4.4  HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential impacts of the Miller/Knox Regional Shoreline (Miller/Knox or park) Land Use Plan Amendment (LUPA) related to hazardous materials and public health. The evaluation provided in this section is based on public databases containing lists of known and significant hazardous waste/hazardous material sites, such as records from the State Water Resources Control Board (SWRCB) GeoTracker and Department of Toxic Substances Control (DTSC) EnviroStor.

No scoping comments related to hazards and hazardous materials were received in response to the notice of preparation (NOP).

4.4.1  Environmental Setting

For purposes of this section, the term “hazardous materials” refers to both hazardous substances and hazardous wastes. A “hazardous material” is defined in the Code of Federal Regulations (CFR) as “a substance or material that … is capable of posing an unreasonable risk to health, safety, and property when transported in commerce” (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

“Hazardous material” means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. “Hazardous materials” include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

“Hazardous wastes” are defined in California Health and Safety Code Section 25141(b) as wastes that:

... because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

POTENTIAL RECEPTEORS/EXPOSURE

The sensitivity of potential receptors in areas of known or potential hazardous materials contamination is dependent on several factors, the primary factor being the potential pathway for human exposure. Exposure pathways include external exposure, inhalation, and ingestion of contaminated soil, air, water, or food. The magnitude, frequency, and duration of human exposure can cause a variety of health effects, from short-term acute symptoms to long-term chronic effects. Potential health effects from exposure can be evaluated in a health risk assessment. The main elements of exposure assessments typically include:

- evaluation of the fate and transport processes for hazardous materials at a given site,
- identification of potential exposure pathways,
- identification of potential exposure scenarios,
- calculation of representative chemical concentrations, and
- estimation of potential chemical uptake.
Sensitive receptors in the area include adjacent residences in the Brickyard Cove development as well as single-family homes in Point Richmond. Additionally, the Washington Elementary School (565 Wine Street, Richmond, CA) is located 0.21 miles north of Miller/Knox. There are no other existing or proposed schools within one-quarter mile of Miller/Knox.

**MILLER/KNOX LAND USE HISTORY**

In the vicinity of Miller/Knox land uses are characterized by a mix of open space, residential, recreational, and former industrial uses. Historical uses at Miller/Knox involved shipping, rail, and industrial activities dating back to early 1900s. Ferry Point was the western terminus of the Atchinson, Topeka, and Santa Fe, now BNSF railroad, transcontinental railroad system. For more information on the history and historic land uses at Miller/Knox, refer to Subsection 4.5.1 in Section 4.5, “Cultural and Tribal Cultural Resources.”

**POTENTIAL CONTAMINATION AT MILLER/KNOX**

**Documented Sites of Contamination**

In California, regulatory databases listing hazardous materials sites provided by numerous federal, state, and local agencies are consolidated in the “Cortese List” pursuant to Government Code Section 65962.5. The Cortese List is located on the California Environmental Protection Agency’s (Cal EPA) website and is a compilation of the following lists:

- list of Hazardous Waste and Substances sites from DTSC’s EnviroStor database;
- list of Leaking Underground Storage Tank (LUST) sites from SWRCB’s GeoTracker database;
- list of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit;
- list of active Cease and Desist Orders and Cleanup and Abatement Orders from the SWRCB; and
- list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC and listed in the EnviroStor database.

The SWRCB GeoTracker database includes LUSTs; permitted underground storage tanks; and spills, leaks, investigations, and cleanup database sites. The DTSC EnviroStor database includes federal and state response sites; voluntary, school, and military cleanups and corrective actions; and permitted sites. The five databases cited above identify sites with suspected and confirmed releases of hazardous materials to the subsurface soil and/or groundwater. The statuses of these sites change as identification, monitoring, and clean-up of hazardous materials progress. Typically, a site is closed once it has been demonstrated that existing site uses combined with the levels of identified contamination on-site present no significant risk to human health or the environment.

The lists and databases comprising the Cortese List were reviewed to identify any active clean-up sites at or within 0.25 miles of Miller/Knox. Statuses of Cortese List sites are updated periodically and would need to be revisited before ground disturbing activities associated with the LUPA recommendations. A records search of the SWRCB and DTSC databases identified one site of documented contamination located within Miller/Knox, and 16 sites within 0.25 mile of Miller/Knox, as disclosed in Table 4.4-1 below (SWRCB 2018; DTSC 2018).
Table 4.4-1  Regulatory Hazardous Waste Sites Listed within 0.25-mile of Miller/Knox

<table>
<thead>
<tr>
<th>Site Name/Address</th>
<th>Chemicals of Concern</th>
<th>Distance from Miller/Knox (miles)</th>
<th>Site Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miller/Knox Park</td>
<td>Gasoline</td>
<td>0</td>
<td>Case completed and closed as of April 14, 1995. Underground storage tanks were removed.</td>
</tr>
<tr>
<td>Regulated Sites Listed within Miller/Knox</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burmah Castrol, Inc</td>
<td>Diesel and motor oil</td>
<td>0.23</td>
<td>Certified O&amp;M, land use restrictions only as of August 29, 1997. This site is a petroleum lubricant storage and transfer facility. Volatile organic compounds were found in the shallow groundwater and seeping into the Richmond Channel. A remedial action plan was approved. The site was subsequently certified on February 5, 1988 but was later decertified in May 1996, when high concentrations of 1,2-dichloroethane (1,2-DCA) were found. The contaminated soil was excavated and backfilled with clean fill and bentonite slurry. Annual inspection reports conclude that the implemented remedy for the site continues to be protective of public health, safety, and the environment.</td>
</tr>
<tr>
<td>Parr Richmond Terminal #1</td>
<td>None specified</td>
<td>0.05</td>
<td>Case completed and closed as of February 12, 2013. Investigation of potential site contamination that may have occurred from activities undertaken under a former Department of Defense (World War II) lease of the site.</td>
</tr>
<tr>
<td>Great Western Chemical Co.</td>
<td>Vinyl chloride and 1,2-dichloroethylene (cis)</td>
<td>0.16</td>
<td>The site was used as a major ship construction site during World War II. The primary business of the Great Western Chemical Co. was chemical distribution. Chlorinated solvents were found in shallow groundwater on-site. Groundwater monitoring and remediation activities commenced and approval for groundwater monitoring well removal was issued on November 6, 2017.</td>
</tr>
<tr>
<td>Richmond Vehicle Facility – BNSF Railway</td>
<td>Under investigation</td>
<td>0.16</td>
<td>The site is part of the BNSF Railway system. It is a 36-acre site with 47 rail spots and 3,190 vehicle bays, and railroad switching capability 7 days a week. It is under security and restricted access. A site screening assessment was prepared on April 5, 2012 and it was determined that the site was an unlikely source/contributor to the unknown chlorinated solvent plume to the south. Thus, DTSC recommended no further action at this site.</td>
</tr>
<tr>
<td>Seacliff Marina</td>
<td>Lead, mercury and compounds, asbestos containing materials</td>
<td>0.23</td>
<td>Certified O&amp;M, land use restrictions only as of June 20, 2002. Seacliff Marina is a 12-acre site. In 1942, the site began operating as a shipyard to the Port of Richmond, which was used for ship repair and maintenance, scrap metal and salvage yards, and auto importers. DTSC provided oversight for remedial activities that were performed in 1998 and 2002. Impacted sediments were excavated and encapsulated off site. The site was cleaned up to residential standards for unrestricted use with the exception of a few specific parcels. Covenants to Restrict Use of Property to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials were placed and recorded for these parcels.</td>
</tr>
<tr>
<td>Canal Boulevard Industrial Parks</td>
<td>Under Investigation</td>
<td>0.06</td>
<td>Three warehouse complexes used by various commercial and light industrial operations. A site screening assessment was prepared on December 23, 2011 and it was determined that there were no records of hazardous substances releases at the site. No further action required as of July 26, 2012.</td>
</tr>
<tr>
<td>1003 Canal Boulevard</td>
<td>Trichloroethylene, vinyl chloride</td>
<td>0.12</td>
<td>A site screening was performed for the industrial properties which recommended further evaluation, including sampling, because of the presence of chlorinated solvent groundwater contamination down-gradient of the site. No further action required as of March 19, 2013.</td>
</tr>
</tbody>
</table>
### Table 4.4-1  Regulatory Hazardous Waste Sites Listed within 0.25-mile of Miller/Knox

<table>
<thead>
<tr>
<th>Site Name/Address</th>
<th>Chemicals of Concern</th>
<th>Distance from Miller/Knox (miles)</th>
<th>Site Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferry Point</td>
<td>Solvents</td>
<td>0.03</td>
<td>Case completed and closed as of August 13, 2010. The property was purchased in 1899 by the Santa Fe Railway Company and has since been leased to a number of companies. Historical records and photographs indicate that at least 10 above ground and underground storage tanks existed on the site at one time or another. In 1990 Levine-Fricke conducted a reconnaissance level soil and groundwater sampling program. The investigation sampled 21 targeted areas of concern and 17 random areas on the site. A number of samples were taken from locations bordering the adjacent property owned by Bray Oil. Petroleum hydrocarbons, pollutant metals and a variety of VOCs were discovered throughout the site.</td>
</tr>
<tr>
<td>Seaciff Estates Construction Project</td>
<td>None specified</td>
<td>0.07</td>
<td>Open and inactive as of October 28, 2004.</td>
</tr>
<tr>
<td>Seaciff Marina</td>
<td>None specified</td>
<td>0.13</td>
<td>Case completed and closed as of June 3, 2009.</td>
</tr>
<tr>
<td>Seaciff Villas</td>
<td>None specified</td>
<td>0.1</td>
<td>Case completed and closed as of June 3, 2009.</td>
</tr>
<tr>
<td>Richmond Terminal 1</td>
<td>Diesel, polynuclear aromatic hydrocarbons, tetrachloroethylene, vinyl chloride</td>
<td>0.01</td>
<td>Assessment and interim remedial action as of February 2, 2005. Terminal One was developed between 1915 and 1918 as a port facility for shipping and industrial activities until the late 1980s. It was mainly used as a storage facility, cargo and bulk liquids were transferred from ships to trucks and rail cars on the site. There is a proposed redevelopment consisting of combined multi-family residential and recreational area, and some recent sampling work has been performed.</td>
</tr>
<tr>
<td>Safety Kleen (Formerly BP Lubricants)</td>
<td>Benzene, diesel, heating oil/fuel oil, other solvent or non-petroleum hydrocarbon, vinyl chloride</td>
<td>0.09</td>
<td>Case open. In the World War II era the site was a shipyard. The docks were backfilled with fill. Between 1971 and 1981, the property was used for the storage and distribution of petrochemicals by Kodak. In 1981, BCI purchased the facility to use as a bulk oil storage, blending and packaging facility. BCI changed its name to Castrol, and is now BP Lubricants. The site is currently in the monitoring phase for historic hydrocarbon and solvent releases. There is a deed restriction on the site. A Revised Groundwater Toxicity Work Plan was submitted on November 15, 2017 to comply with the Site Cleanup Requirements (SCR) Order Number R2-2017-0038, which requires Safety Kleen to evaluate the risk to ecological receptors from oil seeps discharging to surface water in the Santa Fe Channel. The Work Plan was reviewed on January 8, 2018 by the RWQCB and concurrence was recommended.</td>
</tr>
<tr>
<td>Santa Fe Railway Richmond YD#2</td>
<td>Diesel</td>
<td>0.16</td>
<td>Case completed and closed as of September 7, 1999.</td>
</tr>
</tbody>
</table>

Sources: SWRCB 2018, DTSC 2018
HAZARDOUS BUILDING MATERIALS

Many older buildings contain building materials that can be hazardous to people and the environment once disturbed. These materials include lead-based paint, asbestos-containing materials (ACM), and polychlorinated biphenyls (PCBs). Before the U.S. Environmental Protection Agency (EPA) ban in 1978, lead-based paint was commonly used on interior and exterior surfaces of buildings. Through such disturbances as sanding and scraping activities, renovation work, or gradual wear and tear, old peeling paint, or paint dust particulates have been found to contaminate surface soils or cause lead dust to migrate and affect indoor air quality. Exposure to residual lead can cause severe adverse health effects, especially in children.

Asbestos is a naturally-occurring fibrous material that was extensively used as a fireproofing and insulating agent in building construction materials before such uses were banned by the U.S. EPA in the 1970s. ACM were commonly used for insulation of heating ducts as well as ceiling and floor tiles. Similar to lead-based paint, ACM contained within building materials presents no significant health risk because there is no exposure pathway. However, once these tiny fibers are disturbed, they can become airborne and become a respiratory hazard. Once they are inhaled, they can become lodged in the lung potentially causing lung disease or other pulmonary complications. State laws and regulations prohibit emissions of asbestos from asbestos-related manufacturing, demolition, or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to federal and local governmental agencies before beginning renovation or demolition that could disturb asbestos. The San Francisco Bay Area Air Quality Management District (BAAQMD) has the authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and is to be notified ten days in advance of any proposed demolition or abatement work. See Regulatory Setting, below, for further regulations regarding asbestos removal.

PCBs are organic oils that were formerly used primarily as insulators in many types of electrical equipment including transformers and capacitors. After PCBs were determined to be a carcinogen in the mid to late 1970s, the U.S. EPA banned PCB use in most new equipment and began a program to phase out certain existing PCB-containing equipment. Fluorescent lighting ballasts manufactured after January 1, 1978 do not contain PCBs. Spent fluorescent light tubes, thermostats, and other electrical equipment contain heavy metals such as mercury that, if disposed of in landfills, can leach into soil or groundwater. Lighting tubes typically contain concentrations of mercury that may exceed regulatory thresholds for hazardous waste and, as such, must be managed in accordance with hazardous waste regulations. Elemental mercury waste is considered hazardous. Mercury can also be present in the plumbing of older buildings in which mercury-containing equipment has been used.

DREDGED MATERIALS

Dredged sediments from the San Francisco Bay can be contaminated with a variety of pollutants, such as mercury other metals, PCBs, Polycyclic aromatic hydrocarbons, and compounds found in pesticides and herbicides (SFEI 2018). These pollutants are introduced to waterways from point sources such as sewer overflows, municipal and industrial discharges, and spills; or may be introduced from nonpoint sources such as surface runoff and atmospheric deposition.

WILDLAND FIRE

Miller/Knox is composed of vegetated open space areas that can get very dry during summer months, and is surrounded by urban areas to the north and south/southeast. Factors that contribute to the risk of fire include dense and fire-prone vegetation, poor access to fire-fighting equipment in the Ridgeland Planning Area, because of slopes or inadequate roads, lack of adequate water pressure and service in fire-prone locations, and seasonal atmospheric conditions that result in warm, dry fire seasons with strong afternoon winds. Wildfire hazard maps from the California Department of Forestry and Fire Protection (CAL FIRE) and compiled by the Association of Bay Area Governments show Miller/Knox as being within an area that is
considered a fire threatened community (ABAG 2017). The CAL FIRE Fire Hazard Severity Zones (FHSZ) maps rank land under local and state responsibility for wildland fire hazard. Miller/Knox is designated a Local Responsibility Area (Incorporated) and is not considered a very high FHSZ (CAL FIRE 2009). While these maps are not intended for site specific planning, they do indicate potential risks based on existing conditions. The District developed a Wildfire Hazard Reduction and Resource Management Plan (WHRRMP) in 2009, which is discussed in more detail in Section 4.4.2, “Regulatory Setting.”

ROAD AND RAILWAY HAZARDS

Transportation corridors present potential health and safety hazards related to contamination in the rights-of-way, accidental release of materials being transported, and air emissions generated by vehicles. Potential health risks associated with toxic air contaminants are discussed in Subsection 4.9.1 of Section 4.9, “Air Quality.”

Leaded gasoline was used as a vehicle fuel in the United States from the 1920s until the late 1980s. Although lead is no longer used in gasoline formulations, lead emissions from automobiles are a recognized source of contamination in soils along roadways (i.e., aerially-deposited lead). Surface and near-surface soils along heavily-used roadways have the potential to contain elevated concentrations of lead. Studies by the California Department of Transportation (Caltrans) suggest that hazardous waste levels of lead, if present, are generally found in soils within 30 feet of the edge of the pavement (DTSC 2009).

Contaminants common in railway corridors include wood preservatives (e.g., creosote and arsenic) and heavy metals in ballast rock. Ballast rock and soils associated with railroad tracks may also contain naturally-occurring asbestos. In addition, soils in and adjacent to these corridors might contain herbicide residues as a result of historical and ongoing weed-abatement practices.

AIRPORTS AND AIR HAZARDS

Airport influence areas are used in land use planning to identify areas commonly overflown by aircraft as they approach and depart an airport, or as they fly within established airport traffic patterns. Miller/Knox is not within an airport influence area. The nearest airport, Oakland International Airport, is located approximately 16 miles south of Miller/Knox.

4.4.2 Regulatory Setting

FEDERAL

Management of Hazardous Materials

Various federal laws address the proper handling, use, storage, and disposal of hazardous materials, as well as require measures to prevent or mitigate injury to health or the environment if such materials are accidentally released. The U.S. EPA is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are primarily contained in CFR Titles 29, 40, and 49. Hazardous materials, as defined in the Code, are listed in 49 CFR 172.101. Management of hazardous materials is governed by the following laws.

The Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) is the law under which U.S. EPA regulates hazardous waste from the time the waste is generated until its final disposal (“cradle to grave”).

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also called the Superfund Act or CERCLA) (42 USC 9601 et seq.) gives U.S. EPA authority to seek out parties responsible for releases of hazardous substances and ensure their cooperation in site remediation.

The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499; USC Title 42, Chapter 116), also known as SARA Title III or the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), imposes hazardous materials planning requirements to help protect local communities in the event of accidental release.

Transport of Hazardous Materials
The U.S. Department of Transportation (DOT) regulates interstate, intrastate, and foreign carriers of hazardous materials and is responsible for protecting the public from dangers associated with such transport. The federal hazardous materials transportation law, 49 USC 5101 et seq. (formerly the Hazardous Materials Transportation Act 49 USC 1801 et seq.) is the basic statute regulating transport of hazardous materials in the United States. Hazardous materials transport regulations are enforced by the Federal Highway Administration, the U.S. Coast Guard, the Federal Railroad Administration, and the Federal Aviation Administration.

U.S. Army Corps of Engineers
The U.S. Army Corps of Engineers (USACE) regulates water quality and potentially hazardous discharges through the Clean Water Act (33 U.S.C. § 1257, et seq.), the provisions of which are described in Subsection 4.3.2 of Section 4.3, “Hydrology and Water Quality.”

Worker Safety
The federal Occupational Safety and Health Administration (OSHA) is the agency responsible for assuring worker safety in the handling and use of chemicals identified in the Occupational Safety and Health Act of 1970 (Public Law 91-596, 9 USC 651 et seq.). OSHA has adopted numerous regulations pertaining to worker safety, contained in CFR Title 29. These regulations set standards for safe workplaces and work practices, including standards relating to the handling of hazardous materials and those required for excavation and trenching.

STATE
Management of Hazardous Materials
In California, both federal and state community right-to-know laws are coordinated through the Governor’s Office of Emergency Services. The federal law, SARA Title III or EPCRA, described above, encourages and supports emergency planning efforts at the state and local levels and to provide local governments and the public with information about potential chemical hazards in their communities. Because of the community right-to-know laws, information is collected from facilities that handle (produce, use, and store) hazardous materials above certain quantities. The provisions of EPCRA apply to four major categories:

- emergency planning,
- emergency release notification,
- reporting of hazardous chemical storage, and
- inventory of toxic chemical releases.

The corresponding State law is Chapter 6.95 of the California Health and Safety Code (Hazardous Materials Release Response Plans and Inventory). DTSC, a division of Cal EPA, has primary regulatory responsibility over hazardous materials in California, working in conjunction with U.S. EPA to enforce and implement
hazardous materials laws and regulations. As required by Section 65962.5 of the California Government Code, DTSC maintains a hazardous waste and substances site list for the State, known as the Cortese List. Individual regional water quality control boards (RWQCBs) are the lead agencies responsible for identifying, monitoring, and cleaning up LUSTs. The San Francisco RWQCB has jurisdiction over Miller/Knox.

Transport of Hazardous Materials and Hazardous Materials Emergency Response Plan

The State of California has adopted U.S. DOT regulations for the movement of hazardous materials originating within the state and passing through the state; state regulations are contained in 26 California Code of Regulations (CCR). State agencies with primary responsibility for enforcing state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and Caltrans. Together, these agencies determine container types used and license hazardous waste haulers to transport hazardous waste on public roads.

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous materials incidents is one part of the plan. The plan is managed by the Governor’s Office of Emergency Services, which coordinates the responses of other agencies in the Miller/Knox area.

Management of Construction Activities

Through the Porter-Cologne Water Quality Act and the National Pollution Discharge Elimination System (NPDES) program, RWQCBs have the authority to require proper management of hazardous materials during construction. For a detailed description of the Porter-Cologne Water Quality Act, the NPDES program, and the role of the San Francisco Bay RWQCB, see Subsection 4.3.2 of Section 4.3, “Hydrology and Water Quality.”

The SWRCB adopted the statewide NPDES General Permit in August 1999. The state requires that projects disturbing more than one acre of land during construction file a Notice of Intent with the RWQCB to be covered under this permit. Construction activities subject to the General Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters. A stormwater pollution prevention plan (SWPPP) must be developed and implemented for each site covered by the permit. The SWPPP must include best management plans (BMPs) designed to prevent construction pollutants from contacting stormwater and keep products of erosion from moving off-site into receiving waters throughout the construction and life of a project; the BMPs must address source control and, if necessary, pollutant control.

Worker Safety

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are typically more stringent than federal OSHA regulations and are presented in Title 8 of the CCR. Cal/OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

REGIONAL/LOCAL

East Bay Regional Park District Master Plan

The District Master Plan (2013) defines the overall mission and vision for the District and includes policies to preserve the natural, cultural, and scenic values of parks and trails. The following polices are relevant to hazards and hazardous materials:

- Policy KEP 4: The District will participate in efforts to protect scenic or cultural resources, develop larger, multi-agency open space preserves, provide recreational opportunities, protect agricultural use, avoid hazards, and plan for appropriate urban growth boundaries. The District will work with other jurisdictions to develop open space preservation plans and policies that recognize the District’s public interests in open space preservation and that are consistent with Board policy.
Policy RM 1: Climate change is expected to affect these resources in various ways. Changes in the ranges of various species, increased potential for wildfires and pests are anticipated with this change in the weather. In a manner consistent with the desire to conserve and enhance its resources, the District must closely track the impact of this phenomenon and if necessary, act to relocate or protect in-situ resources that are being degraded or potentially lost by this change.

Policy NRM 6: The District will evaluate exotic eucalyptus, Monterey pine and cypress plantations, shrubland or woodland areas occurring along the wildland/urban interface on a case-by-case basis for thinning, removal and/or conversion to a less fire-prone condition, following the methods laid out in the Fuels Management Plan. The District will minimize the widespread encroachment of exotic and/or invasive species such as coyote brush, poison oak, and broom, etc. on parkland and work to preserve native plants where feasible.

East Bay Regional Park District General Conditions
The District’s General Conditions contain the following rules regarding hazards and hazardous materials:

Article 22(b) Dust Control. Dust resulting from the Contractor’s performance of the work shall be controlled by the Contractor either by applying water or a dust palliative without additional costs to the District. The District Inspector has full authority to suspend work wholly or in part should the Contractor fail to perform to the satisfaction of the District Inspector.

Article 24 Hazardous Materials.

(a) Definition. As used herein, hazardous materials shall include all items listed in any statute, ordinance or publication defining hazardous materials including, but not limited to, common household items containing substances now or subsequently listed as a hazardous material or substance, chemicals, drugs, any materials used for laboratory analysis, nuclear and/or radioactive materials, toxic substances, hazardous substances, hazardous wastes, contaminated or polluting substances, materials or waste toxic, caustic, corrosive, gaseous or flammable substances that may cause injury, illness or death to living organisms.

(b) Approval. The Contractor shall not use any hazardous material in connection with this project without the prior written approval of the District Representative. Ten (10) working days prior to using a hazardous material, the Contractor shall submit to the District Representative complete Material Safety Data Sheet (MSDS) information, product specifications, and a document stating the application rate and method and including the name of the manufacturer’s local representative and emergency telephone numbers. All materials shall be properly labeled in accordance with applicable laws. The District Representative’s response to the Contractor’s request for approval of hazardous materials use shall not affect the Contractor’s obligation to comply with the provisions of this section.

(c) Application. In using hazardous materials, the Contractor shall:

1. Notify the District Inspector of the application schedule at least five (5) working days in advance.

2. Comply with all applicable federal, state, and local laws, regulations, and ordinances relating to the use and disposal of hazardous materials and containers, environmental protection, industrial hygiene, worker and public safety.

3. Supply protective clothing or equipment as required by applicable federal or state law for all persons handling hazardous materials, and for the District Inspector as required for inspection of the work.

4. Be responsible for the notification of all concerned parties adjacent to or affected by said hazardous material and as directed by the District Inspector.
(d) Special Situations. In the event the Contractor encounters material on the site reasonably believed to be asbestos, polychlorinated biphenyl (PCB) or any other hazardous or toxic substance, the Contractor shall immediately stop work in the areas affected and report the condition to the District Representative. If in fact the material is asbestos, polychlorinated biphenyl (PCB) or any other hazardous or toxic substance which has not been rendered harmless, the work in the affected area shall not be resumed except by written agreement between the District Representative and the Contractor. The work in the affected area otherwise shall only be resumed when asbestos, polychlorinated biphenyl (PCB) and other hazardous or toxic substances have been removed or rendered harmless.

Article 25. Safety and Public Convenience.

(a) Responsibility for Safety. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs. All work shall conform to the requirements of the California Administrative Code, Title 8, Industrial Relations, Division of Industrial Safety. The Contractor alone shall be responsible for responding to and for the final satisfaction of any and all claims of personal injury or property damage.

(b) Safety Equipment and Workers. The Contractor shall take all reasonable measures as required by existing conditions and performance of the Contract to protect the public and their property. The Contractor shall provide adequate barricades, fences, signs, warning lights, watchpersons, flag persons, etc., to protect the public and their property. Safety devices and workers shall comply with the current State of California “Manual for Warning Signs, Lights and Devices for Use in Performing Work Upon Highways,” as a minimum standard. All lighting shall be electric powered and left on from sunset to sunrise.

(c) Trench and Excavation Safety. As required by the California Labor Code §6705, whenever any portion of the work involves excavating or trenching five feet or deeper, the Contractor shall submit for acceptance by the District, a detailed plan showing the design of shoring, bracing, sloping, etc., to protect the Contractor’s workers, District personnel, and the public at large. If the plan varies from standard shoring systems established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer employed by the Contractor. All costs for trenching, excavation safety, including engineering, shall be included within the Contract Bid.

(d) Unauthorized Vehicles. When required by this Contract or the District Inspector, the Contractor shall take measures to prevent unauthorized vehicular traffic.

(e) Material and Equipment Transportation. Trucks hauling material or equipment shall not exceed vehicle or posted load and speed limits.

(f) Public Convenience. The Contractor shall conduct the work so as to ensure the least possible obstruction to traffic or inconvenience to the general public.

(g) Failure to Provide for Safety. If in the opinion of the District Inspector, the Contractor fails to adequately provide for safety, the District Inspector may:

1. Suspend construction within the area.
2. Order and/or place any additional warning devices, barriers, or protective equipment deemed necessary.
3. Do both 1 and 2.
The District shall not assume the Contractor’s responsibilities by this action and does not release the Contractor’s obligations. The Contractor will be liable for all costs the District incurs in acting under this section and shall reimburse the District for double the District’s costs. This action shall not become a basis for any claim for time or money against the District.

Article 26 Fire Hazards and Preventions.

(a) The Contractor will be held responsible for fire ignited by the Contractor’s employees, subcontractors, or equipment. Employees shall not be allowed to start fires. No open flames shall be permitted.

(b) The Contractor shall take necessary precautions to guard against and eliminate fire hazards that may cause damage to construction work, building materials, equipment, public, and private property, including grassland, brush, and trees.

(c) Flammable materials shall not be poured into drain lines, but shall be disposed of in a legal manner.

(d) Fire hydrants shall be kept accessible to fire-fighting equipment at all times.

(e) Contractors shall comply with state law requirements for burning and use of combustion engines including but not limited to Public Resources Code sections 4427, 4431, 4435, and 4442.

East Bay Regional Park District Wildfire Hazard Reduction and Resource Management Plan

The District’s WHRRMP provides long-term strategies for reducing fuel loads and managing vegetation within District lands. The plan identifies and describes the vegetation types and their associated fuel characteristics and identifies potential fuel treatment methods. Specific recommendations and guidelines for reducing fuel loads and managing vegetation at recommended treatment areas are also provided. Recommendations include types and frequency of fuel treatment actions, considerations for selecting treatments, suggested end-state vegetation types, and concerns regarding plant and animal species and other site-specific features that could potentially be affected by fuel treatment activities (District 2009).

Bay Area Air Quality Management District

BAAQMD is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and is to be notified ten (10) days in advance of any proposed demolition or abatement work. Cal/OSHA regulates asbestos removal to ensure the health and safety of workers removing asbestos containing materials and also must be notified of asbestos abatement activities.

Emergency Operations and Local Hazard Mitigation Plans

The Contra Costa County Hazard Mitigation Plan Update (2011) and the Contra Costa County Emergency Operations Plan (2015) were developed through a partnership of local governments in Contra Costa County, including the City as a municipal planning partner. The Contra Costa County Hazard Mitigation Plan Update is intended to reduce vulnerability from natural hazards within the county and includes a county-wide hazard risk assessment and mitigation strategies to increase the resilience of infrastructure and critical facilities. The Contra Costa County Emergency Operations Plan provides the basis for a coordinated response before, during, and after an emergency affecting the County.

City of Richmond General Plan 2030

The City of Richmond General Plan 2030 identifies goals, policies, and actions that address hazards and hazardous materials. Goals and policies presented in the Public Safety and Noise and Conservation, Natural Resources, and Open Space elements of the General Plan applicable to the LUPA recommendations on City property upon which the District does not have a lease agreement or easement are as follows (City of Richmond 2012a; 2012b):
Goal SN1: Risk Management of Natural and Human-Caused Disasters
Minimize the risk of injury, loss of life, property damage and environmental degradation from seismic activity, geologic hazards, flooding and fire and the storage, use and transport of hazardous materials and operations. Promote a sustainable approach to reduce impacts of natural disasters such as flooding and fire.

- **Policy SN1.3: Hazardous Materials Operations.** Require safe production, transportation, handling, use and disposal of hazardous materials that may cause air, water or soil contamination. Encourage best practices in hazardous waste management and ensure consistency with City, West Contra Costa County and OSHA guidelines, standards and requirements. Protect Richmond’s shoreline and other natural resources from accidental occurrences by controlling the location of new hazardous waste facilities and by limiting the expansion of existing hazardous waste facilities adjacent to the shoreline and along streams or creeks. Coordinate with federal, state and local agencies and law enforcement to prevent the illegal transportation and disposal of hazardous waste.

Goal SN2: High Levels of Police and Fire Service
Provide a high level of security in the community to prevent and reduce crime, and minimize risks to people, property and the environment from fire.

- **Policy SN2.3: Fire Safety.** Regularly update policies that will protect the community and its urban and natural areas from fire hazards. Emphasize prevention and awareness of fire safety guidelines to minimize risk and potential damage to life, property and the environment. In areas designated by the Richmond Fire Department as having a high fire hazard, ensure adequate fire equipment, personnel, firebreaks, facilities, water and access for a quick and efficient response in any area.

Goal SN3: Emergency Preparedness
Develop effective mechanisms for a coordinated response to emergencies and natural disasters to best protect residents, businesses and the environment.

- **Policy SN3.1: Emergency and Disaster Preparedness.** Maintain staff and facilities that will continue to support a coordinated and effective response to emergencies and natural disasters throughout the City. Coordinate with neighboring jurisdictions, local employers and industries to make sure that emergency preparedness and disaster response programs equitably serve all parts of the City. Continue to maintain adequate police and fire staffing, facilities, equipment and maintenance in order to protect the community.

Goal CN6: A Healthy Urban Environment
Elevate the quality of urban areas to support human development and provide residents with a healthy urban environment. Remediate contaminated soil and brownfield sites and properly manage mineral resource sites in order to contribute to improved public health and maximize opportunities to develop new uses. Enhance the natural beauty of the area by promoting design that respects landscape context, restoration of urban creeks, creation of green streets and stewardship of the urban forest.

- **Policy CN6.1: Toxic and Contaminated Sites.** Continue to work with the appropriate local, state, and federal agencies to promote the clean-up and reuse of contaminated sites to protect human and environmental health. Work with property owners and regional agencies to prevent, reduce or eliminate soil and water contamination from industrial operations, the Port and other activities that use, produce or dispose of hazardous or toxic substances. Implement appropriate mitigation measures and clean-up of sites that are known to contain toxic materials as a condition of reuse. Support the remediation and reuse of large, disturbed sites, such as the Winehaven complex at Point Molate and the Terminal 4 site at Point San Pablo, into mixed-use centers that provide the maximum benefit to the community without compromising the integrity of the surrounding natural areas.

City of Richmond Code of Ordinances
Chapter 8.16 - Fire Prevention Code, of the City’s code of ordinances governs conditions hazardous to life and property from fire, and explosion. It adopts the text of the International Fire Code and the California Fire
Ascent Environmental Hazards and Hazardous Materials

Miller/Knox Regional Shoreline Land Use Plan Amendment East Bay Regional Park District

Draft Program Environmental Impact Report 4.4-13

Code, 2016 Edition with several changes, additions, and amendments. Section 8.16.040 – Amendments to the California Fire Code, includes the following provision: whenever any land is to be developed or a building is to be constructed, before undertaking any construction or development, applicants shall submit building plans and specifications to the Richmond Fire Department which includes an aerial pre-fire plan for said Department’s retention and review for compliance with this ordinance and other applicable regulations.

4.4.3 Impacts and Mitigation Measures

METHODOLOGY

This impact analysis is based on a review of applicable laws, plans and policies, permits, and legal requirements pertaining to hazards and hazardous materials. Existing on-site hazardous materials and the potential for other safety or hazardous conditions were identified based on publicly available hazardous materials information and clean-up status from SWRCB’s GeoTracker and DTSC’s EnviroStor databases. Proposed LUPA recommendations are evaluated against the hazardous materials information gathered from these sources to determine whether any risks to public health and safety or other conflicts would occur. Construction-related impacts generally include temporary effects, such as the transport, storage, and use of potentially hazardous chemicals and the potential to encounter hazardous wastes during construction. Operations-related impacts generally include permanent impacts associated with use of the roads at Miller/Knox for the transport of hazardous material as well as the storage and use of hazardous material within Miller/Knox.

The analysis below has been written recognizing the direction from a recent California Environmental Quality Act (CEQA) California Supreme Court decision addressing the scope of analysis required in environmental impact reports for potential impacts resulting from existing environmental hazards in the vicinity of a site for a proposed project. In California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, 377 (“CBIA”), the Court held that:

“In light of CEQA’s text, statutory structure, and purpose, we conclude that agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project’s future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users.” (Id. at pp. 377-378).

The court directed that CEQA does not routinely require in all circumstances the consideration of the effects of existing environmental conditions on the future occupants or users of a proposed project site. But if the project might exacerbate an existing hazard, the lead agency must then analyze the exposure of future residents and users to the hazard. Also, the court did not prohibit an agency from considering how existing hazards might impact a project’s future users, so for publicly sponsored and implemented projects, the lead agency retains this discretion. For the Miller/Knox PEIR, the District is addressing the potential for exposure of park users to existing and reasonably foreseeable future environmental hazards.

These principles are relevant to the discussion below of wildland fire hazards. On that issue, the appropriate analysis is whether the proposed LUPA recommendations risk exacerbating the extent of existing fire hazards, and if so, what would be the potential for exposure to the hazard. The impacts of exposure to sea level rise-induced flooding is evaluated in Impact 4.10-3 of Section 4.10, “Greenhouse Gas Emissions and Climate Change.”
THRESHOLDS OF SIGNIFICANCE

An impact related to hazardous materials and public health is considered significant if implementation of the Miller/Knox LUPA recommendations would do any of the following:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- be located on a site that is included on a list of hazardous-materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- for a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;
- impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; and
- expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

ISSUES NOT DISCUSSED FURTHER

Potential safety hazards related to public or private airports are not evaluated as Miller/Knox is neither in an area with an adopted airport land use plan nor within two miles of an airport or airstrip. This issue is not discussed further.

IMPACTS AND MITIGATION MEASURES

Impact 4.4-1: Routine Transport, Use, or Disposal of Hazardous Materials

The proposed LUPA recommendations would involve some routine transport, use, and disposal of hazardous materials during vehicle maintenance; vegetation management; demolition; and dredging of the lagoon. Compliance with existing regulations would maintain impacts associated with the routine transport, use, and disposal of hazardous materials at a less-than-significant level. However, sediments excavated during lagoon dredging may contain hazardous materials, which could expose workers and park visitors to health and safety risks. This would be a potentially significant impact. Implementation of Mitigation Measure 4.3-3b would reduce the potential for contaminated dredge sediments to create a health and safety risk to a less-than-significant level.

Proposed LUPA recommendations that would involve the routine transport, use, and disposal of hazardous materials include vehicle maintenance; vegetation management; partial demolition of a historic building; removal of abandoned railroad tracks; and dredging of the lagoon. Potentially hazardous materials such as fuels, lubricants, solvents, cleaning products, herbicides, hazardous building materials, such as asbestos
and PCBs; contaminated soils in railway corridors, such as wood preservatives, heavy metals, and naturally-occurring asbestos; and contaminated dredged material may be used and/or disturbed if present. These materials could present health and safety risks if mishandled, inadvertently spilled, or disposed of incorrectly. In addition to potential on-site accidents that may expose workers, staff, and park visitors to hazardous materials; off-site accidents during transport of hazardous materials and waste to or from Miller/Knox could expose the public and the environment to additional risks.

The Lagoon Enhancement Project would involve the comprehensive dredging of up to 10,000 cubic yards of sediment. Continuation of annual lagoon maintenance dredging consists of up to 200 cubic yards of sediment per year consistent with the District’s existing Routine Maintenance Agreement permit. Sediments in the lagoon are from the San Francisco Bay and are pumped into the lagoon by the intake system. As described in Section 4.4.1, “Environmental Setting,” dredged sediments from the San Francisco Bay have the potential to contain hazardous materials. Thus, sediments excavated during the Lagoon Enhancement Project or annual maintenance dredging may contain hazardous materials, which could expose workers and park visitors to health and safety risks. Furthermore, as discussed in Impact 4.3-3 of Section 4.3, “Hydrology and Water Quality,” because high groundwater levels have been reported in the Bray Planning Area, where the dredged materials would be disposed of, it is possible that contaminated leachate from dredged materials could contact and degrade groundwater.

The proposed LUPA would be subject to standard regulations that control the transport, use, and disposal of hazardous materials and minimize the potential for an accidental release of hazardous materials. As described in Title 49 of the CFR and implemented by Title 13 of the CCR, the U.S. DOT Office of Hazardous Materials Safety has established strict regulations for the safe transportation of hazardous materials. Hazardous wastes produced on-site are subject to requirements associated with accumulation time limits, proper storage locations and containers, and proper labeling. For removal of hazardous waste from the site, hazardous waste generators are required to use a certified hazardous waste transportation company, which must ship hazardous waste to a permitted facility for treatment, storage, recycling, or disposal. Furthermore, in accordance with the NPDES program, a SWPPP would be prepared and would include BMPs designed to prevent project-generated pollutants from entering stormwater and moving off-site into receiving waters throughout the implementation and life of the proposed LUPA. BMPs may include silt fencing, limiting use of hazardous materials to areas distant from surface water, and developing and implementing a spill prevention and emergency response plan to handle potential fuel and/or hazardous material spills.

Compliance with existing state and federal regulations such as those contained in Chapter 6.95 of the California Health and Safety Code, CCR Title 26, NPDES, and federal regulations contained in CFR Titles 29, 40, and 49, would reduce impacts associated with the routine transport, use, and disposal of hazardous materials to less than significant. However, sediments excavated during lagoon dredging may contain hazardous materials, which could expose workers and park visitors to health and safety risks. This would be a potentially significant impact.

**Mitigation Measure**

Implement Mitigation Measure 4.3-3b: Sediment analysis plan and reporting, as described in Impact 4.3.3 of Section 4.3, “Hydrology and Water Quality.”

**Significance after Mitigation**

Implementation of Mitigation Measure 4.3-3b would require the District to prepare a sediment analysis plan and complete sediment testing to determine the levels of pollutants of concern within the dredged sediments. If hazardous materials are present, the District would consult with the RWQCB to determine what protective measures, if any, are required and contaminated sediments would be handled and disposed of in accordance with applicable permits as well as federal and state laws that are effective in reducing or eliminating hazards related to hazardous materials. Human health and safety impacts would be avoided through adherence to these procedures, conditions, and regulations. Therefore, impacts would be less than significant with mitigation incorporated.
Impact 4.4-2: Accidental Exposure to Contaminated Soil or Groundwater

Implementation of the LUPA recommendations would involve grading, excavation, and other ground-disturbing activities which could result in accidental exposure of workers and the public to contaminated soil or groundwater. A records search of the SWRCB and DTSC databases identified one site of documented contamination located within Miller/Knox, which has since been remediated, and 16 sites within 0.25 mile of Miller/Knox, which would not be affected by ground-disturbing LUPA activities. However, it is a reasonable risk to recognize that construction at Miller/Knox could encounter previously undocumented underground contamination due to the historical uses of the park. Therefore, impacts would be potentially significant. Implementation of Mitigation Measure 4.4-2 would reduce the risks associated with encountering contaminated materials to a less-than-significant level.

The removal of abandoned railroad tracks; trail improvement and decommissioning; construction of the recreational programs and storage building; and establishment of new, formalized, and expanded staging areas would involve ground-disturbing activities. Ground-disturbing activities such as grading and excavation could result in the accidental exposure of workers and the public to contaminated soil or groundwater if encountered. As discussed in Section 4.4.1, “Environmental Setting,” a records search of the SWRCB and DTSC databases identified one site of documented contamination located within Miller/Knox and 16 sites within 0.25 mile of Miller/Knox. For the one site located on-site, a hazardous material spill was discovered on May 20, 1987 at a petroleum storage facility on the Bray property, likely caused during removal of an on-site storage tank. It was determined that no further action was required, and the case was completed and closed as of April 14, 1995. Because this site was remediated, and the remaining 16 sites are located outside of Miller/Knox, implementation of the LUPA recommendations would not result in the release of hazardous materials from any of these sites. However, given the historical uses of Miller/Knox and the proximity of several documented sites of contamination, it is a reasonable risk to recognize that construction at Miller/Knox could encounter previously undocumented underground contamination, which could be exposed during ground-disturbing activities, creating a potentially significant hazard to the public or the environment.

Mitigation Measure 4.4-2: Prepare and Implement a Management Plan for Accidental Exposure to Underground Contamination

Before issuance of grading permits, a management plan for accidental exposure to underground contamination shall be prepared by the District or the District’s contractor or construction manager. The plan shall be reviewed and approved by Contra Costa Health Services (CCHS) before any ground disturbing activities. The management plan shall include measures to reduce potential hazards to workers, the public, and the environment associated with exposure to contaminated soil or groundwater during construction-related activities. The management plan shall include provisions for halting work, agency notification, managing impacted materials, sampling and analytical requirements, and disposal procedures. Specifically, the construction hazardous materials management plan shall:

- describe the necessary actions to be taken if evidence of contaminated soil or groundwater is encountered during any construction-type activities;
- describe the types of evidence that could indicate potential hazardous materials contamination, such as soil discoloration, petroleum or chemical odors, or buried building materials;
- include measures to protect worker safety if signs of contamination are encountered;
- identify sampling and analysis protocols for various substances that might be encountered;
- list required regulatory agency contacts if contamination is found;
- include recommendations on soil management in the event that aerially deposited lead is discovered in existing road right-of-way;
- identify legal and regulatory processes and thresholds for cleanup of contamination;

- include provisions for delineation, removal, and disposal of any contaminants identified as exceeding human health risk levels; and

- require that the project contractor follow all procedural direction given by CCHS to ensure that suspect soils are isolated, protected from runoff, and disposed of in accordance with the requirements of the licensed receiving facility.

**Significance after Mitigation**

Implementation of Mitigation Measure 4.4-2 would require a construction hazardous materials management plan which would contain provisions for halting work, agency notification, managing impacted materials, sampling and analytical requirements and disposal procedures. These measures would reduce potential hazards to workers, the public, and the environment associated with exposure to previously unknown hazardous materials during ground disturbing activities. Thus, impacts would be less than significant with mitigation incorporated.

**Impact 4.4-3: Exposure of Schools to Hazardous or Acutely Hazardous Materials**

Of the five planning areas, only the Ridgeland Planning Area is within one quarter-mile of an existing school, the Washington Elementary School. Hazardous materials that could be used within the Ridgeland Planning Area include the use of vehicle fuels and fluids and herbicides. The emission of air pollutants from vehicles and mechanical equipment is discussed in Impact 4.9-2 of Section 4.9, “Air Quality.” Compliance with applicable federal, state, and District regulations would minimize the risk of public exposure to the routine use of hazardous materials to a less-than-significant level.

However, given the historical uses of Miller/Knox there is a reasonable risk to recognize that construction could encounter previously undocumented underground contamination, which could be excavated during ground disturbing activities, exposing nearby schools to hazardous materials. This impact would be potentially significant. Implementation of Mitigation Measure 4.4-2 would reduce potential hazards to nearby schools associated with exposure to previously undocumented underground contamination to a less-than-significant level.

The nearest school to Miller/Knox is the Washington Elementary School, located 0.21 miles north of the park boundary. The school site is separated from the park by a hill as well as several roads and a single-family residential development. Of the five planning areas, only the Ridgeland Planning Area is within one quarter-mile of the Washington Elementary School. Hazardous materials that could be used within the Ridgeland Planning Area include the temporary use of vehicle fuels and fluids during implementation of trail and vegetation management recommendations and limited amounts of vehicle fuels and fluids and herbicides during the operational phase of the proposed LUPA. These potentially hazardous materials would be used in small quantities and their use would be limited to specific on-site areas. The emission of air pollutants from vehicles and mechanical equipment is discussed in Impact 4.9.2 of Section 4.9, “Air Quality.”

As discussed under Impact 4.4-1 and 4.4-2, compliance with applicable federal, state, and local regulations would minimize impacts associated with the routine transport, use, and disposal of hazardous materials. Furthermore, because of the intervening topography of the area and the school and limited use of vehicle fluids and herbicides, it is unlikely that hazardous materials used on site would result in a spill that would contaminate off-site areas. Therefore, this impact would be less than significant.

However, given the historical uses of Miller/Knox it is a reasonable risk to recognize that construction could encounter previously undocumented underground contamination, which could be excavated during ground disturbing activities, exposing nearby schools to hazardous materials. Therefore, impacts would be potentially significant.
Mitigation Measures
Implement Mitigation Measure 4.4-2: Prepare and implement management plan for accidental exposure to underground contamination.

Significance after Mitigation
Implementation of Mitigation Measure 4.4-2 would require a management plan for accidental exposure to underground contamination which would contain provisions for halting work, agency notification, managing impacted materials, sampling and analytical requirements and disposal procedures. These measures would reduce potential hazards to nearby schools associated with exposure to previously undocumented underground contamination during ground disturbance activities. Thus, impacts would be less than significant with mitigation incorporated.

Impact 4.4-4: Emergency Response or Evacuation Plans
Implementation of the proposed LUPA recommendations would not result in the permanent modification of existing roadway alignments and includes features which would result in long-term improvements to park emergency access. Areas of Miller/Knox would be closed to visitors during construction-type activities, such as the Lagoon Enhancement Project and building work at Ferry Point. In the case temporary lane closures are required, the District would provide temporary traffic controls as appropriate to facilitate traffic flow and to permit the movement of emergency vehicles. Therefore, implementation of the proposed LUPA recommendations would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. This impact would be less than significant.

Implementation of the proposed LUPA recommendations would not result in the permanent modification of existing roadway alignments. Several LUPA recommendations would improve access to the area, such as a vehicle turn-around area and expansion of the Ferry Point staging area, the development of one new staging area, and one formalized staging area, and thus would result in long-term improvements to park emergency access. In the event that temporary lane closures on Dornan Drive are required, such as during implementation of the Lagoon Enhancement Project, the District would notify the City of Richmond Police and Fire Departments and provide temporary traffic controls as appropriate to facilitate traffic flow and to permit the movement of emergency vehicles. As specified by District General Condition Article 25(f), all work would be conducted so as to ensure the least possible obstruction to traffic or inconvenience to the general public. Temporary traffic controls would abide by District General Condition Article 25(b), and could include measures such as signage, physical barriers and channelizing devices, reduced speed limit, detours, and flaggers. Furthermore, the length of Dornan Drive that would be used would be short, up to 0.5 miles of Dornan Drive would be used to accommodate haul trucks. Therefore, implementation of the proposed LUPA recommendations would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. This impact would be less than significant.

Mitigation Measures
No mitigation is required.
**Impact 4.4-5: Wildland Fire Hazard**

Although Miller/Knox is not designated a very high FHSZ, it is within an area that is considered a fire threatened community. Sources of ignition could include the temporary and periodic use of vehicles and mechanical equipment within vegetated areas. The proposed LUPA recommendations include the establishment of one new parking area, one formalized parking area, expanded parking at the Ferry Point staging area, and a new recreational programs and storage building; however, implementation of the LUPA recommendations would not introduce new permanent residents or significant numbers of new park visitors to a fire prone area. Given compliance with the District’s General Conditions associated with fire hazards and prevention; on-going implementation of the District’s WHRRMP; implementation of the City’s Fire Prevention Code and General Plan policies SN 2.3 and SN3.1; and improved site emergency access that would be provided with implementation of the LUPA recommendations, the proposed LUPA would not expose people or structures to a significant change in the risk of exposure to wildland fires. Impacts would be less than significant.

Although Miller/Knox is not designated a very high FHSZ, it is within an area that is considered a fire threatened community. The site is composed of vegetated open space areas that can get very dry during summer months and is surrounded by residential areas. While LUPA recommendations would include construction of additional parking and a new recreational programs and storage building, the proposed LUPA recommendations would not introduce new permanent residents or significant numbers of new park visitors to a very high FHSZ or fire prone area. Implementation of the proposed LUPA recommendations would require the temporary and periodic use of vehicles and mechanical equipment within vegetated areas. Heat or sparks from vehicles or equipment activity could ignite dry vegetation and cause a fire, exposing people or structures in the vicinity to risk.

The new recreational programs and storage building would comply with the City’s Fire Prevention Code which includes measures such as ignition-resistant construction, automatic interior fire sprinklers, and adequate emergency and fire apparatus access. Furthermore, Section 8.16.040 of the City’s code of ordinances requires applicants to submit building plans and specifications to the Richmond Fire Department for review and approval to ensure that development and construction activities incorporate measures to reduce fire risk. One of the LUPA recommendations is to implement the District’s WHRRMP, as well as the integrated pest management, vegetation management, and grazing recommendations. These recommendations would reduce fuel loads, provide defensible space along the wildland-urban interface, and minimize the risk of wind-driven, catastrophic wildfire. Lastly, LUPA recommendations such as a vehicle turn-around and the development of staging areas would improve traffic flow within the park, and thus would result in long-term improvements to park emergency access. Given compliance with the City’s Fire Prevention Code and General Plan policies SN 2.3 and SN3.1; implementation of the District’s WHRRMP; and improved emergency access, the proposed LUPA would not expose people or structures to a significant change in the risk of loss, injury, or death involving wildland fires. Therefore, this impact is considered less than significant.

**Mitigation Measures**

No mitigation is required.
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4.5 CULTURAL AND TRIBAL CULTURAL RESOURCES

This section evaluates the potential impacts of the Miller/Knox Regional Shoreline (Miller/Knox or park) Land Use Plan Amendment (LUPA) on known and unknown cultural resources. Cultural resources include districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include prehistoric resources, historic-era resources, and “tribal cultural resources” (the latter as defined by Assembly Bill (AB) 52, Statutes of 2014, in Public Resources Code [PRC] Section 21074).

Archaeological resources are locations where human activity has measurably altered the earth or left deposits of prehistoric or historic-era physical remains (e.g., stone tools, bottles, former roads, house foundations). Historical (or architectural) resources include standing buildings (e.g., houses, barns, outbuildings, cabins) and intact structures (e.g., dams, bridges, roads, districts). Tribal cultural resources were added as a resource subject to review under CEQA, effective January 1, 2015 under AB 52. This is a new category of resources under CEQA and includes site features, places, cultural landscapes, sacred places or objects, which are of cultural value to a Tribe.

Several comments regarding cultural resources were received in response to the Notice of Preparation (see Appendix A). Comments received expressed concern with the historic Ferry Point structure and removal of the historic warehouse building, tribal cultural resources, and undiscovered cultural resources. These issues are discussed further in Section 4.5.3 below.

4.5.1 Environmental Setting

Information on the regional prehistory, ethnography, and historic setting is largely based on findings in the Miller/Knox Regional Shoreline Resource Analysis prepared for the East Bay Regional Parks District (District) in September 1983 and information from Bev Ortiz, the District’s Cultural Services Officer.

REGIONAL PREHISTORY

A portion of Miller/Knox covers a segment of the Potrero Hills, a northwest-southwest trending ridge line rising abruptly from the San Francisco Bay to an elevation of 350 feet. The Potrero was a rocky headland which in earlier times was a nearly treeless, windswept, grass-covered range. It was separated from the alluvial plain by a formerly extensive saltwater marsh, with a connecting neck of land that was passable only in the drier periods of the year. Drainages on the Potrero were ephemeral, but springs of fresh water maintained an adequate flow through most of the year. Although this area was subject to Bay winds and fresh water may have been scarce, it had been heavily used by the prehistoric population.

The first archeological study of the Potrero area identified 19 prehistoric sites, mainly consisting of shellmounds (i.e., locations where prolonged habitation had resulted in the accumulation of a mound composed of friable, dark soil). All but three of these sites were shellmounds, the primary constituent of which was fragments of various molluscan species gathered by the inhabitants. Three of the sites, CA-CCO-277, -280 and -293, were, recorded as “small and insignificant,” with a depth of approximately one foot.

Surface collections have been made at several of the Potrero sites. The assemblage of artifacts from these pre-1950’s investigations suggest that the Potrero was occupied by at least 3,000 before current era and appeared to have been intensively occupied for 1,500 years, or for the duration of the period the archaeologists call “the Middle Horizon.” The sparse information recovered from the prehistoric cultural resources of the Potrero do not indicate whether occupation continued as intensively into Late Horizon or ethnohistoric times. Only a few sites have been investigated, and it may well be that other sites might contain...
Ethnoography

At the time of historic contact, the Potrero was within the territory of the Huchiun and the Huchiun Aguasto tribes. The Huchiun Aguasto spoke Karkin, while the Huchiun spoke Chochenyo, a dialect of the San Francisco Bay Costanoan language, one of six Ohlone (aka Costanoan) languages (including Karkin) (Ortiz pers comm. 2018). Karkin was spoken from the Carquinez Strait (“Carquinez” being the Spanish form of Karkin) down through the East Bay and on to the Monterey Bay region. The Huchiun were the largest tribe in the San Francisco Bay region, with 384 individuals, and appeared to have occupied the Bay shoreline from Pinole to Emeryville (including an unknown extent inland). Additionally, Huchiun individuals were known to have entered Mission San Francisco between 1780 and 1806 (Ortiz pers comm. 2018).

There is no mention of any occupied Native American villages on the Potrero in the journals of the early Spanish explorers; however, the records of the mission priests mention a village “Chapugtac” that might have been situated on the Potrero. This village was on the Bahia del Rosario vulgo la Marinera, en la Sierra de la otra banda del brazo del Mar del Sueste. This entry seems to hold contradictory information. The body of water between San Rafael and Richmond and as far south as Yerba Buena Island was named the Bahia del Rosario. The Brazo del Mar del Sueste would seem to have been that part of the San Francisco Bay to the south of Yerba Buena Island. The only mountains exactly on the edge of the Bay around the Bahia del Rosario are at the Potrero.

Within 25 years of the first Spanish soundings of San Pablo Bay in 1775 the vast majority of Ohlone had been relocated and baptized at one of the seven Franciscan Missions founded in Ohlone territory. Multiple resistances to Spanish colonization occurred during this time, including the flight of many Saclan Bay Miwok and Huchiun Ohlone from Mission Dolores in 1795. These tribes confounded both Spanish and Mission Indian presence for two years until the Saclan Bay Miwok were defeated in an attack near the present-day town of Lafayette. To further retaliate, the Spanish and Mission Indians raided the remaining Huchiun Ohlone villages. They removed the surviving women and children to Mission Dolores, while the men were taken to the Presidio San Francisco and presumably executed.

A serious epidemic occurred shortly after this influx and many Indians died, while others fled the strict regimen imposed by the priests. By 1805, after a series of expeditions to bring in those converts who had fled. Lieutenant Arguello reported that there were no more “free” Indians west of Mt Diablo (District 1983).

Historic Setting

Regional History

The Potrero was part of the Rancho San Pablo (also Known as the Rancho de los Cuchigunes a variant spelling of Huchiun), provisionally granted to Francisco Castro in 1823. A map of 1863 indicates that only two houses were located on the southern half of the Potrero at that time. One of these, belonging to L. Luvall, was situated in an area that would later become the site of the large brickyard at Brickyard Cove.

The first Chinese shrimp camp on the Potrero was established in 1865 at the cove just south of Point Molate. This large camp, containing at least 30 wooden huts, was in use until 1912. Mention has also been made of a smaller Chinese shrimp camp, “Red Rock,” that might have been located in the cove just north of Point Richmond or in the cove just north of Point Potrero. No traces remain of either camp.

A map of the Rancho San Pablo was prepared in 1895 showing the ownership and property lines of that time. Property owners of the southern half of the Potrero were Henri Emeric, who owned the eastern portion of the Potrero and all of Point Potrero; John Nicholl, who owned 150 acres that included Point Richmond and

later materials. However, since later materials would have been found in the upper levels of most shellmounds, they would have been the first deposits to be destroyed by agriculture or industrialization (District 1983).
the southern half of the project area; and L.M. Hoefler, who owned 24 acres that included the northern portion of Miller/Knox.

By 1895 several brick yards and quarries had been established on the Potrero. The largest of these, variously called the Remillard Brick Works, the Los Angeles Pressed Brick Company, and the Richmond Pressed Brick Company, was located just south of Point Richmond at Brickyard Cove. Another brick yard, known at one point as the Carey Brick Yard, was located opposite Miller/Knox on the site now occupied by the Richmond Ramblers. A third brick yard was located on the east side of the Potrero, just over the hill from the Carey Brick Yard, and a fourth—the Central Brick Company—was located at the northeastern end of the Potrero.

Development of the Potrero accelerated after 1900, when the Santa Fe Railroad Company completed the construction of its western terminus and ferry slip at the end of Point Richmond. Associated with this development was the construction of the tunnel through the Potrero in 1915, and the extension of the railroad line over the shallow lagoon between the tunnel and the ferry slip at Point Richmond. The mud flat between the railroad tracks and the Potrero remained open for many years though it has since been filled.

In conjunction with industrial development, residential land development also began at Point Richmond around the turn of the century. Among early development proposals were those of John Nicholl who owned part of the existing park site. In 1899, the first Nicholl subdivision, centered in the Potrero foothills, was filed. The subdivision, centered in the Potrero foothills, was “the city of its day” for nearly two decades. In 1904, Nicholl recorded further subdivision on the land now part of the park site itself. The paper streets of this subdivision can still be seen today as trails along the ridgetop and hills lopes of Nicholl Knob. The District has acquired a number of these lots in the Ridgeland Planning Area and they are now part of Miller/Knox.

The next impetus to development of the Potrero occurred as a result of World War II. Four shipyards were constructed in the Richmond Harbor area, primarily to build Liberty and Victory ships. In 1942, the Kaiser shipyard number 3 was constructed at the south end of Point Potrero. The remaining areas of salt marsh were filled, much of the fill coming from the east slope of the Potrero and from the levelling of Point Potrero.

The parkland itself shows significant effects from the industrial development in the area. Much of the eastern and southern slopes were excavated for landfill to locate industrial and ship-building facilities or for building materials such as brick and gravel. In addition, the ridgetops were used for radio communication after the war (an early FM station) and false gun emplacements during the war. More recently, the surrounding land has been quarried for additional landfill and used as the site for Pacific Gas & Electric’s natural gas storage (1949 [District 1983]).

**Park Development**

As early as 1947, the City of Richmond considered the idea of a regional aquatic park in the Point Richmond/Point Molate area. This recommendation was included in the City’s Master Plan of 1954. Activity to develop Miller/Knox park really began in 1962 when several local homeowners purchased many of the old hilltop subdivisions, for the express purpose of preserving them for future parkland. The District, which had formed in 1934, purchased approximately 53 acres in 1970 from ATSF railroad, now BNSF railroad, of what would become the George Miller, Jr./John T. Knox Regional Shoreline when the park was originally dedicated in 1972. This first park acquisition included approximately 45 acres of San Francisco Bay and 8.5 acres of land that consisted of mudflats. At this same time, the East Bay Municipal Utility District (EBMUD) had plans to construct a 500,000-gallon water tank on the top of Nicholl Knob. Local opposition convinced EBMUD that the proposal was not warranted and EBMUD chose to construct a smaller facility downslope where it could be more easily screened from view (District 1983).

In 1973, a study initiated by City of Richmond citizens and other community organizations, recommended that the District acquire further land on the hill behind the shoreline park to form what was then described as an “urban threshold park.” The 1973 Study’s findings provided guidance for the initial development of Miller/Knox. Subsequently, the District initiated park development based on the 1973 EIR and 1974 Environmental Impact Assessments (EIA) for the George Miller, Jr. Memorial Regional Shoreline Phase 1A and
Phase 1. In 1974, the District incorporated a 0.16-acre railroad easement into the park to provide an extension of the Keller’s Beach Shoreline for safe use by anglers and public access to the beach. In 1976, the George Miller, Jr. Regional Shoreline EIR was prepared and project implementation resulted in filling approximately 7.9 acres of the Bay and placing rip-rap to protect the shoreline from erosion and create new shoreline recreation areas. Several other park development and improvement projects have occurred since the initial development of Miller/Knox; the most recent being the 2015-2016 Public Access Improvement Project.

RECORDS SEARCHES, SURVEYS, AND CONSULTATION

Staff members at the Northwest Information Center (NWIC) conducted a confidential records search for Miller/Knox in November 2017 (NWIC #17-1170). In addition to site records and survey reports, the following information was reviewed as part of the records search:

- National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR),
- California Office of Historic Preservation Historic Property Directory,
- California Inventory of Historic Resources,
- California State Historic Landmarks,
- California Points of Historical Interest, and
- Directories of Properties in the Historic Property Data File for Contra Costa County.

Nine reports have covered the majority of Miller/Knox as shown in Table 4.5-1.

<table>
<thead>
<tr>
<th>Table 4.5-1</th>
<th>Previous Cultural Resource Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Number</td>
<td>Author</td>
</tr>
<tr>
<td>S-001537</td>
<td>Peter M. Banks; California Archaeological Consultants, Inc.</td>
</tr>
<tr>
<td>S-006084</td>
<td>Peter M. Banks; California Archaeological Consultants, Inc.</td>
</tr>
<tr>
<td>S-015803</td>
<td>Miley Paul Holman; Holman &amp; Associates</td>
</tr>
<tr>
<td>S-021674</td>
<td>Tetra Tech, Inc.</td>
</tr>
<tr>
<td>S-029433</td>
<td>George McKale, Neal Kaptain, and Benjamin Matzen; LSA Associates, Inc.; Preservation Architecture</td>
</tr>
<tr>
<td>S-031648</td>
<td>Jessica B. Feldman, David Lemon, and Andrew Hope; Myra L. Frank &amp; Associates; California Department of Transportation</td>
</tr>
</tbody>
</table>

Source: Information compiled by Ascent Environmental 2018.
Archaeological Resources
The NWIC records search indicated that nine previously recorded cultural sites were identified within Miller/Knox; including three prehistoric archaeological sites. The archaeological sites have either been destroyed or could not be relocated during the last survey.

- P-07-0163 is an archaeological midden, however it could not be relocated during 2012 survey.
- P-07-0164 is archaeological habitation debris, however survey report S-15803 reported this resource was destroyed when the area was graded to create Ferry Point.
- P-07-0165 is archaeological habitation debris, however survey report S-15803 reported this resource was destroyed when the area was graded to create Ferry Point.

Historical Resources
Of the nine previously recorded cultural sites identified within the project site, six were identified as historic-era features. Three of the six historic-era features have either been evaluated as eligible for, or already listed in, the NRHP or CRHR (described below under Regulatory Setting).

- P-07-0785 is an industrial building and petroleum storage tank that have been evaluated as not eligible for NRHP- or CRHR-listing because it lacks integrity.
- P-07-1162 is the Point Richmond Historic District, listed in the NRHP 1979 as number 79000472 because of its significant architecture and history within the City of Richmond.
- P-07-2738 is Dornan Drive Tunnel, evaluated as appearing eligible for listing in the NRHP because it is an important contributor to the City’s transportation system and maritime-related industrial development.
- P-07-4482 is a residence, known as the Bernardi House, evaluated as not eligible for listing in the NRHP because it lacks integrity.
- P-07-4483 is Nicholl Knob and has not been evaluated for NRHP- or CRHR-eligibility.
- P-07-4485 is a World War II false gun emplacement, currently known as the false gun site, evaluated as appearing eligible for listing in the NRHP because it is associated with WWII, a historically significant event.

Ferry Point Property
In addition to the above-listed historic-era features, the Ferry Point Property (which includes the warehouse, pumphouse, and pier) has been determined to be potentially eligible for the NRHP and the CRHR. An evaluation of historic significance completed in 1995 assessed the buildings under the requirements for the NRHP. It was found that the Ferry Point property appeared eligible for the NRHP as an historic property of local, and possibly national, significance under Criterion A for its association with events that have made a significant contribution to the broad patterns of our history, namely the development of the western terminus of the transcontinental railroad by the Atchison, Topeka, & Santa Fe Railway Co. and for the beginning of transportation and industrial development of Richmond. The property’s area of significance is transportation and its period of significance is from 1899 to 1945.

Further, the report found that the site may also maintain some significance under Criterion B for the property’s association with William Benson Storey Jr., engineer of the Ferry Point Pier design and Santa Fe President from 1920-33, and Criterion C as an early and distinctive example of intermodal transportation technology. Because the report determined the property appears eligible for the NRHP, it would also appear eligible for the CRHR, which maintains essentially the same criteria as the NRHP (District 2015).
In addition, the Ferry Point pier is a Richmond Landmark and is listed on the City’s Historic Resources Inventory. Although it does not specify in the City of Richmond Municipal Code which elements of the site are included in the designation, the assumption is that the eligibility determination was based on the 1995 report commissioned by the District, therefore because the pumphouse and warehouse are identified as historic resources related to the property in the report then they are assumed to be included as part of the City Landmark designation (District 2015).

Tribal Cultural Resources
On October 24, 2017, eight tribes were contacted by the District for AB 52 consultation. Letters sent to the tribes included the location of Miller/Knox, background information about the LUPA, LUPA objectives, and a summary of location and recommendations within the planning area. The following tribes and chairpersons that were contacted are listed below.

- Amah Mutsun Tribal Band of Mission San Juan, Irene Zwierlein, Chairperson;
- Wilton Rancheria, Ed Silva, Tribal Resources Coordinator;
- Indian Canyon Mutsun Band of Costanoan Indians, Ann Marie Sayers, Chairperson;
- Wilton Rancheria, Raymond Hitchcock, Chairperson;
- The Ohlone Indian Tribe, Andrew Galvan;
- North Valley Yokuts Tribe, Katherine Erolinda Perez, Chairperson;
- Coastanoan Rumsen Carmel Tribe, Tony Cerda, Chairperson; and
- Muwekma Ohlone Indian Tribe of the San Francisco Bay, Rosemary Cambra, Chairperson.

4.5.2 Regulatory Setting

FEDERAL

Section 106 of the National Historic Preservation Act
Federal protection of resources is legislated by (a) the NHPA of 1966 as amended by 16 U.S. Code 470, (b) the Archaeological Resource Protection Act of 1979, and (c) the Advisory Council on Historical Preservation. These laws and organizations maintain processes for determination of the effects on historical properties eligible for listing in the NRHP.

Section 106 of the NHPA and accompanying regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the main federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed in, or may be eligible for listing in the NRHP. The NRHP is the nation’s master inventory of known historic resources. It is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, and cultural districts that are considered significant at the national, state, or local level.

The formal criteria (36 CFR 60.4) for determining NRHP eligibility are as follows:

1. The property is at least 50 years old (however, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
2. It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
3. It possesses at least one of the following characteristics:
   a. Association with events that have made a significant contribution to the broad patterns of history (events).
   b. Association with the lives of persons significant in the past (persons).
c. Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction (architecture).

d. Has yielded, or may be likely to yield, information important to prehistory or history (information potential).

Listing in the NRHP does not entail specific protection or assistance for a property but it does guarantee recognition in planning for federal or federally-assisted projects, eligibility for federal tax benefits, and qualification for federal historic preservation assistance. Additionally, project effects on properties listed in the NRHP must be evaluated under CEQA.

The National Register Bulletin also provides guidance in the evaluation of archaeological site significance. If a heritage property cannot be placed within a particular theme or time period, and thereby lacks “focus,” it is considered not eligible for the NRHP. In further expanding upon the generalized National Register criteria, evaluation standards for linear features (such as roads, trails, fence lines, railroads, ditches, flumes, etc.) are considered in terms of four related criteria that account for specific elements that define engineering and construction methods of linear features: (1) size and length; (2) presence of distinctive engineering features and associated properties; (3) structural integrity; and (4) setting. The highest probability for National Register eligibility exists within the intact, longer segments, where multiple criteria coincide.

**Secretary of the Interior’s Standards**

The *Secretary of the Interior’s Standards for the Treatment of Historic Properties* (Secretary’s Standards) provide guidance for working with historic properties. The Secretary’s Standards are used by lead agencies to evaluate proposed rehabilitative work on historic properties. The Secretary’s Standards are a useful analytic tool for understanding and describing the potential impacts of proposed changes to historic resources. Projects that comply with the Secretary’s Standards benefit from a regulatory presumption that they would not result in a significant impact to a historic resource. Projects that do not comply with the Secretary’s Standards may or may not cause a substantial adverse change in the significance of a historic property.

In 1992 the Secretary’s Standards were revised so they could be applied to all types of historic resources, including landscapes. They were reduced to four sets of treatments to guide work on historic properties: Preservation, Rehabilitation, Restoration, and Reconstruction. The four distinct treatments are defined as follows:

- **Preservation** is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

- **Rehabilitation** is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.

- **Restoration** is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.
Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a nonsurviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

The appropriate treatment for any renovation project under the Secretary’s Standards for Treatment of Historic Properties is rehabilitation.

STATE

California Environmental Quality Act

CEQA requires public agencies to consider the effects of their actions on both “historical resources” and “unique archaeological resources.” Pursuant to Public Resources Code (PRC) Section 21084.1, a “project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” Section 21083.2 requires agencies to determine whether projects would have effects on unique archaeological resources.

Historical Resources

“Historical resource” is a term with a defined statutory meaning (PRC, Section 21084.1; determining significant impacts to historical and archaeological resources is described in the State CEQA Guidelines, Sections 15064.5[a] and [b]). Under State CEQA Guidelines Section 15064.5(a), historical resources include the following:

1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (PRC, Section 5024.1).

2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the California Register of Historical Resources (Public Resources Code, Section 5024.1), including the following:

   a) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;

   b) Is associated with the lives of persons important in our past;

   c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

   d) Has yielded, or may be likely to yield, information important in prehistory or history.

4) The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.
Unique Archaeological Resources
CEQA also requires lead agencies to consider whether projects will impact unique archaeological resources. Public Resources Code, Section 21083.2, subdivision (g), states that unique archaeological resource means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Tribal Cultural Resources
CEQA also requires lead agencies to consider whether projects will impact tribal cultural resources. Public Resources Code, Section 21074 states the following:

a) “Tribal cultural resources” are either of the following:

1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

   A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

   B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

California Register of Historical Resources
All properties in California that are listed in or formally determined eligible for listing in the NRHP are eligible for the CRHR. The CRHR is a listing of State of California resources that are significant within the context of California’s history. The CRHR is a statewide program of similar scope and with similar criteria for inclusion as those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR.

A historic resource must be significant at the local, state, or national level under one or more of the criteria defined in the California Code of Regulations Title 15, Chapter 11.5, Section 4850 to be included in the CRHR. The CRHR criteria are similar to the NRHP criteria and are tied to CEQA because any resource that meets the criteria below is considered a significant historical resource under CEQA. As noted above, all resources listed in or formally determined eligible for the NRHP are automatically listed in the CRHR.
The CRHR uses four evaluation criteria:

1. Is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

2. Is associated with the lives of persons important to local, California, or national history.

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.

4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Similar to the NRHP, a resource must meet one of the above criteria and retain integrity. The CRHR uses the same seven aspects of integrity as the NRHP.

**California Native American Historical, Cultural, and Sacred Sites Act**

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The Act requires that upon discovery of human remains, construction or excavation activity cease and the County coroner be notified. If the remains are of a Native American, the coroner must notify the Native American Heritage Commission (NAHC), which notifies and has the authority to designate the most likely descendant (MLD) of the deceased. The Act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

**Health and Safety Code, Sections 7052 and 7050.5**

Section 7052 of the Health and Safety Code states that the disturbance of Native American cemeteries is a felony. Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the NAHC.

**Public Resources Code, Section 5097**

Public Resources Code (PRC) Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of human remains on nonfederal land. The disposition of Native American burial falls within the jurisdiction of the NAHC. Section 5097.5 of the Code states the following:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

**Assembly Bill 52**

Assembly Bill (AB) 52, signed by the California Governor in September of 2014, establishes a new class of resources under CEQA: “tribal cultural resources.” It requires that lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation once the lead agency determines that the application for the project is complete, prior to the issuance of a NOP of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration. AB 52 also requires revision to CEQA Appendix G, the environmental checklist. This revision would create a new category for “tribal cultural resources.”
REGIONAL/LOCAL

East Bay Regional Park District Master Plan

The District Master Plan (2013) defines the overall mission and vision for the District. The Master Plan contains policies, land use designations, and descriptions of the programs in place for achieving the highest standards of service in resource conservation, management, interpretation, public access, and recreation. The Master Plan contains land use designations, also referred to as unit designations, to indicate levels of resource protection required. These unit designations include Special Protection Features (SPF) that identify areas with unique or fragile natural, cultural, aesthetic, or educational features. This designation provides the greatest amount of protection for resources that require specialized types of management to preserve and enhance them.

The policies included in the Master Plan guide the stewardship and development of the parks. Specifically, the District Master Plan includes policies related to acquisition, management, conservation, and access of cultural resources (District 2013).

- **Policy CRM 1**: The District will manage, conserve, and when practical restore parkland cultural and historic resources and sites; to preserve the heritage of the people who occupied this land before the District was established; and continue to encourage the cultural traditions associated with the land today.

- **Policy CRM 3**: The District will maintain a current map and written inventory of all cultural features and sites found on park land, and will preserve and protect these cultural features and sites “in situ” in accordance with Board policy. The District will evaluate significant cultural and historic sites to determine if they should be nominated for State Historic Landmark status or for the National Register of Historic Places.

- **Policy CRM 4**: The District will determine the level of public access to cultural and historic resources using procedures and practices adopted by the Board of Directors. The District will employ generally accepted best management practices to minimize the impact of public use and access on these resources, and to appropriately interpret the significance of these resources on a regional scale.

- **Policy CRM 5**: The District will notify Native Americans and other culturally associated peoples in a timely manner of plans which may affect sites and landscapes significant to their culture and will include them in discussions regarding the preservation and land use planning of culturally significant sites and landscapes.

- **Policy CRM 6**: The District will accommodate requests by Native Americans, ranching or farming communities and other groups to help maintain and use cultural sites and to play an active role in their preservation and interpretation.

- **Policy RS 1**: The District will provide a variety of interpretive programs that focus attention on the region’s natural and cultural resources. Programs will be designed with sensitivity to the needs and interests of people of all ages and backgrounds. Programs will enhance environmental experiences and foster values that are consistent with conserving natural and cultural resources for current and future generations to enjoy. The District will pursue and encourage volunteer support to assist in meeting these objectives.

- **Policy RFA 7**: The District will continue to develop children’s play areas in suitable park settings designated for recreation. The District will attempt to incorporate environmental and cultural themes in the design of these facilities.

- **Policy KEP 4**: The District will participate in efforts to protect scenic or cultural resources, develop larger, multi-agency open space preserves, provide recreational opportunities, protect agricultural use, avoid
hazards and plan for appropriate urban growth boundaries. The District will work with other jurisdictions
to develop open space preservation plans and policies that recognize the District’s public interests in
open space preservation and that are consistent with Board policy.

- **Policy PRPT22**: Areas with unique or fragile features will be designated as Special Protection Features to
  preserve and enhance them through specialized management. Special Protection Features may be
  closed seasonally or permanently to public access, if public access will endanger them.

**East Bay Regional Parks District Ordinance 38**

Ordinance 38 provides general rules and regulations for the district. Section 810 of the ordinance discusses
special protection areas within the district and states that no person shall ride or operate a bicycle or ride a
horse within a posted Special Protection Area, except on designated trails. Special Protection Areas are
designated by the Board to preserve cultural and/or natural resources. Within Miller/Knox, Ferry Point is
designated a Special Protection Area.

**East Bay Regional Park District General Conditions**

Article 23 of the District’s internal General Conditions for contractors applicable to the proposed LUPA
include:

- If cultural resources or human remains should be encountered during construction, all ground disturbing
  activities within fifty (50) feet of the find shall be halted and the District Inspector notified immediately.
  Work shall not be permitted to commence until the District provides written direction to proceed. Only
  the balance of that work day shall be compensated by the District if the Contractor cannot perform work
  elsewhere on the project. Examples of cultural resources include:

  - Prehistoric archaeological deposits such as obsidian or chert flakes or tools; ground-stone mortars,
    slabs, or pestles; cultural deposits of shell or bone; locally darkened midden (trash) soils; and human
    interments.

  - Historic-period archaeological materials such as foundations or other structural remains; refuse
    deposits; backfilled wells or privies; nails; glass and pottery.

  - Do not collect, deface, excavate, or destroy any objects of antiquity. Examples of such objects include
    stone-flaked or ground tools, bones, shells, beads, bottles, nails, barbed wire, ceramic pieces, buttons,
    weathered boards, and tin cans. Leave these objects undisturbed. If discovered, leave in place, note
    their location, and immediately notify the District Inspector.

**Richmond Historic Register**

The Richmond Historic Register includes a list of designated historic resources within the City. The Historic
Structures Code defines a historic resource as any building, structure, sign, feature, site, place, area, or
other improvement of scientific, aesthetic, educational, cultural, archaeological, architectural, or historical
value to citizens of the City and designated as such by the Richmond City Council. Historic resources also
include historic landmarks and contributing structures in historic districts (City of Richmond 2012a).

**City of Richmond General Plan**

The Richmond General Plan 2030 was adopted in 2012 to guide the City’s sustainable growth and
development. The General Plan’s Conservation, Natural Resources and Open Space element presents
policies related to cultural resources that are relevant to the proposed project.

- **Policy CN2.2**: Minimize the impacts of development on the shoreline with special attention to intensity,
density, and proximity to the water. Conserve, protect and enhance natural and cultural resources along
the Richmond shoreline. Promote a balance of uses along the shoreline that supports multiple
community needs such as economic development, recreation, historic preservation and natural resource
protection (City of Richmond 2012b).
- Provide a mix of residential and recreation uses in the Southern Gateway change area; support an active industrial waterfront around the Port and along the Santa Fe Channel; and promote a cultural heritage shoreline west of the Port.

- Protect and restore wetlands, native habitats and open space; develop shoreline parks and trails to increase public access; encourage recreation and tourism activities; and enhance and showcase historic and cultural resources. Prepare, adopt, and implement plans that will work to protect natural and built environments from adverse potential impacts of sea level rise due to climate change.

- **Policy HR1.1.** Protect, preserve and enhance the diverse range of historic, cultural and archaeological sites and resources in the City for the benefit of current and future residents and visitors.

- **Policy HR1.2.** Promote adaptive reuse, rehabilitation and retrofitting of historic buildings that are no longer in their original use and explore approaches to integrate preservation with economic revitalization objectives.

- **Policy HR1.3.** Promote context-sensitive design that respects and celebrates the history and historical character of sites and resources while meeting contemporary needs of the community. Encourage compatibility between new development, adaptive reuse, retrofitting and rehabilitating of historic properties and areas in the City within the historical context of the resource. Maintain consistency with the National Trust for Historic Preservation’s “Main Street” principles and the Secretary of the Interior’s Standards for the Treatment of Historic Properties, which include guidance for buildings and cultural landscapes. Ensure that commercial facilities such as those in the Point Richmond Historic District are developed in a way that complements and preserves the historic, “village-like” appearance and character of the district.

- **Policy HR1.4.** Encourage the reuse and retrofitting of existing structures to support an environment-friendly approach to redevelopment and revitalization of existing areas of the City.

- **Policy HR2.1.** Build on Richmond’s unique and nationally recognized historic resources to draw visitors to the City while supporting preservation and community development goals. Resources such as the Rose the Riveter/WW II Home Front National Historical Park, Point Molate and the San Pablo Peninsula and Point Richmond have the potential to draw visitors from the local area, the region and beyond. Integrate historic preservation with economic development objectives to generate additional revenue for the City while providing the investment needed to preserve resources.

- **Policy HR3.1.** Elevate community awareness about the value of historic preservation to build support for preservation, revitalization and adaptive reuse of historic and cultural structures and resources. Leverage the Richmond Museum of History (and its museum ship, the SS Red Oak Victory), the Point Richmond History Association and the National Historical Park to enhance public understanding of the City’s historic resources.

- **Policy HR3.2.** Improve the community’s access to information on available programs and resources for historic preservation in Richmond. There are a host of grants, funding sources and technical assistance programs dedicated to the preservation of historic properties including the Preserve America program. The City will play an active role providing information to owners and prospective buyers.
4.5.3 Impacts and Mitigation Measures

METHODOLOGY
The primary sources of information for this section are:

- North West Information Center (NWIC) records search (confidential)
- Ferry Point Buildings Development Study (2015)
- Miller/Knox Regional Shoreline Resource Analysis (1983)

The impact analysis for archaeological resources is based on the findings presented in the NWIC records search. The impact analysis for historical resources is based on the findings presented in the Ferry Point Buildings Development Study. The analysis is also informed by the provisions and requirements of federal, state, and local laws and regulations that apply to cultural resources. In determining the level of significance, the analysis assumes that the project would comply with relevant, federal, state, and local laws, regulations, and ordinances.

THRESHOLDS OF SIGNIFICANCE
Based on Appendix G of the State CEQA Guidelines, the project would result in a significant impact on cultural resources if it would:

- cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines;
- cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the State CEQA Guidelines;
- cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically; or
- disturb any human remains, including those interred outside of dedicated cemeteries.

ISSUES NOT DISCUSSED FURTHER
Impacts to Tribal Cultural Resources
As previously described, eight tribes were contacted by the District for AB 52 consultation on October 24, 2017. None of the eight tribes responded within the 30-day response period for AB 52 as defined in PRC Section 21074; therefore, no AB 52 consultation was undertaken. Because no tribal cultural resources were identified, and no other evidence exists that indicates the potential for occurrence within Miller/Knox, there would be no impact and this issue is not discussed further in this PEIR. Additionally, implementation of the LUPA recommendations is not expected to adversely affect any known cultural resource.
IMPACTS AND MITIGATION MEASURES

Impact 4.5-1: Change In the Significance of an Historical Resource

Implementation of the LUPA recommendations would result in partial demolition of the historic warehouse building within the Ferry Point Planning Area. The warehouse building is a historic resource within the City because of its association with the Ferry Point Pier. Demolishing and replacing the building with another use would result in a significant impact because the historic resource would be partially eliminated. Implementation of Mitigation Measures 4.5-1a and 4.5-1b would reduce the impacts related to the loss of the historic warehouse building, but not to a level of less than significant because the complete historic resource would no longer exist. Consequently, mitigation is available to only partially mitigate the impacts of the project on historical resources. Therefore, the impact would remain significant and unavoidable after application of all feasible mitigation measures.

Currently, the area including the historic buildings and historic pier is designated as a Special Protection Unit by the District. This designation would be carried forward with implementation of the LUPA recommendations. The LUPA recommendations to rehabilitate the historic pumphouse building for passive interpretive use and to replace the historic warehouse building with a day-use and scenic vista area are consistent with this designation, particularly as both buildings are currently deteriorating. Regarding the historic pumphouse, improvements would be implemented to render it consistent with current building codes and provide safe public access. This building would serve as a passive historical interpretive feature to expand on the existing interpretive focus of Ferry Point. Regarding the historic warehouse, the structure would be partially demolished to retain the existing concrete structural side and roof beams, which would delineate a framework for a day-use picnic area and a scenic vista point. Interpretive panels would highlight the role of Ferry Point’s historic contribution to intermodal transportation, its role in World War II, and in contributing to development of the City of Richmond. These activities would improve the condition of this Special Protection Unit by providing safe public access as well as interpretive elements highlighting the history of Ferry Point.

A records search of Miller/Knox was conducted in November 2017 by the NWIC. As discussed above, there are six previously recorded historic-era features. Of the six identified features, three have been evaluated as eligible or already listed in the NRHP: Point Richmond Historic District (P-07-1162), Dornan Drive Tunnel (P-07-2738), and the World War II false gun emplacement (P-07-4485). The residence (P-07-4482) and the industrial building and petroleum storage tank (P-07-0785) were evaluated and considered not eligible for listing in the NRHP or CRHR. Nicholl Nob (P-07-4483) has not been evaluated for NRHP or CRHR listing. None of these historic-era features would be impacted by any of the LUPA recommendations.

In addition to the historic features identified in the NWIC records search, the Ferry Point Property, which includes the warehouse, pumphouse, and historic pier has been determined to be potentially eligible for the NRHP and the CRHR. The historic Ferry Point pier is also a Richmond Landmark and is listed on the City’s Historic Resources Inventory. No alterations or modifications to the historic Ferry Point pier are proposed as part of the LUPA; however, implementation of the LUPA recommendations would result in partial demolition of the warehouse and construction of picnic area/vista point would be developed within the building footprint. The existing concrete structural side and roof beams from the warehouse would be retained and incorporated into a structure for the picnic area. The LUPA recommendations also include improvements to the pumphouse building to upgrade it to current building codes and provide safe public access. The building upgrade would preserve a portion of the building for public appreciation and interpretation. The pumphouse would be rehabilitated in compliance with The Secretary’s Standards for the Rehabilitation of Historic Buildings. According to CEQA Section 15126.4(b)(1), if a project adheres to the Secretary’s Standards, the project’s impact “will generally be considered mitigated below the level of a significance and thus is not significant.” However, finalization of the proposed design work to meet the Secretary of the Interior’s Rehabilitation Standards has not been completed and these LUPA recommendations will be reviewed against this Program EIR after final design is complete. As noted in Section 3.8 of Chapter 3, “Project Description,” these buildings are located within 100-feet of the Bay shoreline, which would be within shared
BCDC and District jurisdiction. Therefore, the District would obtain a permit from BCDC before any work-related activities. The following environmental protection feature would be implemented to preserve the history of the site: an exhibit/display of the history of the warehouse building would be incorporated to include information such as historic and current photographs, interpretive text, drawings, videos, interactive media, and oral histories. The exhibit/display would be developed in consultation with Contra Costa County, local historical organizations, and those with an interest in the history of Miller/Knox. Additionally, the exhibit/display would be displayed in a location within Miller/Knox that is accessible to the public and may be incorporated into the interpretive exhibit.

Because the warehouse and pumphouse buildings are eligible for listing in the NRHP and CRHR and implementation of the LUPA recommendations would result in partial demolition of the warehouse and alteration of the pumphouse, the impact on historic resources would be significant.

Mitigation Measures

Mitigation Measure 4.5-1a: Document Historic Buildings Before Removal
The District shall complete documentation of the historic warehouse and pumphouse buildings before any demolition/construction work is conducted. Documentation shall consist of written history of the property, plans and drawings of the historic resources, and photographs, as described below:

- **Written History.** The report shall be reproduced on archival bond paper.

- **Plans and Drawings.** An architectural historian (or historical architect, as appropriate) shall conduct research into the availability of plans and drawings of the Historic Warehouse Building as the building currently exists. If such plans/drawings exist, their usefulness as documentation for the building shall be evaluated by the architectural historian. If deemed adequate, the plans/drawings shall be reproduced on archival mylar. If no plans/drawings are available, or if the existing plans/drawings are not found to be useful in documenting the historic resource, a historical architect shall prepare dimensioned plans and exterior elevations of the building. A combination of existing and new drawings is acceptable. All drawings shall be reproduced on archival mylar.

  The architectural historian shall conduct research into the existence of the original architectural plans and drawings of the building. If found, the plans shall be reproduced on archival mylar. Alternatively, the architectural plans can be scanned and saved as TIFF files. The scanning resolution shall be not less than 300 dpi.

  All digital files, including drawing files, shall be saved on media and labeled following the Secretary’s Standards and Guidelines for Archeology and Historic Preservation Digital Photography Specifications.

- **Photographs.** Digital photographs shall be taken of the historic warehouse and pumphouse buildings following the Secretary’s Standards and Guidelines for Archeology and Historic Preservation Digital Photography Standards.

The documentation shall be prepared by an architectural historian, or historical architect as appropriate, meeting the Secretary’s Standards and Guidelines for Archeology and Historic Preservation, Professional Qualification Standards. The documentation shall be submitted to the Contra Costa County Library, Contra Costa County Museums, and the Richmond Historic Register.

Mitigation Measure 4.5-1b: Ensure Appropriate Rehabilitation Plans for the Pumphouse Building
To ensure the protection of the historic integrity of the NRHP-eligible pumphouse throughout the rehabilitation period, the District shall prepare a rehabilitation plan for the pumphouse building that meets the Secretary’s Standards to the greatest degree feasible. The SOI Guidelines contain flexibility for rehabilitation of historic structures to accommodate a wide range of adapted re-uses. Specific protection measures and
recommendations shall be developed in conjunction with an architect and site design team experienced in historic preservation work. Protection measures for the rehabilitation plan shall include but are not limited to, the following:

- Historic finishes and materials shall be protected with appropriate methods.
- Infrastructure upgrades (e.g., conduit in walls) shall be installed where they will not affect significant historic fabric.
- Training on protection of historical features shall be provided for all construction workers before the beginning of work on-site.
- In addition to the protective measures, above, cleaning of historic finishes using “the gentlest means possible” as directed by the Standards for Rehabilitation shall be used.

**Significance after Mitigation**

Implementation of Mitigation Measure 4.5-1a would reduce the impacts related to the loss of the historic warehouse building, but not to a level of less than significant because the complete historic resource would no longer exist. Mitigation Measure 4.5-1b would ensure compliance with the Secretary’s Rehabilitation Standards and impacts to the pumphouse would be reduced to a less-than-significant level.

Consequently, mitigation is available to only partially mitigate the impacts of the project on historical resources. Therefore, the impact would remain significant and unavoidable after application of all feasible mitigation measures.

**Impact 4.5-2: Disturb Unique Archaeological Resources**

Implementation of the LUPA recommendations could cause a substantial change in the significance of an archaeological resource. There are no known archaeological resources within Miller/Knox; however, ground-disturbing activities related to implementation of the LUPA could result in discovery of a previously unidentified resource and/or cause a substantial change in the significance of a unique archaeological resource as defined in CEQA Guidelines Section 15064.5. This would be a potentially significant impact. Compliance with the District’s General Conditions Article 23 and implementation of Mitigation Measure 4.5-2 would reduce impacts associated with accidental damage to unknown archaeological resources to a less-than-significant level.

The record search conducted in November 2017 by the NWIC indicated three previously recorded prehistoric archaeological sites within Miller/Knox. The archaeological sites included habitation debris and an archaeological midden. The habitation debris sites were reported as being destroyed when the area was graded to create Ferry Point, and the archaeological midden could not be relocated during a 2012 survey. Because there are no known resources within Miller/Knox, implementation of LUPA recommendations would not disturb any known, unique archaeological resources.

Because of the programmatic nature of the analysis, a pedestrian survey for archaeological resources was not conducted for the Miller/Knox LUPA area. Because the identified archaeological sites were determined to be destroyed or could not be relocated, there are therefore no known unique archaeological resources within Miller/Knox. However, ground-disturbing activities could result in discovery of or damage to previously undiscovered archaeological resources as defined in State CEQA Guidelines Section 15064.5. This impact would be potentially significant.

**Mitigation Measure 4.5-2: Protection of Discovered Archaeological Resources**

- Before any ground disturbing activities, the District shall retain a qualified archaeologist to conduct archaeological surveys. The District shall follow recommendations identified in the survey report, which may include activities such as subsurface testing, designing and implementing a Worker Environmental
Awareness Program, monitoring of ground-disturbing activity by a qualified archaeologist, avoidance of sites, or preservation in place.

In the event that evidence of any prehistoric or historic-era subsurface archaeological features or deposits are discovered during construction-related earth-moving activities (e.g., ceramic shard, trash scatters, lithic scatters), all ground-disturbing activity in the area of the discovery shall be halted until a qualified archaeologist can assess the significance of the find. If the find is a prehistoric archeological site, the appropriate Native American group shall be notified. If the archaeologist determines that the find does not meet the CRHR standards of significance for cultural resources, activity may proceed. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan shall be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the District to avoid disturbance to the resources, and if complete avoidance is not feasible in light of project design, economics, logistics, and other factors, follow accepted professional standards in recording any find including submittal of the standard DPR Primary Record forms (Form DPR 523) and location information to Northwest Information Center.

In addition to adhering to applicable District Master Plan policies and Article 23 of the District’s General Conditions, the District shall comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect archaeological resources.

**Significance after Mitigation**

Implementation of Mitigation Measure 4.5-2 would reduce impacts associated with accidental damage to unknown archaeological resources to a less-than-significant level because it would require the performance of professionally-accepted and legally-compliant procedures for the discovery of previously undocumented significant archaeological resources.

**Impact 4.5-3: Accidental Discovery Of Human Remains**

Soil disturbance associated with implementation of the LUPA recommendations could unearth previously undiscovered or unrecorded human remains, if they are present. Compliance with California Health and Safety Code Sections 7050.5 and 7052, California Public Resources Code Section 5097, and the District’s General Conditions Article 23 would reduce any impacts to a less-than-significant level.

Grave sites and Native American remains can occur outside of dedicated cemeteries or burial sites. Ground-disturbing activities could uncover previously unknown human remains, which could be archaeologically or culturally significant. Implementation of the LUPA recommendations would include some grading and excavation associated with the partial demolition of the existing warehouse, construction of the recreational programs and storage building, new and expanded staging area development, and new paved trails. These activities would result in limited, shallow levels of soil disturbance; it is unlikely that unknown human remains would be unearthed by these activities. Nevertheless, the potential exists for previously undiscovered human remains to be discovered when soils are disturbed.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097.

These statutes require that if human remains are discovered during any construction activities, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the Contra Costa County coroner and NAHC shall be notified immediately, in accordance with to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California’s Health and Safety Code. If the remains are determined by NAHC to be Native American, the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner’s findings, the archaeologist, and the NAHC-designated
Most Likely Descendant shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California Public Resources Code Section 5097.94.

Compliance with California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097 would avoid or minimize the disturbance of human remains and would guide the appropriate treatment of any remains that are discovered. Therefore, this impact would be less than significant.

Mitigation Measures

No mitigation is required.
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4.6 AESTHETIC RESOURCES

This section describes existing visual resources and the physical features that make up the visible landscape within Miller/Knox Regional Shoreline (Miller/Knox or park) and evaluates changes to those resources that could occur from implementation of the proposed Miller/Knox Land Use Plan Amendment (LUPA). The effects of a project on the visual environment are generally defined in terms of the project’s physical characteristics and potential visibility, the extent to which the project’s presence would change the perceived visual character and quality of the environment, and the expected level of sensitivity that the viewing public may have where a project would alter existing views. The “Analysis Methodology” discussion below provides further detail on the approach used in this evaluation.

Scoping comments received in response to the NOP include the following concerns related to aesthetic resources: impacts related to historic structures and viewsheds, nighttime lighting, and visual blight resulting from the historic buildings in the Ferry Point Planning Area. Visual blight is an adverse change to a landscape that affects visual quality and is not considered an environmental impact under California Environmental Quality Act (CEQA), however, visual impacts related to the historic buildings, in addition to other noted concerns, are addressed in Impact 4.6-2.

4.6.1 Environmental Setting

VIEWER SENSITIVITY

The sensitivity of the viewer, or viewer concern, is based on such factors as: the visibility of resources in the landscape, proximity of the viewers to the visual resource, elevation of the viewers in relation to the visual resource, frequency and duration of views, numbers of viewers, and types and expectations of individuals and viewer groups. Viewer groups are differentiated by physical factors that modify perception. For parks, a distinction can be made between three basic groups, passers-by (motorists and passengers in cars or buses), recreationists (walkers/users of the recreation sites), and residents (those home occupants who can view a park from nearby areas). These groups are further differentiated by the activities they are engaged in. Activities such as commuting or working can distract the observer from the visual environment. On the other hand, activities such as walking, biking, or other forms of recreation can heighten awareness of scenic surroundings. Once overall visual sensitivity is established (based on existing visual quality, viewer exposure, and viewer concern), these factors are then considered together with the level of expected change in basic visual attributes such as form, line, color, and texture.

VISUAL CHARACTER OF THE SURROUNDING AREA

Miller/Knox is located within the Point Richmond community of the City of Richmond. The City is bordered to the west by the San Francisco and the San Pablo Bay, and to the east by the Sobrante Ridge, a segment of the San Pablo and Potrero Hills Range within Contra Costa County. Point Richmond and the City are predominately built-out, with the majority of natural open space areas limited to the City edges, including portions of its Bay shoreline. The City is traversed by Interstate 580 (I-580) and 80 (I-80), which provide regional access to the north, south, and west. While major commercial and industrial uses surround the highway corridors, unsightly buildings, commercial districts, and residential neighborhoods exist near the downtown core of the City.

The majority of the older residential neighborhoods are located inland near the downtown core. The newer and more suburban residential neighborhoods are primarily located near Hilltop, a neighborhood in the northern portion of the City. In addition, a small number of residential uses exist along the Bay and along the hillsides. The eastern portion of the City is dominated by the San Pablo-Potrero Hills Range, which can reach elevations of up to 1,050 feet. The 400-foot crest of the Sobrante Ridge serves the elevation transition.
between the City core’s low-lying areas and the San Pablo-Potrero Hills Range. The range can be seen throughout the City and is generally undeveloped. The majority of the City’s park and open space areas exist within the hillside viewshed.

Due to the proximity to the San Francisco Bay, in addition to topographic changes from the coastal edge to the mountain range to the west, areas within the City provide a wide range of natural hillside and Bay views. Though long-range views within the City are generally expansive because of the flat terrain throughout the City, views are often blocked by existing mature trees and buildings (City of Richmond 2011).

**VISUAL CHARACTER OF MILLER/KNOX**

The LUPA identifies five distinct planning areas within Miller/Knox, as shown in Exhibit 3-2, in Chapter 3, “Project Description.” These planning areas include the Ferry Point, Bray, Bay Shore, Lagoon, and Ridgeland Planning Area.

As disclosed in Chapter 3, “Project Description,” Miller/Knox is in the southwestern portion of the City in the Point Richmond community. Miller/Knox encompasses more than 307 acres of grasslands, shrublands, woodlands, picnic areas, hiking areas, pedestrian and cycling trails, and beaches. The developed portions of the park include maintained landscaping and turf, picnic areas and beaches, trails, and a managed, artificial lagoon. Undeveloped areas support both native vegetation and areas of non-native, invasive species.

The visual character of Miller/Knox is defined by open views of the San Francisco Bay and mountains, varied vegetation and trees, the large and central lagoon, and cultural and recreational resources within the park. Exhibit 4.6-1 shows an elevated view of Miller/Knox, which includes the Lagoon Planning Area, portions of the shoreline, and views of the Bay to the south. Dornan Drive extends from the southern portion of Miller/Knox to the north, near Keller Beach Park. Topographically, the area of Miller/Knox west of Dornan Drive is mostly flat, with the exception of the land above Keller Beach. East of Dornan Drive is hilly with elevations of up to 370 feet near Nicholl Knob. The differing topography east of Dornan Drive allows for elevated views of the park and San Francisco Bay, as shown in Exhibit 4.6-1.

**Ferry Point Planning Area**

The Ferry Point Planning Area consists of 28 acres, 18 of which are tidal or sub-tidal, and 10 of which are on land. The area is triangular in shape and located adjacent to the Bray Planning Area at the southern tip of Miller/Knox. The Ferry Point Planning Area features a section of the San Francisco Bay Trail; picnic areas, the Ferry Point Fishing Pier; and open areas. The Ferry Point planning area also includes historic two buildings, the pumphouse and warehouse. Both buildings are considered historic and eligible for National Register listing. These historic buildings, although in poor condition, contribute to the visual character of Miller/Knox, which has high scenic quality overall. As described in section 3.5.1 of Chapter 3, “Project Description,” the Ferry Point Plaza was reconfigured in 2015 as part of the Ferry Point Public Access Improvement Project. This project resulted in new active and passive recreational amenities, improved access to the small sandy beach, and developed an ADA-compliant pathway to the Ferry Point parking area.

Exhibit 4.6-2 illustrates existing views of Ferry Point Planning Area, which consists of a combination of natural features and built resources. Natural features in this area include short grasses and small shrubs, although they are intermixed with gravel and a paved pathway and thus don’t provide a strong sense of nature. The area does provide expansive, panoramic views of San Francisco, Angel Island and the rolling hills of Marin County, which increase the visual quality of the area. The natural and open character of the view is interrupted by existing structures at the western tip of the Ferry Point Planning Area, including the Ferry Point Fishing Pier, the pumphouse, and the warehouse. The historic pumphouse and warehouse buildings are in poor physical condition with graffiti on their facades and chain link fencing surrounds the structures. In their current condition, they detract from the visual character and quality of the Ferry Point Planning Area by intruding into views of the Bay with degraded appearance and reducing continuity of the distant panoramic vista.
Exhibit 4.6-1  Overall View of Miller/Knox

Source: Taken by Ascent Environmental in 2018
Primary viewer groups in this area are recreationists, including walkers, cyclists, anglers, and picnickers. Such viewers experience longer duration views (moderate-high exposure) of the local landscape than motorists because they spend extended time at their view points, and have high expectations for a scenic experience, particularly in parks and open space, because they are recreating. Therefore, park recreationists tend to have high sensitivity to visual quality.

**Bray Planning Area**

The Bray Planning Area is a 7.08-acre triangular parcel located west of Dornan Drive. The relatively-flat property consists of a mix of un-maintained native and non-native vegetation, user-created trails, a small wetland in the center of the property, and remnant debris from the previous structures.

Exhibit 4.6-3 shows the Bray Planning Area in its existing condition. The area is characterized by its dense vegetation and varying sizes and colors of grasses and shrubs. Because the area includes unmaintained and densely populated vegetation, outward views from the property and inward views of the property are limited. Given its somewhat natural condition, the visual character of the site has moderate scenic quality. Few viewers are present in this planning area, aside from intermittent hikers on the user-created trails and passer-by on Dornan Drive and the existing section of Bay Trail. This area is also frequented by bird watchers who utilize the space to view birds and other wildlife.
Bay Shore Planning Area
The Bay Shore Planning Area includes a narrow, relatively flat stretch of San Francisco Bay shoreline that extends from the north at Keller Beach, to the south near Ferry Point, where it then wraps around the Ferry Point Planning Area to connect with Ferry Point Beach. The largest portion of land within this planning area is Keller Beach, which encompasses approximately 1.3 acres of the northern portion of Miller/Knox, near the Dornan Drive Tunnel. Keller Beach includes picnic tables, barbeques, restrooms, an outdoor shower, horseshoe pits, and landscaping. These amenities are arranged on terraces accentuated by curvilinear rock walls overlooking the beach and San Francisco Bay. Ferry Point Beach, located at the southern portion of Miller/Knox, consists of a launch station for non-motorized watercraft including canoes, kayaks, and paddleboards. There is a small pocket beach located between Keller Beach and Ferry Point that offers additional views across the San Francisco Bay. As previously described, the Ferry Point Plaza, adjacent to the Bay Shore Planning Area, was reconfigured in 2015 as part of the Ferry Point Public Access Improvement Project. This project introduced several new amenities for park visitors in addition to improved access, including public view access, and inclusion of ADA-compliant features.

As depicted in Exhibit 4.6-4, the Bay Shore Planning Area is linear with high continuity of visual character along the bay shoreline. There is a trail, which is interrupted by abandoned railroad tracks in the northern portion of the planning area. Also visible is rip rap rock and unmaintained vegetation along the shoreline. Portions of this planning area include paved pedestrian paths, while other parts include un-paved, user-created paths. Expansive and mostly uninterrupted views of the San Francisco Bay shoreline and cityscape, Angel Island, and the surrounding hillsides of Marin County are available, which increase the overall visual quality of the planning area. On a clear day, portions of the Golden Gate Bridge can be viewed southwest of Angel Island. The overall visual character of the planning area has moderate to high scenic quality, with the distant vistas increasing quality and the near-ground scene (rip rap, railroad tracks, unmaintained vegetation) detracting from it.

The primary viewer group in this planning area consists of shoreline visitors, including walkers, joggers, and beach-goers. Such viewers experience long duration views (moderate-high exposure) of the local landscape and have high expectations for a scenic experience, particularly along water and in open space, because they are likely visiting to appreciate the scenic bay/shoreline setting. The bay/shoreline visual setting includes not only views across the bay, but also views to and along the shoreline. Because of this, it is important that views from, to, and along the shoreline are protected.

Lagoon Planning Area
The Lagoon Planning Area is centrally located within Miller/Knox. This area is bordered by the Bay Shore Planning Area to the west, the Ridgeland Planning Area to the east across Dornan Drive, and the Bray Planning Area to the south. The Lagoon Planning Area is relatively flat and consists of an artificial lagoon and associated pedestrian facilities, group and individual picnic areas with barbeques, children’s play areas, expanses of lawn for unstructured play, multiple paved parking areas, a large concrete surface used for unstructured play, and restrooms.

As shown in Exhibit 4.6-5, the Lagoon Planning Area includes interconnected network of paved paths, that offer picnic and seating areas to enjoy views of the lagoon. Young and mature trees are present throughout the planning area and are scattered among both maintained and unmaintained vegetation. The area surrounding the lagoon has high continuity and the visual character of an urban park. Although the area does not provide direct, unrestricted views of the Bay, portions of long-distance views can be observed through breaks in the surrounding vegetation. Views of the rolling hills of the Ridgeland Planning Area are available looking to the east. Multiple paved areas detract from the natural visual quality of the site. The overall visual character of the planning area has moderate scenic quality. As part of the 2015 Public Access Improvement Project, public amenities, such as picnic areas, tables, and barbeques within the Lagoon Planning Area were improved, further enhancing the landscape quality of and access to bay vistas from the area.
The primary viewer group is recreationists, including walkers and runners, bicycling travelers, game-playing visitors, and picnic groups. Some of these viewers tend to experience longer duration views (moderate-high exposure) of the local landscape, however, others are focused on their recreational activity in the park instead. Visitors who seek to appreciate the elevated views of the area, such as hikers within the Ridgeland Planning Area, tend to have high expectations for a scenic experience. Therefore, they tend to have high sensitivity to visual quality. Others are less sensitive to visual quality, because they are participants in outdoor activities, such as games or family/friend visiting. Passers-by traveling along Dornan Drive would also be less sensitive to visual quality because of their short-duration views.

**Ridgeland Planning Area**

The Ridgeland Planning Area includes approximately 163 acres of hilly terrain east of Dornan Drive. This area features approximately 4 miles of hiking trails in open-space grassland intermixed with patches of shrubland and woodland. The highest peak in the planning area is Nicholl Knob, which extends 371 feet above sea level. Four established vista points in the Ridgeland Planning Area offer expansive, high-quality views of Miller/Knox, the San Francisco Bay, and the surrounding Bay Area from a rare, elevated viewing perspective. There are several existing structures within the Ridgeland Planning Area. These include the Bernardi House, a False Gun site, and the Golden State Model Railroad Museum.

As shown in Exhibit 4.6-6, the Ridgeland Planning Area consists of areas of hilly, mostly natural open space. Views of the area include rolling hills, low-lying grasses, scattered vegetation and trees, and hiking trails, with considerable continuity of visual character. Views from portions of the planning area offer long-distance views of Miller/Knox and the surrounding Bay Area. As seen in Exhibit 4.6-6, expansive and high-quality views can be seen of the San Francisco cityscape, Angel Island, Golden Gate Bridge, and Marin County hillsides. Given the presence of several expansive views of the Bay Area from elevated vista points, visual quality of this planning area is high.

The primary viewer group in this area is trail users, including hikers and runners, as well as visitors arriving for nature and scenic appreciation, including photographers. Such viewers tend to experience long duration views (moderate-high exposure) of the local landscape, because they are walking or running at a moderate pace along trails. Also, walkers and nature appreciators often pause at vista points. They have high expectations for a scenic experience, particularly at vista viewpoints. Therefore, these park visitors tend to have high sensitivity to visual quality.

**VIEWS OF MILLER/KNOX FROM THE SURROUNDING AREA**

Miller/Knox covers approximately 307 acres of Point Richmond. Due to its size and the ranges in topography at the park, Miller/Knox cannot be viewed in its entirety at any one give view point or location. Portions of Miller/Knox can be seen by surrounding land uses, such as the residential areas located in Point Richmond and south of the park, from Canal Boulevard, and within the park along Dornan Drive. Portions can also be viewed from the hiking trails and recreational paths located within the park.

**LIGHT AND GLARE CONDITIONS**

Miller/Knox offers daytime recreational uses to residents and visitors. Due to the nature of the site use and management, lighting is generally limited to restrooms and roadways within the park, as well as lighting on the Ferry Point Pier. The primary sources of glare are from parked cars and sun glare from water, such as the lagoon and the San Francisco Bay. Surrounding sources of light and glare include street lights, surrounding residential areas and vehicles. Distant light is visible from the San Francisco and other urban areas across the San Francisco Bay.
4.6.2 Regulatory Setting

FEDERAL

No federal plans, policies, regulations, or laws related to aesthetics, light, and glare are applicable to the Miller/Knox LUPA.

STATE

California Scenic Highway Program

California’s Scenic Highway Program was created by the California Legislature in 1963 and is managed by the California Department of Transportation. The goal of this program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to highways. A highway may be designated “scenic” depending on how much of the natural landscape travelers can see, the scenic quality of the landscape, and the extent to which development intrudes on travelers’ enjoyment of the view.

Both I-580 and I-80 are located within Richmond, however, neither are eligible for inclusion of the California Scenic Highway Program as an officially designated scenic highway (Caltrans 2011). There are no state scenic highways located within the viewshed of Miller/Knox.

LOCAL

East Bay Regional Park District Master Plan

The District Master Plan 2013 defines the overall mission and vision for the Park District. The Master Plan contains policies and descriptions of the programs in place for achieving the highest standards of service in resource conservation, management, interpretation, public access, and recreation. The policies guide the stewardship and development of the parks. Generally, the District Master Plan includes efforts related to the protection of scenic resources through the development and protection of open space. Preservation efforts identified to protect scenic resources include open space perseverance plans, conservation easements, development restrictions, and zoning and land use regulations (District 2013). An applicable policy to the proposed LUPA is included below:

- **Policy PRPT 8**: A Regional Shoreline (one area or a group of smaller shoreline areas that are connected by trail or water access) must contain a variety of natural environments and manageable units of tidal, near shore wetland and upland areas that can be used for scientific, interpretive, or environmental purposes; and/or contain sufficient land and water to provide a variety of recreational activities, such as swimming, fishing, boating, or viewing. The Recreation/Staging Unit providing for public access and services may comprise no more than 30 percent of a Regional Shoreline.

City of Richmond General Plan

The Richmond General Plan 2030 was adopted in 2012 to guide the City’s sustainable growth and development. The General Plan’s Conservation, Natural Resources and Open Space element presents policies related to aesthetics that are relevant to the proposed LUPA.

- **Policy CN2.1**: Preserve open space areas along the shoreline, creeks, and in the hills to protect natural habitat and maintain the integrity of hillsides, creeks and wetlands. Protect existing open space, agricultural lands and parks.

- **Policy CN2.2**: Minimize the impacts of development on the shoreline with special attention to intensity, density, and proximity to the water. Conserve, protect and enhance natural and cultural resources along the Richmond shoreline. Promote a balance of uses along the shoreline that supports multiple community needs such as economic development, recreation, historic preservation and natural resource protection.
Policy CN2.3: Protect natural topography to preserve and enhance Richmond’s natural beauty and require developers to concentrate residential development below the 400-foot elevation. The natural characteristics of the Berkeley Hills, San Pablo Ridge, El Sobrante Ridge, Point Potrero and San Pablo Peninsula should be protected and enhanced by regulating allowable methods of site preparation, grading, soils repair, foundation design and topographic alteration, as well as the height, color, material and siting of structures and roadways, quantities of cut and fill, placement of utility crossings and removal of vegetation.

4.6.3 Impacts and Mitigation Measures

METHODOLOGY

Evaluation of potential aesthetic resource impacts are based on review of site photos and visual renderings representing key vantage points in addition to documents pertaining to Miller/Knox, including the City of Richmond General Plan (City of Richmond 2012). Potential impacts to aesthetic resources that could result from LUPA implementation were determined through a professionally-accepted practice that considers three primary factors: (a) the existing scenic quality of an area; (b) the level of viewer exposure and concern regarding visual change; and (c) the level of actual visual change caused by a project as seen by a given viewer group. A substantial adverse effect would occur when viewers with high levels of overall visual sensitivity (i.e., high viewer concern and visual exposure, in settings of high existing visual quality) encounter diminished scenic quality, substantial visual change, or scenic view obstruction as a result of a project (e.g., the implementation of the proposed LUPA).

Visual Simulations

A Visual simulation was prepared to depict visual changes as a result of LUPA implementation from key vantage points and where more substantial changes are occurring for the Ferry Point Planning Area recommendations (Exhibit 4.6-7), including multi-use trail improvements, the rehabilitated pumphouse, and the new picnic area in the footprint of the warehouse; This visual rendering provides context for examining the existing visual setting relative to the proposed visual changes with implementation of the LUPA.

THRESHOLDS OF SIGNIFICANCE

An impact on aesthetic resources, or related to light and glare is considered significant if implementation of the LUPA recommendations would do any of the following:

- have a substantial adverse effect on a scenic vista;
- substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway;
- substantially degrade the existing visual character or quality of the site and its surroundings;
- create a new source of substantial light or glare that would adversely affect day or nighttime views in the area;
Exhibit 4.6-7

Ferry Point Planning Area Visual Simulation

Source: Prepared by Ascent Environmental in 2018
ISSUES NOT DISCUSSED FURTHER

**Visual Resources within a State Scenic Highway**
As previously discussed, no roadway or highway segments in the vicinity of Miller/Knox, including I-80 and I-580, are designated as scenic highways under the California Scenic Highway Program (Caltrans 2011). The nearest designated highway is State Route 24, located approximately 8.5 miles southeast of Miller/Knox, with no views of the park. No impacts to scenic resources within a state scenic highway would occur, and therefore, this topic is not discussed further in this PEIR.

**IMPACTS AND MITIGATION MEASURES**

**Impact 4.6-1: Result In a Substantial Adverse Effect On a Scenic Vista**

Implementation of the LUPA recommendations would result in temporary construction-type activities, which could temporarily alter views of the San Francisco Bay from various planning areas in the park because of the presence of equipment and material stockpiles. Because construction activities would be temporary in nature and recommendations implemented under the LUPA would result in additional and improved scenic vistas and viewing opportunity within the park, impacts are considered less than significant.

Implementation of some of the LUPA recommendations would require the temporary use of large equipment, materials, and vehicles. Specifically, the rehabilitation of the pumphouse and partial demolition of the warehouse, as well as the Lagoon Enhancement Project would require more extensive construction-type activities which could be visible from established vista points in the Ridgeland Planning Area, as well as from other areas of Miller/Knox. Equipment such as excavators, haul trucks, material stock piles, construction vehicles, etc. would reduce the visual character and quality of the immediate area. However, all of these activities would be temporary in nature and would not result in permanent impacts to any views in the park, including from vista points. In addition, these activities would occur in different areas of the park at different times according to the construction and implementation schedule provided in Section 3.10 of Chapter 3, “Project Description.” Furthermore, given that the vista points in the park are within the Ridgeland Planning Area and elevated, long-distance views of the Bay and surrounding cityscape, bridges, and mountains would still be available during all phases of LUPA implementation.

The primary permanent visual changes that would occur as a result of the LUPA recommendations include the rehabilitation of the historic pumphouse, demolition of the historic warehouse next to the pumphouse, and development of a new picnic area in the footprint of the warehouse building at Ferry Point; development of the new recreational programs and storage building and demonstration gardens on the Bray Property; and the construction of a grand promenade connecting the Ferry Point pier to the lagoon through the Bray Property, and other multi-use paved trails. As depicted on Exhibits 4.6-7 and 4.6-8, implementation of the LUPA recommendations would result in long-term beneficial impacts to visual character and quality of Miller/Knox through improved park facilities, such as the pumphouse and warehouse and associated access to the shoreline, through improved walkways and overall connectivity, inclusion of new native vegetation and gardens. These improvements would be slightly visible from scenic vistas in and around Miller/Knox. Furthermore, the Ridgeland Planning Area recommendations include providing additional vista points, and improvements to the existing trail system and vegetation.

Extensive consideration has been given to the proposed configuration of the Ferry Point Planning Area in the LUPA, recognizing the potential trade-offs of preservation/restoration of two existing historic buildings (i.e., the pumphouse closest to the point and warehouse next to the pumphouse) and enhancement/opening of the broad vistas of the Bay, San Francisco, Angel Island, and Marin County. The LUPA proposes to retain and renovate the pumphouse building to accomplish preservation and interpretation of the heritage of Ferry Point, along with leaving the pier in place, while improving the scenic quality and viewer access to vistas.
across the Bay by removing the warehouse and developing a visitor amenity, a picnic area and shoreline viewpoint, in its place. From the perspective of scenic quality of Miller/Knox and the Bay vistas, this approach would enhance the openness and availability of the cross-Bay vistas and provide improved viewer access to the vista, which would benefit the scenic quality of the planning area. Please refer to Section 4.5, Cultural and Tribal Cultural Resources, for a discussion of historic resource impacts.

In summary, although construction could be visible from scenic vistas in the park during the implementation phase of several LUPA recommendations, the impacts would be temporary and long-distance views from existing scenic vistas would not be substantially altered. Once the LUPA recommendations are completed, views from scenic vistas within and adjacent to the park would be improved, and more opportunities for scenic views would be available. This impact would be **less than significant**.

**Mitigation Measures**
No mitigation measures are necessary.

**Impact 4.6-2: Degrade Existing Visual Character or Quality**

Implementation of the LUPA recommendations would result in temporary and permanent visual changes within Miller/Knox. Although the existing visual character and quality of Miller/Knox would be temporarily degraded during active construction activities, over the long-term the LUPA recommendations would enhance the existing landscape of Miller/Knox and ultimately improve the quality of the visual character of the park. Impacts would be **less than significant**.

As previously discussed in Impact 4.6-1 above, implementation of the LUPA recommendations would result in construction related-activity within Miller/Knox, which would be visible during periods of heavy activity and could degrade the visual quality of Miller/Knox. However, these activities would be temporary in nature and occur in different areas of the park at different times over an approximately 10-year period, according to the construction and implementation schedule provided in Section 3.10 of Chapter 3, “Project Description.” Therefore, while more visibly intrusive activities are occurring, such as the Lagoon Enhancement Project, visitors could still use other areas of Miller/Knox with visual character and quality intact.

Implementation of the LUPA recommendations would result in several long-term and beneficial impacts to visual character and quality of the park. Examples of scenic quality improvements would include the rehabilitated pumphouse, development of a picnic area at Ferry Point, multi-use trails and overall trail connectivity that improves viewer access to vistas, inclusion of new native vegetation and gardens, and new and improved picnic areas and trails. The LUPA recommendations for the Bray Planning Area would result in new trail connections, park facilities, demonstration gardens and plant communities, and interpretive/education opportunities. Overall, the existing visual character and quality of the Bray Planning Area would be improved and more unified with the landscape character of the rest of Miller/Knox as a regional park.

Implementation of the LUPA recommendations would result in an overall improvement in the scenic quality of Miller/Knox. The impact would be **less than significant**.

**Mitigation Measures**
No mitigation measures are necessary.

**Impact 4.6-3: Create a Substantial New Source of Light and/or Glare**

Implementation of the LUPA recommendations would introduce minimal new sources of light and glare associated with development within the Ferry Point and Bray Planning Areas. This impact would be **less than significant**.
As previously described in Section 4.6.1 “Light and Glare Conditions,” existing light sources within Miller/Knox are minimal, the only lighting present within the park is at the Ferry Point fishing pier. New sources of light and glare as a result of LUPA implementation would be minimal because the majority of the recommendations are improvements to existing facilities and amenities, or improvements that would enhance the natural environment such as the Lagoon Enhancement Project. The park is closed from 10:00 p.m. to 5:00 a.m., except for the fishing pier, so no substantial nighttime light would be generated at Miller/Knox from implementation of the LUPA recommendations. Therefore, it would not result in substantial additional lighting within the park nor would it create glare affecting adjacent residents or other land uses.

The primary source of potential new glare that could result from the LUPA recommendations would be from windows or other reflective finishes associated with the recreational programs and storage building on the Bray Planning Area. The structure would be a single level and small in size in relation to the over 300-acre Miller/Knox park area. It would be built with the design concept of blending in with the surrounding landscape and using non-reflective finishes. Therefore, no new significant glare would result from the new structure. Other smaller sources of new glare would be related to the expanded, formalized, and new staging areas and additional cars present on site. The potential increase in vehicles on site would not be substantial, because the park is not expanding in size or adding substantial capacity and would be divided among two existing staging areas: Ferry Point and Dornan Drive, and one new staging area at Canal Boulevard. Given that vehicles already park in these areas, a substantial new source of glare would not be the result. Therefore, impacts related to new sources of light and glare would be less than significant.

**Mitigation Measures**

No mitigation measures are necessary.
4.7 RECREATION RESOURCES AND PUBLIC ACCESS

This section describes existing recreation facilities and opportunities and evaluates changes to the physical environment that may result from implementation of the Miller/Knox Regional Shoreline (Miller/Knox or park) Land Use Plan Amendment (LUPA). The analysis that follows evaluates recreational impacts, including demand and availability of recreational resources, associated with implementation of the LUPA.

Scoping comments received related to recreation resources and public access expressed concern over general recreational accessibility, development of the San Francisco Bay Trail along the park shoreline, per the District’s Measure CC, impacts to watersports, off-leash opportunities for dogs, and included suggestions for additional recreational opportunities such as designated off-leash dog areas and sports courts. These issues are further discussed below in Impact 4.7-1.

4.7.1 Environmental Setting

LOCAL AND REGIONAL PARKS AND RECREATION FACILITIES IN THE MILLER/KNOX VICINITY

The City of Richmond contains approximately 4,300 acres of parklands and open space, which account for roughly 20 percent of the land area in the City. Of these parklands, 4,029 acres are owned and operated by regional agencies, and 283 acres are City-owned facilities or jointly used by the City and other public or private entities (City of Richmond 2011).

The City of Richmond owns and operates 74 public parks, including compact parks, pocket parks, overlooks, pathways, neighborhood parks, and community parks. Recreational facilities within the City include play lots, play fields, eight community centers, two senior centers, a swim center, indoor recreation complex, and municipal natatorium, known as The Plunge (City of Richmond 2011).

Within the Richmond city limits, the District manages approximately 4,025 acres of regional and state parklands that range from large-scale hillside natural areas to shoreline parks. These parks feature trail systems and day-use areas that are made available to the public for activities such as hiking, horseback riding, mountain biking, bird-watching, fishing, and picnicking. The District provides open space, wildlife habitat, and range of passive recreational opportunities in the urban corridor of Contra Costa and Alameda counties. State and regional parks in the City include Wildcat Canyon State Park, Sobrante Ridge Regional Preserve, East Bay Shoreline State Park, Point Isabel Regional Shoreline, and Miller/Knox (City of Richmond 2011). The closest park to Miller/Knox is Judge George D Carroll Park, located 0.5 mile north of the central portion of Miller/Knox. Additionally, the Rosie the Riveter WWII Home Front National Historical Park is located within the City of Richmond, approximately 1.5 miles south of Miller/Knox.

EXISTING RECREATIONAL CHARACTER OF MILLER/KNOX REGIONAL SHORELINE

Miller/Knox is within the southwestern portion of the City of Richmond. The Park is bound by the San Francisco Bay to the west, Point Richmond to the north, Canal Boulevard to the east, and Brickyard Cove Road to the south. Additionally, the park is intersected by Dornan Drive, which extends from the northern portion of the park, to the south near Ferry Point beach. Miller/Knox includes 307 acres of parkland, most of which is utilized for recreational activities including the District’s Interpretive and Recreation Services community outreach programs such as the Teen Eco Action and Adventure Crew/Richmond Ranges, both of which target under-served West Contra Costa County youth. The District’s Recreation in Nature activity guide frequently includes activities at Miller/Knox. A comprehensive overview of recreational resources available within the park are depicted in Exhibit 4.7-1 and are summarized below by LUPA planning area.
Ferry Point Planning Area
The Ferry Point Planning Area features picnic facilities, a fishing pier, viewing opportunities, a portion of the San Francisco Bay Trail (Bay Trail), and open areas for passive recreational use. The Bay Trail is used extensively by recreational walkers, runners, and bicyclists. (District 2017; District 1983). The historic pier, warehouse, and pump house buildings are also located in the Ferry Point Planning Area; however, they are currently closed to public access. Interpretive panels and benches are located along the Bay Trail and at the fishing pier.

Bray Planning Area
The Bray Planning Area is relatively undeveloped and includes a mix of un-maintained native and non-native vegetation, user-created trials, and remnant debris from previous structures. This area is frequented by recreationists who birdwatch and view other wildlife. The Bray Planning Area currently has few established recreational amenities.

Bay Shore Planning Area
The Bay Shore Planning Area is a narrow band of relatively flat, San Francisco Bay shoreline, starting at Keller Beach in the north, extending south to Ferry Point, and wrapping around the Ferry Point Planning Area to connect with Ferry Point Beach. Keller Beach includes picnic tables, barbeques, restrooms, an outdoor shower, horseshoe pits, and landscaping. These amenities are arranged on terraces accentuated by curvilinear rock walls overlooking the beach and San Francisco Bay. Ferry Point Beach is a small beach located at the south end of Miller/Knox. A designated location on the San Francisco Water Trail, Ferry Point Beach is a popular launch location for non-motorized watercraft including canoes, kayaks, and paddleboards. A paved section of San Francisco Bay Trail exists along the shoreline between Ferry Point Beach and Ferry Point fishing pier; it continues landward into the Lagoon Planning Area.

Lagoon Planning Area
Within the Lagoon Planning Area, the lagoon is surrounded by a one-mile-long pedestrian path with benches; picnic areas with barbeques; turf areas that are used for volleyball, badminton, soccer, and other outdoor recreation; and a horseshoe pit. A large concrete pad structure in the Lagoon Planning Area is intended for overflow parking, but is frequently used by visitors for bicycling, roller skating, scooters, and street hockey.

Ridgeland Planning Area
East of Dornan Drive is the Ridgeland Planning Area, which includes a segment of the Potrero Hills. The Potrero Hills consists of a northeast-southwest trending ridgeline, known as Nicholl Knob, that extends 371 feet in elevation. The Ridgeland Planning Area is primarily open-space with grasslands, shrubland, and woodland. The False Gun site is at the intersection of the West Ridge Trail and the Crest Trail in the Ridgeland Planning Area and is one of four established vista points in the area with an informational panel and benches. Several trails can be accessed throughout the Ridgeland Planning Area as shown on Exhibit 4.7-1. These trails are designated for day-hiking recreation and offer both longer and shorter hiking routes. Areas within the Ridgeland Planning Area offer expansive and elevated views of the bay, and recreationists that seek passive recreation often utilize this space to experience the views, bird watch, or create art.

4.7.2 Regulatory Setting

FEDERAL
No federal plans, policies, regulations, or laws related to recreation or recreational resources are applicable to the LUPA.

STATE
No state plans, policies, regulations, or laws related to recreation or recreational resources are applicable to the LUPA.
REgional/Local

East Bay Regional Park District Master Plan

The District Master Plan 2013 defines the overall mission and vision for the District. The Master Plan contains policies and descriptions of the programs in place for achieving the highest standards of service in resource conservation, management, interpretation, public access, and recreation. Specifically, the District Master Plan includes policies related to recreational outreach, resources, education, programs, interpretive resources, as well as availability and access to park resources and facilities (District 2013). Those applicable to the proposed LUPA are provide below

- **Policy PA 1:** The District will use the concepts of the Healthy Parks Healthy People movement to focus its outreach and education efforts. To achieve the goals of the Healthy Parks Healthy People movement the District will partner with other park, recreation and community organizations; along with schools, local health providers and businesses to provide opportunities for families and individuals to experience both traditional and non-traditional types of outdoor activities while reconnecting to the outdoors.

- **Policy PA 2:** The District will provide information about its parks, trails and programs in a variety of venues, languages and types of media. There is a need to serve both a more ethnically diverse set of residents and an increasing number of seniors and youth.

- **Policy PA 3:** The District will regularly use formal and informal survey methods to assess the interests of its constituents. This information will be used to guide the development of outreach and educational programs, facilities and activities found in the parks.

- **Policy PA 4:** The District will provide access to parklands and trails to suit the level of expected use. Where feasible, the District will provide alternatives to parking on or use of neighborhood streets. The District will continue to advocate and support service to the regional park system by public transit.

- **Policy PA 5:** The District will cooperate with local and regional planning efforts to create more walkable and bikeable communities, and coordinate park access opportunities with local trails and bike paths developed by other agencies to promote green transportation access to the Regional Parks and Trails.

- **Policy PA 6:** The District will comply with the requirements of the Americans with Disabilities Act and use the current edition of the California State Parks Accessibility Guidelines as its standard for making the improvements necessary to create accessible circulation, programs and facilities throughout the Park District.

- **Policy PA 7:** The District will evaluate and monitor the compliance level of access routes from public transit stops into the parks and encourage local agencies to make the improvements necessary to provide compliant accessibility to the parks.

- **Policy PA 8:** The District will endeavor to assist individuals and groups who require special assistance with programs or facilities because of physical disability or economic circumstances.

- **Policy IRS 1:** The District will provide a variety of interpretive programs that focus attention on the region’s natural and cultural resources. Programs will be designed with sensitivity to the needs and interests of people of all ages and backgrounds. Programs will enhance environmental experiences and foster values that are consistent with conserving natural and cultural resources for current and future generations to enjoy. The District will pursue and encourage volunteer support to assist in meeting these objectives.

- **Policy IRS 2:** The District will offer recreational programs and services that appeal to participants of all ages and backgrounds, in keeping with its vision and mission. The District will create and manage a
comprehensive offering of recreational opportunities, tours and outdoor skills training that will help visitors use and enjoy the parks and trails, and will collaborate with other agencies, organizations and partners to provide a broad spectrum of regional recreational opportunities.

- **Policy RFA 1**: The District will provide areas and facilities that serve the recreational needs of park users, in accordance with the plans, policies and park classifications adopted by the Board of Directors. The District will generally not develop or provide facilities that are more appropriately provided by local recreational and park agencies. Where possible and appropriate, the District will provide multiple-use facilities to serve recreational needs.

- **Policy RFA 2**: The District will provide a diverse system of non-motorized trails to accommodate a variety of recreational users including hikers, joggers, people with dogs, bicyclists and equestrians. Both wide and narrow trails will be designed and designated to accommodate either single or multiple users based on location, recreational intensity, environmental and safety considerations. The District will focus on appropriate trail planning and design, signage and trail user education to promote safety and minimize conflicts between users.

- **Policy RFA 3**: The District will continue to add narrow trails designated as both single- and multi-use for hikers, equestrians, dog walkers and bike riders throughout the system of regional parklands.

- **Policy RFA 4**: The District will expand its unpaved multi-use trail system as additional acreage and new parks are added. The District will continue to provide multi-use trails to link parks and to provide access to park visitor destinations.

- **Policy RFA 5**: The District will continue to plan for and expand the system of paved, multi-use regional trails connecting parklands and major population centers.

- **Policy RFA 6**: The District will continue to develop group and family picnic facilities throughout the parks system and will continue to improve the reservation system.

- **Policy RFA 7**: The District will continue to develop children’s play areas in suitable park settings designated for recreation. The District will attempt to incorporate environmental and cultural themes in the design of these facilities.

- **Policy RFA 8**: The District will continue to plan, develop and provide a regional system of aquatic facilities at parks that can support these activities. The District will strive to improve public access to lakes and to the San Francisco Bay and Delta shorelines for boating and fishing, and will increase access to swimming beaches.

- **Policy RFA 9**: The District will continue to plan and develop a balanced system of regional camping facilities, including day camps, group camps, backpack camps, family camps and residential camps.

- **Policy RFA 10**: The District will continue to provide special recreational facilities throughout the parklands to broaden the range of opportunities in the parks and to take advantage of existing resources. The District will ensure that these facilities are compatible with the District’s vision and mission, with other parkland resources and priorities, and with public needs and demands.

**District Ordinance 38**

District Ordinance 38 provides regulations related to the terms and conditions of dogs within District property. Section 801 of the ordinance states that no dogs, even if securely leashed, shall be permitted in the following areas:

- swimming pool;
- bathing beach;
- designated nature study area, wetland or marsh area;
golf course; or
area where a conservation easement management plan or permit specifically prohibits them.

Additionally, the ordinance states that dogs are allowed within the developed portions of District parks but are required to remain leashed (District 2016). As it pertains to Miller/Knox, the Ridgeland Planning Area is considered undeveloped, while the remainder of the regional park is considered developed.

City of Richmond General Plan
The Richmond General Plan 2030 was approved in 2011 and provides goals and policies parks and open space in the City (City of Richmond 2012). The recreation section of the General Plan provides applicable policies relevant to the LUPA.

Policy PR1.2: Improve connections to parks, open space, and recreational facilities through an interconnected network of pedestrian-friendly green streets, multimodal corridors, and trails. Enhance trails and greenways to provide recreational opportunities for residents, connect neighborhoods and community uses, improve access to natural resources and the shoreline and promote walking and bicycling. On-street connections should be pedestrian and bicycle-friendly and incorporate green infrastructure where possible. Transit links along key corridors will allow residents and visitors to access parks, recreation facilities and open space areas. Developing open space and recreational resources hand-in-hand with pedestrian, bicycle, and transit improvements will better link neighborhoods together physically, connecting the community to open space resources, community facilities, and key destinations throughout the City.

Policy PR1.4: Promote access to non-City operated parks and recreational facilities. Existing resources operated by the East Bay Regional Parks District, school district, community groups, or others may support residents’ interim needs for convenient access to parks and community centers. Joint-use opportunities serve to more efficiently utilize existing facilities and amenities, host programs in convenient neighborhood locations, better activate community area so that they in use during the day and in the evenings, and enable the City and partners to share the cost of maintenance, upgrades and improvements for the benefit of the entire community.

4.7.3 Impacts and Mitigation Measures

METHODODOLOGY
Evaluation of potential recreation impacts is based on review of the existing recreational resources in the vicinity of Miller/Knox and evaluation of how implementation of the Miller/Knox LUPA could impact those resources. For the purpose of this analysis, a significant impact would occur if the project would result in the physical deterioration of a park or accelerate its deterioration, resulting in significant environmental impacts.

THRESHOLDS OF SIGNIFICANCE
Based on Appendix G of the State CEQA Guidelines, a recreation impact is considered significant if implementation of the LUPA recommendations f would do any of the following:

- increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, or
- include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.
ISSUES NOT DISCUSSED FURTHER

Include recreational facilities or require the construction or expansion of recreation facilities.
Implementation of the LUPA recommendations, as described in Section 3.8 of Chapter 3, “Project Description,” would result in new and improved recreational resources at Miller/Knox. Because the LUPA recommendations would incorporate new and improved recreational facilities, implementation of the LUPA would not require additional construction or expansion of facilities, other than what is already identified within the recommendations. This impact is not further discussed.

IMPACTS AND MITIGATION MEASURES

Impact 4.7-1: Increase the Use of Existing Neighborhood and regional Parks Such That Physical Deterioration Would Occur or Be Accelerated

Implementation of the LUPA recommendations would improve the existing Miller/Knox park. During active construction activities, such as during implementation of the Lagoon Enhancement Project, partial demolition of the warehouse building, and construction of the recreational programs and storage building, certain areas of the park would be used for construction staging, material laydown and storage, and would be closed to the public. This could result in the temporary increased recreational use at nearby parks by some portion of visitors that would otherwise use Miller/Knox. Once the LUPA recommendations are implemented and major construction activities are completed, Miller/Knox would have enhanced recreational resources and new and improved facilities that would serve existing park users, so overall use of the park would be similar to existing conditions. Therefore, the impact would be less than significant.

During implementation of LUPA recommendations, such as the Lagoon Enhancement Project, construction of the recreational programs and storage building, rehabilitation of the pumphouse, partial demolition of the warehouse, construction associated with new and expanding staging areas and paved multi-use trails, certain areas of the park would be used for construction staging, material laydown and storage, and would be temporarily closed to the public. Although some existing park users could opt to visit alternative parks in the area during construction activities, these activities would be temporary, and occur at different times and locations within the over 300-acre park. Therefore, sufficient parkland within Miller/Knox would remain available to visitors during the various implementation phases, which would reasonably limit the number of current Miller/Knox visitors potentially diverted to other nearby parks. The potential for an increase in the visitation to other existing neighborhood and regional parks would be temporary and not substantial such that physical deterioration would occur or be accelerated.

Implementation of the Canal Boulevard staging area could result in a reroute of the San Francisco Bay Trail per the request of the Trails for Richmond Action Committee in conjunction with the City of Richmond. However, during construction activities the existing Bay Trail alignment in this area would remain open, and once complete, the reroute would provide an off-street section of the Bay Trail, which would be an improvement to the existing alignment that currently shares Canal Boulevard with vehicles.

Over the long-term, the LUPA recommendations would result in enhanced and additional facilities that would be beneficial to recreation and public access within Miller/Knox. Implementation of the LUPA recommendations would support and enhance the same types of recreation and recreation amenities that are currently in place. There would be additional picnic areas, benches, staging areas for parking, new interpretive areas that would allow for education, such as at Ferry Point and the new recreational programs and storage building, new and improved trails and walkways in all areas of the park, and new and improved vista points in the Ridgeland Planning Area and at Ferry Point. These improvements within Miller/Knox would result in greater connectivity between the Ferry, Bray, and Lagoon Planning Areas, allow for greater access to expansive views of the Bay, and increase opportunities for public education, volunteer activities, and access to the various amenities offered within the park. Therefore, once the LUPA recommendations are complete, recreational resources and opportunities within Miller/Knox would be improved. Recognizing that the park
acreage would remain unchanged and new facilities, such as the recreational programs and storage building, would provide an amenity for uses that are currently occurring, a substantial change in the long-term level of visitation would not occur.

In summary, because construction-related activities would be temporary and site-specific, large areas of Miller/Knox would remain available for public use during the construction period limiting diversion to other parks, and recreational resources at Miller/Knox would be improved upon completion, the impact to other existing neighborhood and regional parks would be less than significant.

Mitigation Measures
No mitigation is required.