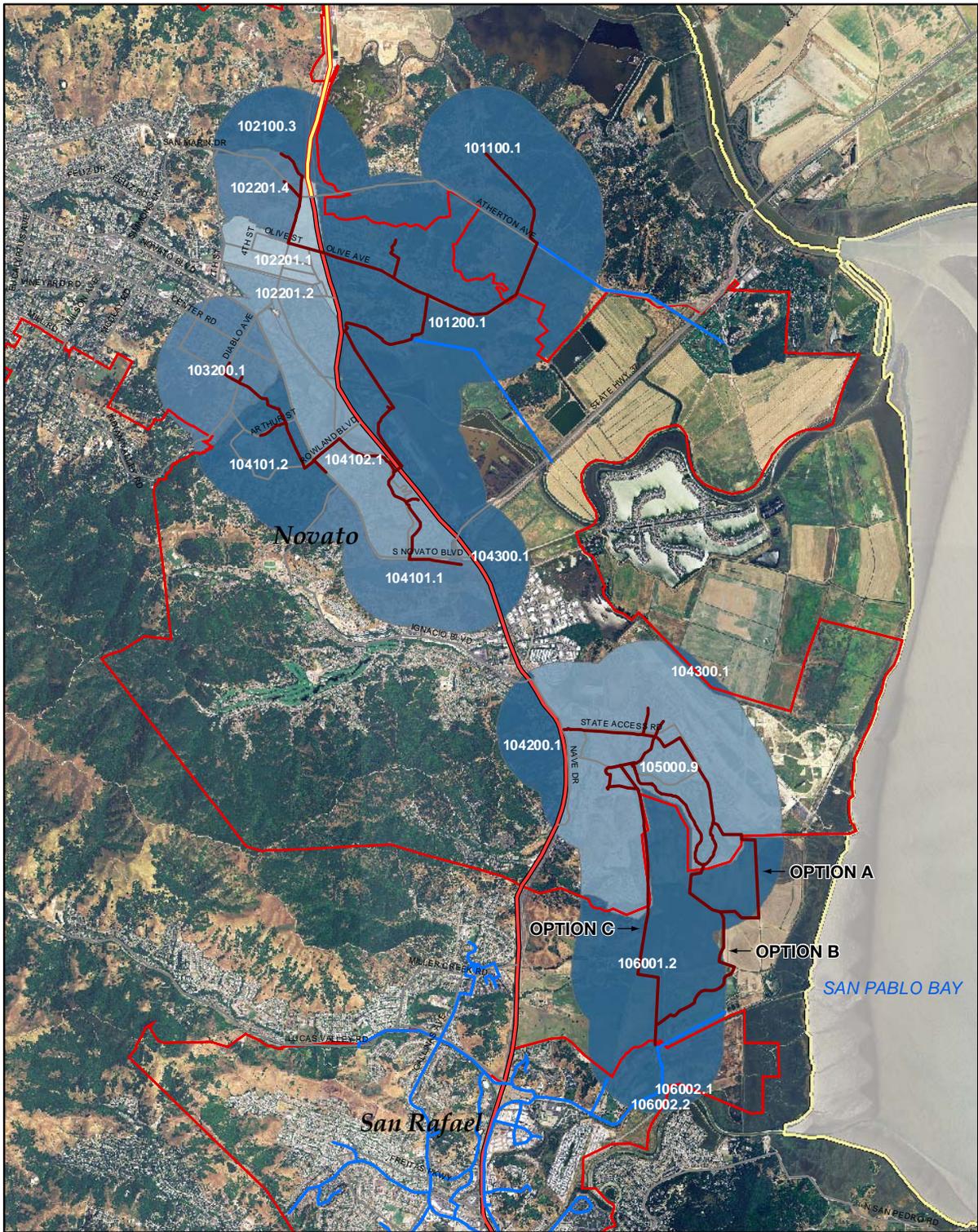
The impacts to potential low-income communities under Phase 1 would be equivalent to and greater than the impacts discussed for the No Action Alternative, in proportion to the facilities constructed under this alternative. A discussion of impacts by Member Agency is provided below.

LGVSD/NMWD and Novato SD/NMWD

Figure 3.15-5 shows median household income levels within a one-half mile of the pipeline alignments in Novato and San Rafael. Census blocks 102201.1 and 105000.9 show median household incomes less than \$38,000. The project construction activities could affect the low-income communities in these blocks. The impact would be similar to those discussed under No Action Alternative; no impact would occur.

SVCS

Figure 3.15-6 shows Census blocks and median household income levels within a one-half-mile radius of the proposed components in Sonoma County. Three Census blocks in the area show median household incomes less than \$38,000; out of which two blocks (150303.2 and 150303.3) are located just within the one-half mile buffer line around the pipelines and have few to no households in the potentially affected areas and one block (150201.6) had a median household income of \$25,827 (i.e., approximately 32 percent lower than the threshold). The impact would be similar to that discussed the LGVSD and Novato SD above.



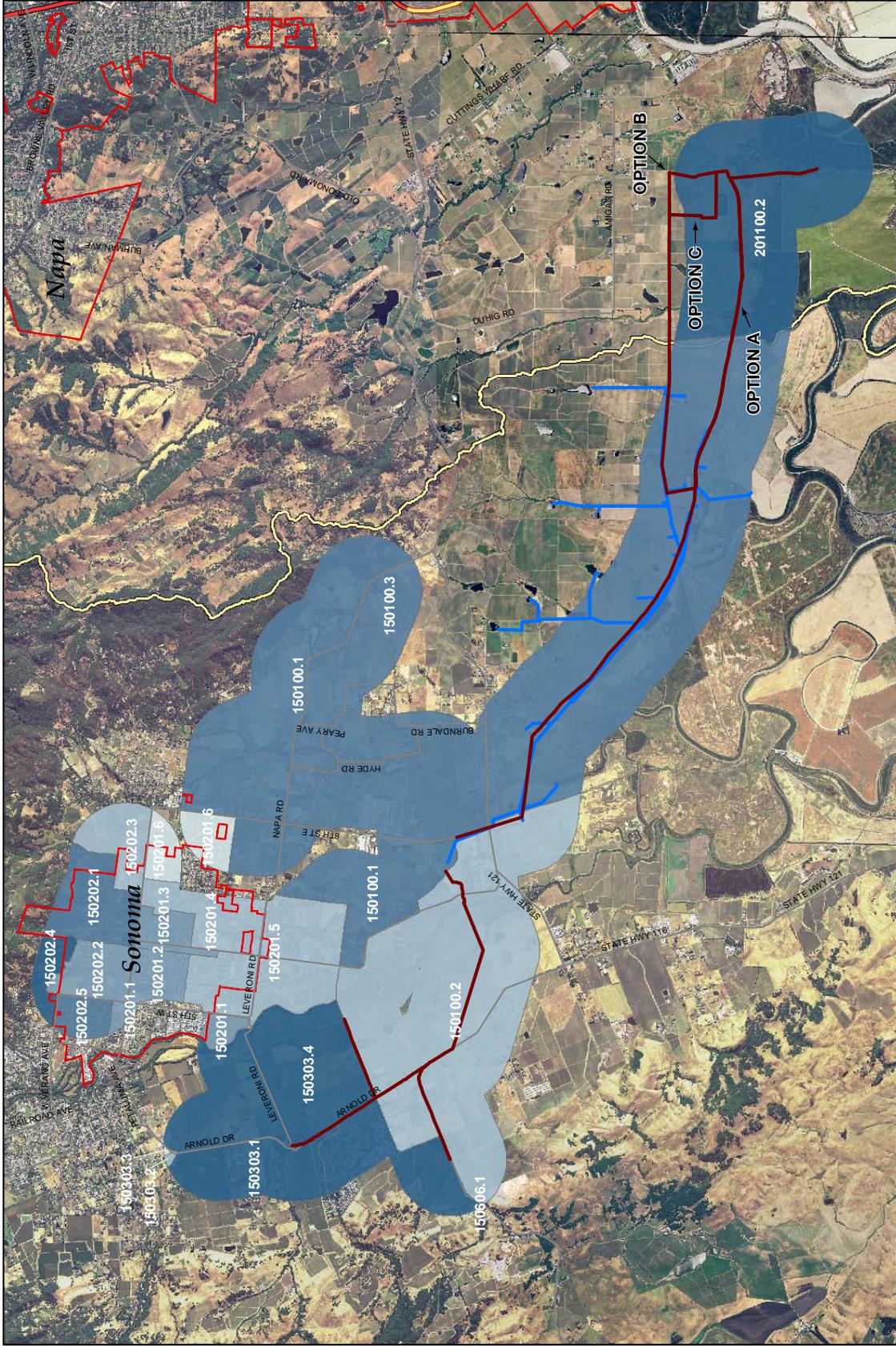
Median Household Income - Marin County

- Local Project Pipelines
- Existing Pipelines
- Urban Growth Boundary
- < \$38,000
- \$38,000 - \$44,999
- \$45,000 - \$54,999
- \$55,000 - \$64,999
- > \$65,000

SOURCE: CDM, 2008

NBWA North Bay Water Recycling Program . 206088.01

Figure 3.15-5
Median Household Incomes within Half-Mile of
the Project Area in Marin County (Phase 1)



SOURCE: CDM

NBWRA North Bay Water Recycling Program, 206088

Figure 3.15-6
 Median Household Incomes within Half-Mile
 of the Project Area in Sonoma County (Phase 1)

Napa SD

Figure 3.15-7 shows median household income levels within a one-half mile of the pipeline alignments in Napa County. Census block 200300.4 showed median household of \$35,026, which was less than the threshold. Project construction impacts would occur in Census blocks 200300.3, 200300.4, 200300.5, 200900.1, 201002.1, and 201400.2. According to the Census data, median household incomes were greater than the threshold for all the Census blocks except for the Census block 200300.4, which had a median household income of \$35,026 (slightly lower than the threshold). Disadvantaged communities along Imola Avenue would be potentially affected by project construction. However, the pipeline construction would occur in other areas with both low-income and higher income neighborhoods and would not disproportionately affect the low-income communities along Imola Avenue. No impact is expected.

Alternative 1: Basic System (Program level)

Compared to the CEQA Baseline, the Basic System projects would provide 83 miles of new pipeline, 2,158 HP of pumping capacity, treatment facilities providing 7.8 mgd of tertiary capacity, and 1,020 AF of storage. Compared to the No Action Alternative (NEPA Baseline), Basic System would provide 65 miles of new pipeline, 1,246 HP of pumping capacity, treatment facilities providing 7.3 mgd of tertiary capacity, and 955 AF of storage.

The impacts to potential low-income communities under the Basic System would be equivalent to and greater than the impacts discussed for Phase 1, in proportion to the facilities constructed under this alternative. A discussion of impacts by Member Agency is provided below.

LGVSD/NMWD and Novato SD/NMWD

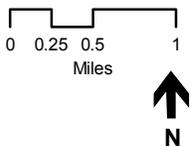
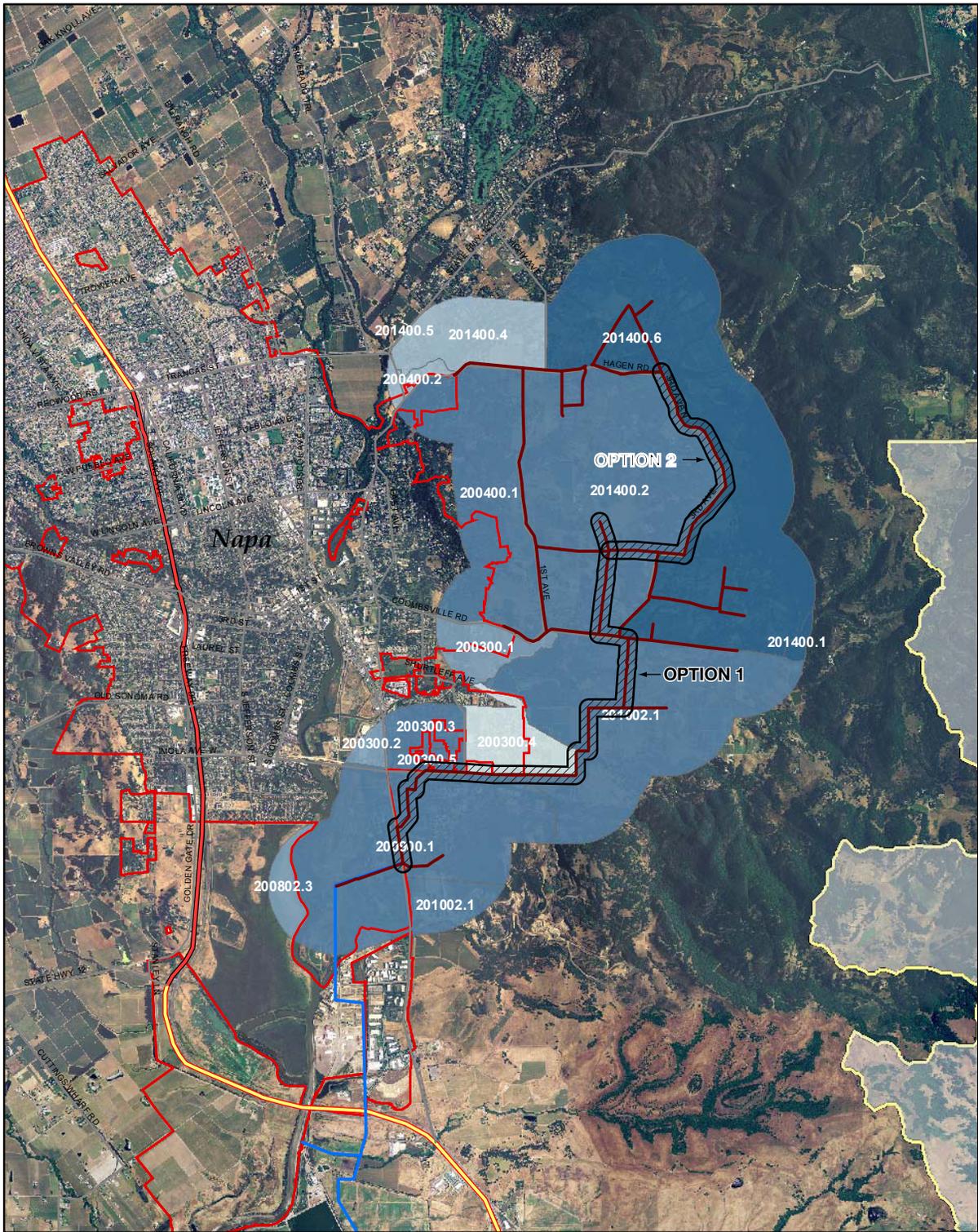
In Marin County, Census tract 1011 could be affected by construction activities under the Basic System. Median household income in Census tract 1011 was \$99,899, which is substantially higher than the threshold of \$38,000. There would be no low-income communities in the action area, therefore no additional impact would occur.

SVCS

In Sonoma County, Census tracts 150302, 150303, and 1505 could be affected by construction activities under the Basic System. The median household incomes were \$46,807, \$53,373, and \$60,678 in the tracts respectively, which were higher than the threshold of \$38,000. There would be no low-income communities in the action area, therefore no additional impact would occur.

Napa SD

In Napa County, Census tract 2011 could be affected by construction activities under the Basic System. The median household income in the tract was \$71,696, which is substantially higher than the threshold of \$38,000. There would be no low-income communities in the action area, therefore no further impact would occur.



Median Household Income - Napa County

- Local Project Pipelines
- Existing Pipelines
- Urban Growth Boundary
- < \$38,000
- \$38,000 - \$44,999
- \$45,000 - \$54,999
- \$55,000 - \$64,999
- > \$65,000

SOURCE: CDM, 2008

NBWA North Bay Water Recycling Program . 206088.01
Figure 3.15-7
 Median Household Incomes within Half-Mile of the Project Area in Napa County (Phase 1)

Alternative 2: Partially Connected System (Program level)

Compared to the CEQA Baseline, the Partially Connected System would provide 139 miles of new pipeline, 3,454 HP of pumping capacity, treatment facilities providing 15.9 mgd of tertiary capacity, and 2,220 AF of storage. Compared to the No Action Alternative (NEPA Baseline), the Partially Connected System would provide 122 miles of new pipeline, 2,542 HP of pumping capacity, treatment facilities providing 15.4 mgd of tertiary capacity, and 2,155 AF of storage.

The impacts to potential low-income communities under the Partially Connected System would be equivalent to and greater than the impacts discussed for the Basic System, in proportion to the facilities constructed under this alternative. A discussion of impacts by Member Agency is provided below.

LGVSD/ NMWD and Novato SD/ NMWD

In Marin County, Census tracts 106001, 106002, and 1082 could be affected by construction activities under the Partially Connected System. Median household income was \$63,974 in Census tract 106001, \$76,564 in Census tract 106002, and \$57,029 in Census tract 1082, which are higher than the threshold of \$38,000. There would be no low-income communities in the action area, therefore no additional impact would occur.

SVCS

In Sonoma County, Census tracts 1501 and 150606 could be affected by construction activities under the Partially Connected System. Median household income was \$55,000 in Census tract 1501, and \$77,281 in Census tract 150606, which are higher than the threshold of \$38,000. There would be no low-income communities in the action area, therefore no additional impact would occur.

Napa SD

In Napa County, Census tracts 200801 and 200802 could be affected by construction activities under the Partially Connected System. The median household incomes in both the tracts were \$51,442 and \$51,442 respectively, which are higher than the threshold of \$38,000. There would be no low-income communities in the action area, therefore no additional impact would occur.

Alternative 3: Fully Connected System (Program level)

Compared to the CEQA Baseline, the Fully Connected System would provide 153 miles of new pipeline, 5,021 HP of pumping capacity, treatment facilities providing 20.8 mgd of tertiary capacity, and 2,220 AF of storage. Compared to the No Action Alternative (NEPA Baseline), the Fully Connected System would provide 135 miles of new pipeline, 3,907 HP of pumping capacity, treatment facilities providing 20.3 mgd of tertiary capacity, and 2,155 AF of storage.

The impacts associated with the Fully Connected System would be equivalent to the impacts discussed for the Partially Connected System. There would be no additional Census tracts affected by the Fully Connected System relative to the Partially Connected System, therefore no additional impacts would occur.

Impact 3.15.3: Increased water and sewer fees. The NBWRP would provide recycled water and could result in an increase water and sewer fees that would disproportionately affect minority and low-income populations. (No Impact)

The NBWRP would provide recycled water to the communities that can connect to the distribution pipelines in the action area including minority and non-minority population. Costs associated with the project are discussed in **Section 3.16, Socioeconomics**. The member agencies would likely increase customer water and sewer fees to repay a portion of the loans acquired through implementation of the NBWRP. A fee would also be charged for use of the recycled water generated by the NBWRP. As described in **Section 3.16, Socioeconomics**, the exact funding mechanisms for the NBWRP are yet to be determined, therefore potential changes in customers' sewer fees cannot be evaluated. The recycled water use fee and the level of increase in the water or sewer fees are not known at this time. The member agencies would apply the recycled water use fees to the users who would receive the recycled water in the action area. The fees or any increased water and sewer rates would be applied equally to all customers in the service areas (i.e., not only to minority and low-income populations). As discussed in **Impacts 3.15.1 and 3.15.2**, the action area does not include a high number of minority and low-income populations. Therefore, there would be no disproportionate increase in water and sewer fees on low-income populations.

No Project Alternative

The NBWRP would not be implemented under the No Project Alternative, therefore no impacts would occur. For a discussion of the No Project under future conditions, see No Action Alternative below.

No Action Alternative

Under the No Action Alternative, which includes consideration of future conditions, it is likely that a subset of water recycling projects would be implemented by the Member Agencies on an individual basis, without the benefit of regional coordination or federal funding.

For comparison to the Action Alternatives, it is estimated that approximately 17.5 miles of new pipeline, 912 HP of pumping capacity, treatment facilities providing 0.5 mgd of tertiary capacity, and approximately 65 AF of storage would be constructed by Member Agencies on an individual basis (see **Chart 3.15-1, No Action**).

Under future baseline (2020) conditions, the low-income and minority populations within the region are anticipated to change in accordance with anticipated development allowed under the approved General Plans within the region. A discussion of individual Member Agencies is provided below.

LGVSD/NMWD and Napa SD

There would be no project facilities constructed under the No Action Alternative, therefore no impact would occur.

Novato SD/NMWD and SVCSD

The member agencies would construct portions of the recycled water projects proposed in the Marin and Sonoma counties under the No Action Alternative. The impact would be similar to that discussed above.

Phase 1 (Project level)

Compared to the CEQA Baseline, Phase 1 projects would provide 46 miles of new pipeline, 1,655 HP of pumping capacity, treatment facilities providing 6.4 mgd of tertiary capacity, and 65 AF of storage. Compared to the No Action Alternative (NEPA Baseline), Phase 1 projects would provide 28 miles of new pipeline, 743 HP of pumping capacity, treatment facilities providing 5.9 mgd of tertiary capacity, and no additional storage.

The cost impacts related to water and sewer fees under Phase 1 would be similar to the impacts discussed for the No Action Alternative, although incrementally greater in proportion to the facilities constructed under this alternative. Refer to **Section 3.16, Socioeconomics**, for implementations costs for Phase 1 and all the Alternatives. The impacts would be similar to those discussed above, although incrementally greater.

Alternative 1: Basic System (Program level)

Compared to the CEQA Baseline, the Basic System projects would provide 83 miles of new pipeline, 2,158 HP of pumping capacity, treatment facilities providing 7.8 mgd of tertiary capacity, and 1,020 AF of storage. Compared to the No Action Alternative (NEPA Baseline), Basic System would provide 65 miles of new pipeline, 1,246 HP of pumping capacity, treatment facilities providing 7.3 mgd of tertiary capacity, and 955 AF of storage.

The cost impacts related to water and sewer fees under the Basic System would be similar to the impacts discussed for Phase 1, although incrementally greater in proportion to the facilities constructed under this alternative. Refer to **Section 3.16, Socioeconomics**, for implementations costs for Phase 1 and all the Alternatives. The impacts would be similar to those discussed above, although incrementally greater.

Alternative 2: Partially Connected System (Program level)

Compared to the CEQA Baseline, the Partially Connected System would provide 139 miles of new pipeline, 3,454 HP of pumping capacity, treatment facilities providing 15.9 mgd of tertiary capacity, and 2,220 AF of storage. Compared to the No Action Alternative (NEPA Baseline), the Partially Connected System would provide 122 miles of new pipeline, 2,542 HP of pumping capacity, treatment facilities providing 15.4 mgd of tertiary capacity, and 2,155 AF of storage.

The cost impacts related to water and sewer fees under the Partially Connected System would be similar to the impacts discussed for the Basic System, although incrementally greater in proportion to the facilities constructed under this alternative. Refer to **Section 3.16, Socioeconomics**, for implementations costs for Phase 1 and all the Alternatives. The impacts would be similar to those discussed above, although incrementally greater.

Alternative 3: Fully Connected System (Program level)

Compared to the CEQA Baseline, the Fully Connected System would provide 153 miles of new pipeline, 5,021 HP of pumping capacity, treatment facilities providing 20.8 mgd of tertiary capacity, and 2,220 AF of storage. Compared to the No Action Alternative (NEPA Baseline), the Fully Connected System would provide 135 miles of new pipeline, 3,907 HP of pumping capacity, treatment facilities providing 20.3 mgd of tertiary capacity, and 2,155 AF of storage.

The cost impacts related to water and sewer fees under the Fully Connected System would be similar to the impacts discussed for the Partially Connected System, although incrementally greater in proportion to the facilities constructed under this alternative. Refer to **Section 3.16, Socioeconomics**, for implementations costs for Phase 1 and all the Alternatives.

Impact 3.15.4: Impact on Farm Workers. The NBWRP would provide recycled water and could disproportionately affect minority populations. (No Impact)

Approximately 40 percent of all farm workers are foreign-born, which mostly originate in rural communities in Latin America, principally Mexico (USDA, 2008). The NBWRP would increase agricultural production, which would increase farm employment. The increase in farm jobs would affect both minority and non-minority populations and would not cause a disproportionate impact. The agricultural lands would be irrigated with recycled water instead of groundwater or surface water supplies (see **Section 3.4, Water Quality**, for public health issue related to recycled water use). Bilingual signage would be installed to indicate recycled water use. No disproportionate impact is expected.

No Project Alternative

No project would be implemented under the No Project Alternative, therefore no impact would occur. For a discussion of the No Project under future conditions, see No Action Alternative below.

No Action Alternative

Under the No Action Alternative, which includes consideration of future conditions, it is likely that a subset of water recycling projects would be implemented by the Member Agencies on an individual basis, without the benefit of regional coordination or federal funding.

For comparison to the Action Alternatives, it is estimated that approximately 17.5 miles of new pipeline, 912 HP of pumping capacity, treatment facilities providing 0.5 mgd of tertiary capacity, and approximately 65 AF of storage would be constructed by Member Agencies on an individual basis (see **Chart 3.15-1, No Action**).

Under future baseline (2020) conditions, the minority population within the region is anticipated to change in accordance with anticipated development allowed under the approved General Plans within the region. A discussion of individual Member Agencies is provided below.

Some portions of the recycled water projects would be implemented under No Action Alternative and impacts would be associated with SVCSD and Napa SD as discussed below. **Table 3.15-10** provides the new acres of vineyard production under the No Action Alternative.

**TABLE 3.15-10
NEW ACRES OF VINEYARD PRODUCTION**

	No Action Alternative	Phase 1	Basic System	Partially Connected System	Fully Connected System
Novato SD					
New acres of vineyard production	-	-	-	841	3,564
Anticipated number of new farm jobs	-	-	-	<80	<240
SVCSD					
New acres of vineyard production	1,954	3,195	4,039	6,763	6,280
Anticipated number of new farm jobs	<160	<240	<320	<480	<480
Napa SD					
New acres agricultural production	417	3,085	5,947	8,370	8,370
Anticipated number of new farm jobs	<80	~240	<480	<640	<640

NOTE: There would be no new farm production for LGVSD, therefore is not listed in the table.

SOURCE: CDM, 2008; UCCE, 2008

LGVSND/NMWD and Novato SD/NMWD

Farm worker employment under the No Action Alternative would remain similar to existing conditions. Agricultural production would continue at existing levels and farmers would employ farm workers to meet labor demands. There would be no disproportionate impacts to minority farm workers.

SVCSD

As shown in Table 3.15-10, under the No Action Alternative, vineyard production would increase by 1,954 acres in Sonoma County. New production would require additional farm labor and provide employment to farm workers. Based on University of California Crop Extension estimates (2003), labor requirements for wine grapes production would be about 80 full time workers per 1,000 acres, therefore approximately 160 new farm worker jobs would be created. The increase in farm jobs would affect both minority and non-minority populations and would not cause a disproportionate impact to minority farm workers. The agricultural lands would be irrigated with recycled water instead of groundwater or surface water supplies (see **Section 3.4, Water Quality**, for public health issue related to recycled water use). Bilingual signage would be installed to indicate recycled water use. No disproportionate impact is expected.

Napa SD

There would be no project facilities constructed under the No Action Alternative, therefore no impact would occur.

Phase 1 (Project level)

Compared to the CEQA Baseline, Phase 1 projects would provide 46 miles of new pipeline, 1,655 HP of pumping capacity, treatment facilities providing 6.4 mgd of tertiary capacity, and 65 AF of storage. Compared to the No Action Alternative (NEPA Baseline), Phase 1 projects would provide 28 miles of new pipeline, 743 HP of pumping capacity, treatment facilities providing 5.9 mgd of tertiary capacity, and no additional storage.

The impacts related to farm workers under Phase 1 would be equivalent to and greater than the impacts discussed for the No Action Alternative, in proportion to the facilities constructed under this alternative. A discussion of impacts by Member Agency is provided below.

LGVSD/NMWD and Novato SD/NMWD

The NBWRP does not include any agricultural land in Marin County. Therefore, no impact would occur in Marin County.

SVCS

Under Phase 1, the NBWRP would require greater than 240 farm employees (see Table 3.15-10). The change in the farm employment would be greater than that discussed under No Action Alternative; however there would be no disproportionate impacts to minority populations. No impact is expected.

Napa SD

The impacts under No Action Alternative for Napa SD would be similar to those discussed for SVCS for approximately 80 new farm jobs that would be created. Please refer to Table 3.15-10. There would be no impact.

Alternative 1: Basic System (Program level)

Compared to the CEQA Baseline, the Basic System projects would provide 83 miles of new pipeline, 2,158 HP of pumping capacity, treatment facilities providing 7.8 mgd of tertiary capacity, and 1,020 AF of storage. Compared to the No Action Alternative (NEPA Baseline), Basic System would provide 65 miles of new pipeline, 1,246 HP of pumping capacity, treatment facilities providing 7.3 mgd of tertiary capacity, and 955 AF of storage.

The impacts related to farm workers under the Basic System would be equivalent to and greater than the impacts discussed for Phase 1, in proportion to the facilities constructed under this alternative. A discussion of impacts by Member Agency is provided below.

LGVSD/NMWD and Novato SD/NMWD

See discussion under Phase 1. No impact would occur.

SVCS D

Please refer to the discussion above. Under the Basic System, there would be 320 farm employees required; therefore the change in the farm worker employment would be greater under the Basic System as compared to the No Action Alternative. However, the change in the employment would not disproportionately affect minority populations (see discussion above). No impact would occur.

Napa SD

The impacts associated with the Basic System would be equivalent to the impacts discussed for Phase 1. Any additional vineyards served by the Basic System would require new farm employees as shown in Table 3.15-10 in addition to Phase 1. However, there would be no disproportionate effect on farm worker employment (see discussion under No Action Alternative and Phase 1).

Alternative 2: Partially Connected System (Program level)

Compared to the CEQA Baseline, the Partially Connected System would provide 139 miles of new pipeline, 3,454 HP of pumping capacity, treatment facilities providing 15.9 mgd of tertiary capacity, and 2,220 AF of storage. Compared to the No Action Alternative (NEPA Baseline), the Partially Connected System would provide 122 miles of new pipeline, 2,542 HP of pumping capacity, treatment facilities providing 15.4 mgd of tertiary capacity, and 2,155 AF of storage.

The impacts related to farm workers under the Partially Connected System would be equivalent to and greater than the impacts discussed for the Basic System, in proportion to the facilities constructed under this alternative. A discussion of impacts by Member Agency is provided below.

Novato SD/NMWD

Under the Partially Connected System, 841 acres of new vineyard production would occur that would require less than 80 new farm employees (see Table 3.15-10). However, the increase in employment would affect both minority and non-minority populations. No disproportionate impact to minority population would occur. No impact is expected.

SVCS D and Napa SD

Please refer to the impact discussion under the Basic System and Table 3.15-10 for the new farm jobs required. The impact would be similar to that discussed above. No impact would occur.

Alternative 3: Fully Connected System (Program level)

Compared to the CEQA Baseline, the Fully Connected System would provide 153 miles of new pipeline, 5,021 HP of pumping capacity, treatment facilities providing 20.8 mgd of tertiary capacity, and 2,220 AF of storage. Compared to the No Action Alternative (NEPA Baseline), the Fully Connected System would provide 135 miles of new pipeline, 3,907 HP of pumping capacity, treatment facilities providing 20.3 mgd of tertiary capacity, and 2,155 AF of storage.

The impacts related to farm workers under the Fully Connected System would be equivalent to and greater than the impacts discussed for the Partially Connected System, in proportion to the facilities constructed under this alternative. A discussion of impacts by Member Agency is provided below.

Novato SD/ NMWD, SVCSD, Napa SD

Please refer to the discussed under the Partially Connected System and Table 3.15-10 for the new farm jobs required. The impact would be similar to that discussed above. No impact would occur.

3.15.4 Impact Summary by Service Area

Table 3.15-11 provides a summary of potential environmental justice impacts associated with implementation of the NBWRP.

**TABLE 3.15-11
POTENTIAL IMPACTS AND SIGNIFICANCE – ENVIRONMENTAL JUSTICE**

Proposed Action	Impact by Member Agency Service Areas			
	LGVSD/ NMWD	Novato SD/ NMWD	SVCSD	Napa SD/ Napa County
Impact 3.15.1: Disproportionate impacts to minority population from project construction.				
No Project Alternative	NI	NI	NI	NI
No Action Alternative	NI	NI	NI	NI
Phase 1	NI	NI	NI	NI
Alternative 1: Basic System	NI	NI	NI	NI
Alternative 2: Partially Connected System	NI	NI	NI	NI
Alternative 3: Fully Connected System	NI	NI	NI	NI
Impact 3.15.2: Disproportionate impacts to low-income population from project construction.				
No Project Alternative	NI	NI	NI	NI
No Action Alternative	NI	NI	NI	NI
Phase 1	NI	NI	NI	NI
Alternative 1: Basic System	NI	NI	NI	NI
Alternative 2: Partially Connected System	NI	NI	NI	NI
Alternative 3: Fully Connected System	NI	NI	NI	NI
Impact 3.15.3: Disproportionate impacts from increased water or sewer fees.				
No Project Alternative	NI	NI	NI	NI
No Action Alternative	NI	NI	NI	NI
Phase 1	NI	NI	NI	NI
Alternative 1: Basic System	NI	NI	NI	NI
Alternative 2: Partially Connected System	NI	NI	NI	NI
Alternative 3: Fully Connected System	NI	NI	NI	NI

TABLE 3.15-11 (Continued)
POTENTIAL IMPACTS AND SIGNIFICANCE – ENVIRONMENTAL JUSTICE

Proposed Action	Impact by Member Agency Service Areas			
	LGVSD/ NMWD	Novato SD/ NMWD	SVCSD	Napa SD/ Napa County
Impact 3.15.4: Disproportionate impacts to farm workers.				
No Project Alternative	NI	NI	NI	NI
No Action Alternative	NI	NI	NI	NI
Phase 1	NI	NI	NI	NI
Alternative 1: Basic System	NI	NI	NI	NI
Alternative 2: Partially Connected System	NI	NI	NI	NI
Alternative 3: Fully Connected System	NI	NI	NI	NI

NI = No (Environmental Justice) Impact

3.15.5 References

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