Initial Study/Mitigated Negative Declaration

NRRWF Soil Stockpile Expansion Project

FEBRUARY 2024

Prepared for:

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ATCM	Airborne Toxic Control Measure
BRCP	Butte Regional Conservation Plan
BCAQMD	Butte County Air Quality Management District
BMP	Best management practice
CAAQS	California ambient air quality standards
CAP	Climate Action Plan
CARB	California Air Resources Board
CASP	Covered aerated static pile
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
cy	Cubic yard
EPA	Environmental Protection Agency
DPM	Diesel particulate matter
GHG	Greenhouse gas
GWP	Global warning potential
IS	Initial Study
JTD	Joint Technical Document
LEA	Local Enforcement Agency
MND	Mitigated Negative Declaration
MT	Metric ton
MTBA	Migratory Bird Treaty Act
NAAQS	National ambient air quality standards
NPDES	National Pollutant Discharge Elimination System
NRRWF	Neal Road Recycling and Waste Facility
NSVAB	Northern Sacramento Valley Air Basin
SB	Senate Bill
SR	State Route
SVAB	Sacramento Valley Air Basin
SWRCB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan

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1 Introduction

1.1 Project Overview

The proposed Project is the Neal Road Recycling and Waste Facility Soil Stockpile Expansion Project (Project or proposed Project) at the Neal Road Recycling and Waste Facility (NRRWF) located at 1023 Neal Road, Paradise, California (Town) in unincorporated Butte County (County). The Project would expand an existing soil stockpile at the NRRWF onto County-owned land immediately west of the existing facility. No solid waste disposal would occur on the expansion site.

1.2 California Environmental Quality Act Compliance

Butte County Public Works is the lead agency for the Project. This Initial Study (IS) has been prepared per the requirements of the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code Section 21000, et seq.), and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.). As described in this IS, there is no substantial evidence in the record that the Project, with feasible mitigation measures incorporated, would result in a significant effect on the environment. Therefore, the County has prepared a Mitigated Negative Declaration (MND).

1.3 Public Review Process

The IS and proposed MND will be circulated for public review for a period of 30 days, pursuant to CEQA Guidelines Section 15073(a). The County will provide public notice at the beginning of the public review period.

Following the close of the 30-day review period, the County will consider the proposed MND and all comments regarding environmental issues. The County shall adopt the proposed MND if it finds that there is no substantial evidence that the Project will have a significant effect on the environment. The County shall consider approval of the Project once the MND is adopted.

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2 Project Description

2.1 Project Location

The Project would be located at the existing Neal Road Recycling and Waste Facility (NRRWF), 1023 Neal Road, Paradise (Assessor's Parcel Number 040-600-082), as well as a portion of the parcel located directly north and west of the NRRWF (Assessor's Parcel Number 040-600-084) in unincorporated Butte County. The Project site is located near the Town of Paradise, approximately 7 miles southeast of the City of Chico and east of the census-designated placed of Durham off of State Route 99 (see Figure 1).

2.2 Environmental Setting

Neal Road Recycling and Waste Facility

The NRRWF is owned by Butte County and operated by the Butte County Public Works Department, as an Enterprise Fund[1]. The NRRWF has a permitted capacity of approximately 25.3 million cubic yards and an estimated remaining capacity of 12.6 million cubic yards (WSP 2024). The facility is estimated to operate until 2055, accommodating 2.5% to 3.5% annual increases in solid waste due to anticipated growth in the City and Butte County. The maximum amount accepted daily at the NRRWF is 1,500 tons, although the daily amount rarely exceeds 1,200 tons. The NRRWF is approximately 190 acres in size, all of which are highly disturbed.

Project Site

The Project site is approximately 15 acres and is within a parcel spanning approximately 190 acres in total, with 140 acres permitted for the disposal of solid waste. The Assessor's Parcel Number (APN) is 040-600-082. The Project would involve the expansion of a soil stockpile located on the western end of the site. This stockpile would extend beyond the existing footprint of the facility, resulting in a slight expansion of the site. At its furthest point, the soil stockpile expansion would extend approximately 130 feet beyond the current western boundary of the facility. The volume of the extended stockpile would be approximately 1,169,000 cubic yards (CY). In addition, the fence around the western boundary of the site would be removed to allow for the stockpile expansion. The fence would be reconstructed around the facility's new western boundary.

The Butte County General Plan 2040 designates the NRRWF site as Public with the Solid Waste Management Overlay, as shown in Figure 2, General Plan Land Use (Butte County 2023). The NRRWF site is zoned as Public, while the Project's off-site impact area is zoned as Agriculture – 20 (20-acre minimum) within the Neal Road Recycling, Energy, and Waste Facility Overlay, as shown in Figure 3, Zoning. The Project site, including the existing NRRWF site and its off-site impact area are located within the Neal Road Recycling, Energy, and Waste Facility overlay as identified by the County's Zoning Code.

According to the County Code, the purpose of the Public zone is to allow for public and quasi-public facilities that serve Butte County residents and visitors (Butte County Code of Ordinances, Section 24-28.A). Permitted uses in the Public zone include public and private schools; parks and playgrounds; community centers; interpretive

[1] An enterprise fund is a self-supporting government fund that sells goods and services to the public for a fee.

facilities; public libraries; governmental offices; and police and fire stations. Uses permitted with the approval of a Conditional Use Permit include hospitals, cultural institutions, religious facilities, and large-scale facilities such as dams and reservoirs, landfills, cemeteries and mausoleums, correctional institutions, major utilities, and other similar public works projects.

The purpose of Agriculture zones in the County is to support, protect, and maintain a viable, long-term agricultural sector in the County (Butte County Code of Ordinances, Section 24-12.A). Permitted uses include crop cultivation, animal grazing, stock ponds, and agricultural processing. Uses permitted with the approval of a Conditional Use Permit include animal processing, dairies, hog farms, stables, forestry and logging, and mining and oil extraction. In the Agriculture – 20 (20-acre minimum) zone, the minimum parcel size is 20 acres. Under existing conditions, the off-site area proposed for development by the Project are undeveloped and do not contain agricultural uses.

The Neal Road Recycling and Waste Facility overlay zone promotes compatible development around the NRRWF (Butte County Code of Ordinances, Section 24-44). The overlay zone also ensures adequate separation between the NRRWF and land uses that are potentially incompatible with landfill activities. This overlay is intended to promote the diversion of solid wastes into appropriate recycling facilities, energy generation, and other uses that add value and benefit to the local economy.

Surrounding Land Uses

The Project site is adjacent to a parcel (APN 040-600-081) to the south at 999 Neal Road zoned as Heavy Industrial and designated in the Butte County General Plan 2040 as Industrial (0.5 Maximum Floor Area Ratio [FAR[2]]). Currently, this parcel is occupied by an asphalt and aggregate facility. The NRRWF is surrounded by a stretch of land that extends 2,000 feet beyond the landfill perimeter zoned as Agriculture - 20 (20-acre minimum) and designated as Agriculture in the Butte County General Plan 2040. Most of this surrounding land is undeveloped. Table 1 displays the land uses surrounding the Project site.

Table 1. Surrounding Land Uses

Direction	Existing Use	General Plan	Zoning Designation
North	Vacant Parcel	AG-20	Agriculture
East	Vacant Parcel	AG-20	Agriculture
South	Asphalt and Aggregate Facility	Industrial (I)	Heavy Industrial
West	Vacant Parcel	AG-20	Agriculture

Note: See Figure 2, General Plan Land Use, and Figure 3, Zoning.

2.3 Project Characteristics

Project Components

The County is proposing to expand an existing soil stockpile at the NRRWF located at 1023 Neal Road, Paradise, in unincorporated Butte County. The Project would involve expansion of the existing soil stockpile beyond the western boundary of the site into an undeveloped area as shown in Figure 4, Project Site Plan. The expanded stockpile volume would be approximately 1,169,000 CY. At its furthest point, the soil stockpile expansion would extend

[2] FAR is a measure of building intensity, and is defined as the ratio of a building's total floor area (gross floor area) to the size of the land parcel upon which it is built

approximately 130 feet beyond the current western boundary of the facility. A fence located along the western footprint of the site would be removed and reconstructed around the expanded stockpile to accommodate the expansion of the facility's footprint. Upon Project implementation, the soil stockpile would be used to cover the waste brought into the facility.

2.4 Project Construction and Phasing

The Project would be anticipated to begin construction in 2024. Following initial excavation, stockpiling would continue into 2025. .

2.5 Project Approvals

The proposed Project must be approved by the County Board of Supervisors after adoption of the proposed mitigated negative declaration.

3 Initial Study Checklist

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date _____

3.1 Aesthetics

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**AESTHETICS** – Except as provided in Public Resources Code Section 21099, would the project**:**				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact. Scenic vistas are defined as an expansive view of highly valued landscape features (e.g., mountain range, lake, or coastline) observable from a publicly accessible vantage point. In the Project vicinity, publicly accessible vantage points are limited to public roads (Neal Road and SR 99). As described in the Butte County General Plan, scenic vistas include views of land-based geological features such as the Central Buttes and Butte Creek Canyon, as well as views of water-based scenic areas including the Sacramento River and Lake Oroville (Butte County 2023). The nearest scenic view is that of Butte Creek Canyon, which is located over two miles north of NRRWF.

The Project would involve the expansion of a stockpile located at the existing NRRWF. There are no scenic resources or unique natural features located on or adjacent to the site. Due to the conditions surrounding the site, including its topography and the existing built environment, there are no scenic vistas in the Project area. While the Project would result in the expansion of the facility's footprint, this expansion would be minimal and would not result in disturbances to any scenic vistas. Therefore, the Project would have **no impact** on scenic vistas.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. As previously mentioned, there are no scenic resources located at or near the Project site, including trees, outcroppings, or historic buildings. In addition, there are no state scenic highways near the Project site, as identified by the California Scenic Highway Mapping System (Caltrans 2023). Route 70, an eligible highway, is located over 7 miles south of the NRRWF. The County General Plan designates a portion of Skyway, near the Town of Paradise, and a portion of State Route 32 near Chico, as scenic corridors (Butte County 2023). The Project site is not visible from these roadways and does not contain any potential scenic resources. Therefore, **no impact** would occur.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant. As previously discussed, the Project site is located in a portion of unincorporated Butte County within an active solid waste and recycling facility. The parcel to which the soil stockpile would be expanded is immediately adjacent to the NRRWF. Implementation of the proposed Project would allow for the siting of soil in an area not currently used for stockpiling. However, the proposed expansion area is directly adjacent to the existing stockpile, which would make the resultant visual character substantially similar to the existing condition. While the proposed Project would likely result in a taller stockpile than currently exists on the site, the change would be relatively minor and consistent with the current use of the site. Therefore, the Project would not substantially degrade the existing visual character or quality, and impacts would be **less than significant**.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. The Project would not include any new light sources and would thus not create a new source of substantial light which would adversely affect day or nighttime views. Glare occurs when light is reflected off surfaces and causes a nuisance to surrounding sensitive receptors, as defined by the CEQA Guidelines and the Butte County General Plan. Glare can result from sunlight or from artificial light reflecting off building exteriors, such as glass windows or other highly reflective surface materials. The Project does not include any such components and there would be **no impact**.

3.2 Agriculture and Forestry Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	**AGRICULTURE AND FORESTRY RESOURCES** – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) ***Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

No Impact. The Project site is located within an existing developed solid waste and recycling facility and would expand on to the adjacent undeveloped land. The California Department of Conservation (DOC) Important Farmland Finder indicates that the NRRWF facility is designated as "Urban and Built-Up Land" while the area surrounding the NRRWF, including the proposed expansion area, is designated as "Grazing Land" (DOC 2022). As such, the Project would have **no impact** on converting Prime Farmland, Unique Farmland, or Farmland of Statewide Important to non-agricultural use.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The majority of the Project site is located within the existing NRRWF footprint, while a portion of the Project site is located within adjacent land with adjacent, undeveloped land. The NRRWF facility is zoned as Public, while the portion of the Project site outside of the NRRWF footprint is zoned as Agriculture – 20 (20-acre minimum). The entirety of the Project site, including the portion located outside of the existing facility footprint, is located within the Solid Waste Management Overlay. There are no existing agricultural uses planned or existing within the Project site. Additionally, the Solid Waste Management Overlay does not allow for agricultural uses, as stated in Section 24-44 of the City's Municipal Code. In addition, the Project site is not located on land under a Williamson Act. Therefore, the Project would have **no impact** associated with a conflict with zoning or a Williamson Act Contract.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. No portion of the Project site is considered forest land[3] as defined in California Public Resources Code Section 12220(g). Timberland[4] (as defined by California Public Resources Code Section 4526) or timberland-zoned timberland production[5] (as defined by Section 51104(g) of the Government Code) is not present on site, nor are there any active or potential commercial timber operations present in the area. Therefore, the proposed Project would not conflict with lands zoned for forest land, timberland, or timberland production and there would be **no impact**.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As stated in response to Checklist Item 3.2c, the Project site does not contain forest land. As such, the Project would have **no impact** regarding the loss of forest land or conversion of forest land to non-forest use.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As previously stated, the Project site does not contain any agricultural uses, nor does its zoning and land use designations allow for agricultural operations. Additionally, there is no forest land on or adjacent to the site. Therefore, there would be **no impact**.

[3] "Forest land" is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

[4] "Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.

[5] "Timberland production zone" or "TPZ" means an area, which is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Environmental Setting

Butte County is located within the Sacramento Valley Air Basin (SVAB), comprising the northern half of California's 400-mile-long Great Central Valley. The SVAB encompasses approximately 14,994 square miles with a largely flat valley floor (excepting the Sutter Buttes) about 200 miles long and up to 150 miles wide, bordered on its east, north and west by the Sierra Nevada, Cascade, and Coast mountain ranges, respectively.

The SVAB, containing 11 counties and some two million people, is divided into two air quality planning areas based on the amount of pollutant transport from one area to the other and the level of emissions within each. Butte County is within the Northern Sacramento Valley Air Basin (NSVAB), which is composed of Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba Counties.

Emissions from the urbanized portion of the basin (Sacramento, Yolo, Solano, and Placer Counties) dominate the emission inventory for the SVAB, and on-road motor vehicles are the primary source of emissions in the Sacramento metropolitan area. While pollutant concentrations have generally declined over the years, additional emission reductions will be needed to attain the State and national ambient air quality standards in the SVAB.

Seasonal weather patterns have a significant effect upon regional and local air quality. The Sacramento Valley and Butte County have a Mediterranean climate, characterized by hot, dry summers and cool, wet winters. Winter weather is governed by cyclonic storms from the North Pacific, while summer weather is typically subject to a high-pressure cell that deflects storms from the region.

In the County, winters are generally mild with daytime average temperatures in the low 50s and nighttime temperatures in the upper 30s. Temperatures range from an average January low of approximately 36 degrees

Fahrenheit (°F) to an average July high of approximately 96°F, although periodic lower and higher temperatures are common. Rainfall between October and May averages about 26 inches but varies considerably year to year. Heavy snowfall often occurs in the northeastern mountainous portion of the county. Periodic rainstorms contrast with occasional stagnant weather and thick ground or "tule" fog in the moister, flatter parts of the valley. Winter winds generally come from the south, although north winds also occur.

Diminished air quality within Butte County largely results from local air pollution sources, transport of pollutants into the area from the south, wildfire smoke, the NSVAB topography, prevailing wind patterns, and certain inversion conditions that differ with the season. During the summer, sinking air forms a "lid" over the region, confining pollution within a shallow layer the ground that leads to photochemical smog and visibility problems. During winter nights, air near the ground cools while the air above remains relatively warm, resulting in little air movement and localized pollution "hot spots" near emission sources. Carbon monoxide, nitrogen oxides, particulate matter and lead particulate concentrations tend to elevate during winter inversion conditions when little air movement may persist for weeks.

As a result, high levels of particulate matter (primarily fine particulates or $PM_{2.5}$) and ground-level ozone are the pollutants of most concern to the NSVAB Districts. Ground-level ozone, the principal component of smog, forms when reactive organic gases (ROG) and nitrogen oxides (NO_x) – together known as ozone precursor pollutants – react in strong sunlight. Ozone levels tend to be highest in Butte County during late spring through early fall, when sunlight is strong and constant, and emissions of the precursor pollutants are highest.

The Project is located in unincorporated Butte County, which is currently designated as a nonattainment area for state and national ozone (O_3) standards and state particulate matter equal to or less than 10 microns in aerodynamic diameter (PM_{10}) standards. The County is in attainment for all other criteria air pollutants.

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant. The applicable air quality plan for the Project area is the *Northern Sacramento Valley Planning Area 2021 Triennial Air Quality Attainment Plan.* In adopting this plan, Butte County Air Quality Management District (BCAQMD) assumes that growth within its jurisdiction will be in accordance with city and county general plans, for which air quality effects associated with build-out have been analyzed.

A project is deemed inconsistent with an air quality plan if it would result in population or employment growth that exceeds the growth estimates in the applicable air quality plan (i.e., generating emissions not accounted for in the applicable air quality plan emissions budget). Therefore, proposed projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rate included in the applicable air quality plan.

For purposes of air quality attainment planning, BCAQMD assumes growth within its jurisdiction will be in accordance with city and county general plans. The County is proposing to expand an existing soil stockpile at the NRRWF located at 1023 Neal Road in Paradise. The proposed Project would involve expanding the existing stockpile beyond the western boundary of the NRRWF site into an undeveloped area. The expanded stockpile volume would be approximately 1,169,000 cubic yards. At its furthest point, the soil stockpile expansion would extend approximately 130 feet beyond the current western boundary of the facility. A fence located along the western footprint of the site would be removed and reconstructed around the expanded stockpile to accommodate the expansion of the facility's footprint.

The Butte County General Plan 2040 designates the Project site as Public with the Solid Waste Management Overlay and the surrounding land as agriculture (Butte County 2023). While the proposed expansion beyond the facility boundary would be within agricultural land, the NRRWF is zoned as Public with the Neal Road Recycling, and Waste Facility Overlay. The NRRWF is an approved permitted use in the County's designated Public zone. According to the County Code, the purpose of the Public zone is to allow for public and quasi-public facilities that serve Butte County residents and visitors. While the proposed Project would expand an existing stockpile into agricultural land, it would not result in population or employment growth in the County. Furthermore, the proposed Project's emissions would not exceed the BCAQMD thresholds as shown in Tables 3.3-3 through 3.3-5, below. The Project is not anticipated to cause significant impacts to regional air quality or otherwise conflict with the basin's air quality management plan.

Based on the preceding considerations, the proposed Project would result in a **less than significant** impact because it would not conflict with the region's air quality plans.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The proposed Project is located within the BCAQMD jurisdiction. The BCAQMD has adopted the CEQA Air Quality Handbook, which contains thresholds of significance used to access air quality related impacts from construction and operations of a project. The quantitative air quality analysis provided herein applies the BCAQMD thresholds identified below to determine the potential for the proposed Project to result in a significant air quality impact under CEQA (BCAQMD 2014). Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 3.3-1 are exceeded.

Table 3.3-1. Butte County Air Quality Management District Air Quality Significance Thresholds

Criteria Pollutants Thresholds	
Pollutant	**Construction**
ROG	137 lbs/day or 4.5 tons/year
NO_x	137 lbs/day or 4.5 tons/year
PM < 10 microns (PM_{10} or smaller)	80 lbs/day
Pollutant	**Operational**
ROG	25 lbs/day
NO_x	25 lbs/day
PM	80 lbs/day
Toxic Air Contaminants	
Pollutant	**Threshold**
TACs	Maximum incremental cancer risk ≥ 10 in 1 million Chronic and acute hazard index ≥ 1.0 Hazard Index Ambient Diesel $PM_{2.5}$ ≥ 0.3 ug/m^3 annual average

Notes: BCAQMD = Butte County Air Quality Management District; ROG = reactive organic gases; NO_x = oxides of nitrogen; PM = particulate matter; TAC = toxic air contaminant; lbs/day = pounds per day; µg/m^3 = micrograms per cubic meter.
Source: BCAQMD 2014.

Construction

Construction of the proposed Project would result in the temporary addition of pollutants to the local air shed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling and from construction workers traveling to and from the site. Construction emissions were quantified using the California Emissions Estimator (CalEEMod) Version 2022.1.1.13. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. Therefore, an increment of day-to-day variability exists.

Construction scenario assumptions, including trip distances, were based on project specific information and CalEEMod default values where project information was not available.

For purposes of estimating project emissions, it was assumed that construction of the proposed Project would commence in July 2024[6] and would last approximately 7 months, ending in January 2025. The analysis contained herein is based on the following schedule assumptions (duration of phases is approximate):

- Site Preparation (July 1, 2024 – July 13, 2024): 2 weeks
- Grading (July 14, 2024 – January 31, 2025): 6 ½ months.

The estimated construction duration and construction equipment mix were provided by the facility operator. Detailed construction equipment modeling assumptions are provided in Appendix A. Site preparation would include onsite balanced cut and fill. Construction-worker, vendor truck, and haul truck trips by construction phase were based information provided by the facility operator. CalEEMod default trip length values were used for the distances for all construction-related trips.

The construction equipment mix and vehicle trips used for estimating the proposed Project-generated construction emissions are shown in Table 3.3-2. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site 5 days per week (22 days per month) during Project construction.

Table 3.3-2. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Site Preparation	4	2	0	Tractors/Loaders/Backhoes	1	5
Grading	8	2	0	Scrapers	3	8

[6] The analysis assumes a construction start date of July 2024, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

Note: See Appendix A for details.

To account for compliance with BCAQMD dust control best practices, it was assumed that the active sites would be watered at least twice daily, or as necessary depending on weather conditions, resulting in a 55% to 61% reduction in fugitive dust as implemented by CalEEMod. Predicted maximum daily and annual emissions for construction activities are presented in Tables 3.3-3 and 3.3-4 and compared to the BCAQMD significance thresholds.

Table 3.3-3. Daily Construction-Related Criteria Air Pollutant Emissions

Year	ROG (lbs/day)	NO_X (lbs/day)	CO (lbs/day)	SO_2 (lbs/day)	PM_{10} Total (lbs/day)	$PM_{2.5}$ Total (lbs/day)
2024	2.51	24.72	18.94	0.05	2.26	1.03
2025	2.24	20.60	17.33	0.05	2.10	0.88
BCAQMD threshold (lbs/day)	*137*	*137*	*NA*	*NA*	*80*	*NA*
Exceedance of threshold?	*No*	*No*	*NA*	*NA*	*No*	*NA*

Source: See Appendix A for detailed results.
Notes: Values shown are the maximum summer or winter daily emissions results from CalEEMod. These estimates reflect implementation of BCAQMD fugitive dust best control practices. BCAQMD has adopted construction thresholds for ROG, NO_x, and PM_{10}. lbs/day = pounds per day; CO = carbon monoxide; NO_X = nitrogen oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; ROG = reactive organic gases; SO_2 = sulfur dioxide; NA = not applicable.

Table 3.3-4. Annual Construction-Related Criteria Air Pollutant Emissions

Year	ROG (tons/year)	NO_X (tons/year)	CO (tons/year)	SO_2 (tons/year)	PM_{10} Total (tons/year)	$PM_{2.5}$ Total (tons/year)
2024	0.15	1.51	1.16	<0.01	0.14	0.06
2025	0.02	0.22	0.19	<0.01	0.02	0.01
BCAQMD threshold (tons/year)	*4.5*	*4.5*	*NA*	*NA*	*NA*	*NA*
Exceedance of threshold?	*No*	*No*	*NA*	*NA*	*NA*	*NA*

Source: See Appendix A for detailed results.
Notes: Values shown are the annual results from CalEEMod. These estimates reflect implementation of BCAQMD fugitive dust best control practices. BCAQMD has adopted annual construction thresholds for ROG and NO_x.
CO = carbon monoxide; NO_X = nitrogen oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; ROG = reactive organic gases; SO_2 = sulfur dioxide; NA = not applicable; <0.01 = reported value less than 0.01.

As shown in Tables 3.3-3 and 3.3-4, the daily and annual construction emissions of ROG, NO_x and PM_{10} would not exceed the applicable BCAQMD significance thresholds. Therefore, construction-related emissions of criteria air pollutant would be less than significant.

Operation

The Project site includes an approximate 130,680 square foot area proposed for expanding storage pile capacity at the NRRFW. The expansion of the existing storage pile would not result in new or additional truck operations, including hauling trucks or pile maintenance and operation off-road vehicles. Therefore,

there would be no increased mobile operational emissions associated with the proposed Project, and nominal net operational emissions increase overall. Therefore, operational-related emissions of criteria air pollutant would be **less than significant**.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Toxic Air Contaminants

Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. During Project construction, diesel particulate matter (DPM) would be the primary TAC emitted from diesel-fueled equipment and trucks. The following measures are required by State law to reduce DPM emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use Off-Road Diesel Vehicles (Cal. Code Regs., tit. 13, chapter 9, § 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to 5 minutes; electric auxiliary power units should be used whenever possible (Cal. Code Regs., tit. 13, chapter 10, § 2485).

The construction of the proposed Project would not be located within 1,000 feet of existing sensitive receptors. The nearest sensitive receptors (i.e., residences) are located approximately 5,500 feet southwest of the Project site. Thus, the proposed Project would not place a new TAC-producing land use activity adjacent to existing sensitive receptors. In addition, the proposed Project would not include siting of new sensitive receptors.

DPM emissions would be emitted from off-road equipment operations and heavy-duty trucks during Project construction activities. Off-road construction equipment and commercial trucks are subject to CARB ATCMs to reduce DPM emissions. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should also be limited to the period/duration of activities associated with the Project. Total Project construction is anticipated to occur over a temporary period of 7 months, much less than the 30-year exposure period. Thus, it is anticipated the proposed Project would not result in exposure of sensitive receptors to substantial TAC concentrations during short-term construction and impacts would be **less than significant**.

The proposed Project would not result in an increase in operational vehicular emissions. The Project would not increase existing haul trucks or off-road equipment operation of the existing storage pile. Nevertheless, off-road equipment would be subject to CARB's Regulation for In-Use Off-Road Diesel Vehicles to reduce DPM and criteria pollutant emissions. Furthermore, the closest off-site sensitive receptors are located a substantial distance from the property at approximately 5,500 feet southwest of the Project site. Therefore, it is anticipated the proposed Project would not result in exposure of sensitive receptors to substantial TAC concentrations during long-term operations and impacts would be **less than significant**.

Health Effects of Carbon Monoxide

Mobile source impacts occur on two scales of motion. Regionally, proposed Project-related travel would contribute to regional trip generation and increase the total VMT within the local airshed and the SVAB. Locally, Project generated traffic would be added to the County's roadway system near the Project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-Project traffic, there is a potential for the formation of microscale carbon monoxide (CO) hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions technology at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SVAB is steadily decreasing.

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. Construction activities associated with the proposed Project would be temporary and would not be considered a source of daily, long-term mobile-source emissions. The proposed Project would not increase existing haul trucks or off-road equipment operation of the existing storage pile. Therefore, the proposed Project would result in a **less-than-significant** impact to air quality with regard to potential CO hotspots.

Health Effects of Criteria Air Pollutants

As demonstrated above, construction of the proposed Project and operational emissions would not result in emissions that exceed the BCAQMD significance thresholds for any criteria air pollutants, as shown in Tables 3.3-3 through 3.3-5.

ROG and NO_X are precursors to O_3, for which the County is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of ROG and NO_X to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SVAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the precursor emissions would occur because exceedances of the O_3 AAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. As discussed previously, ROG and NO_X emissions associated with construction and operation would be **less than significant**.

Health impacts that result from NO_2 and NO_X include respiratory irritation. The proposed Project's construction and operation would generate NO_X emissions that would not exceed the operational BCAQMD mass daily thresholds; therefore, construction and operation of the proposed Project would not contribute to exceedances of the NAAQS and CAAQS for NO_2 although the SVAB is designated as in attainment of the NAAQS and CAAQS for NO_2 and the existing NO_2 concentrations in the area. Therefore, potential health impacts associated with NO_2 and NO_X are considered **less than significant.**

The associated potential for CO hotspots were discussed previously and are determined to be a less-than-significant impact. Thus, the proposed Project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction and operation of the proposed Project would not exceed the BCAQMD threshold for both PM_{10} and $PM_{2.5}$. As such the proposed Project would not contribute to exceedances of the NAAQS and CAAQS for

particulate matter or obstruct the SVAB from coming into attainment for these pollutants. Thus, the associated health impacts are considered **less than significant**.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant. The occurrence and severity of potential odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receiving location. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints. BCAQMD Rule 200, Nuisance, prohibits discharge of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public.

Odors would be potentially generated from vehicles and equipment exhaust emissions during proposed Project construction. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors would be short-term and cease upon completion of construction, disperse rapidly from the proposed Project sites, and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Typical sources of substantial operational odors include landfills, rendering plants, chemical plants, agricultural uses, wastewater treatment plants, and refineries which are not applicable to this Project. The proposed Project would involve expanding the existing soil stockpile beyond the western boundary of the site into an undeveloped area, The expanded stockpile volume would be approximately 1,169,000 CY. The stockpile is composed of soil which would be used to cover the waste brought into the facility. The proposed Project does not include any onsite composting and therefore does not generate associated odor. The nearest sensitive receptors (i.e., residences) are located approximately 5,500 feet southwest of the Project site. Thus, the proposed Project would not place a new odor-producing land use activity adjacent to existing sensitive receptors. In addition, the proposed Project would not include siting of new sensitive receptors. Thus, operation of the proposed Project would not result in odors that would affect a substantial number of people and this impact would be **less than significant**.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Environmental Setting

Dudek conducted a Biological Resources Assessment (BRA) (Appendix B of this MND) on March 1, 2023 for the potential soil stockpile area (referred to from here on as "study area") for the NRWWF. This BRA consisted of a search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPAC) database, and the California Native Plant Society's (CNPS) of Rare and Endangered Plants data to obtain records of special-status species occurrences in the vicinity of the study area. In addition, Dudek Biologist Mikaela Bissell conducted a

general reconnaissance survey of the study area on March 01, 2023. The purpose of this assessment was to review current site conditions, document existing vegetation communities within and in the vicinity of the Project site, and assess the potential for special-status species and sensitive habitats to occur. Below is a discussion of the existing habitat conditions on the Project site, the special-status plant and wildlife species, and the sensitive biological resources potentially present in the study area.

The study area is approximately 1.4-acre and has an elevation that ranges between 213 and 220 feet above mean sea level. The study area is relatively flat and is located on annual grassland with grazing cattle surrounding the area. Topography of the area surrounding the study area consist of moderately sloping valleys and hillsides. In addition, a riverine feature flow north of the study area (Appendix B).

Soils and Hydrology

There are two soil types mapped within the 1.4-acre study area, the 15.1-acre existing stockpile area, and the 20-acre Project boundary (USDA 2023a) as shown on Figure 5, Soils and Terrain, of Appendix B to this IS/MND. Of these, one soil type is classified as hydric[7] and may be associated with vernal pools and stream terraces according to the Natural Resource Conservation Service (NRCS) (USDA 2023b). Soils are variable in the study area and may contain cemented ash, volcanic mud flows, and patches of alluvium. The closest serpentine soils are approximately 10-15 miles northeast from the study area located in Deadwood in Butte County and are categorized as Unit 2 #384 (Late Proterozoic to Early Jurassic).

The study area occurs in the Butte Creek watershed, which is approximately 800 square miles in size and spans over 90 miles through the following counties: Butte, Tehama, Sutter, Glenn, and Colusa (Sacramento River Watershed Program 2023). The 12-digit Hydrologic Unit Code (HUC) for the study area, Project boundary, and existing soil stockpile is 180201580203. The USFWS National Wetlands Inventory identifies two riverine features just outside of the project boundary. The first feature runs west of the study area and is categorized as a riverine (R4SBC: 'R'- riverine, '4' – intermittent, 'SB' streambed, and 'C'- seasonally flooded). The second feature is located southeast outside of the Project boundary and is also classified as a R4SBC feature. According to the Federal Management Agency Flood Zone (FEMA) data, the study area is located within the 100-year floodplain (FEMA, 2023) as shown in Figure 6, Hydrologic Resources.

Vegetation Communities and Land Cover

The existing stockpile area is mapped as consisting solely of urban land cover, as shown in Figure 7, Vegetation Communities and Land Covers. The 1.4-acre study area and the 20-acre project boundary are mapped of urban land cover and annual grassland habitat. According to the CNDDB search, there are seven sensitive natural communities mapped in the study area region: Great Valley valley oak riparian forest, Great Valley mixed riparian forest, Great Valley cottonwood riparian forest, northern basalt flow vernal pool, northern volcanic mud flow vernal pool, Great Valley willow scrub, and northern hardpan vernal pool. None of these sensitive natural communities were identified within the study area (Appendix B).

[7] Hydric soils are often associated with aquatic resources, such as wetlands, streams, and floodplains.

Aquatic Resources

During the biological reconnaissance survey performed by Dudek, a wetland swale feature was identified within the study area. The biologist documented visible sediment sorting, hydrology, and facultative wetland plants during the survey.

Special-Status Species

Results of the CDFW CNDDB, USFWS IPAC, and CNPS database searches identified records for 29 special-status plant species and 27 special-status wildlife species within the Project study area and existing stockpile area. A total of 19 plant species and 22 wildlife species were removed from consideration based on a lack of suitable habitat, or because the Project boundary is outside the known geographic or elevation range for the species (Appendix B). A total of ten special-status plant species and five special-status wildlife species have at least a moderate potential to occur within the Project boundary. These species are outlined in Table 3.4-1 below.

Table 3.4-1. Potentially Occurring Special-Status Plant and Wildlife Species

Scientific Name	Common Name	Status (Fed/State/CRPR)
Plants		
Balsamorhiza macrolepis	big-scale balsamroot	None/None/1B.2
Castilleja rubicundula var. *rubicundula*	pink creamsacs	None/None/1B.2
Euphorbia hooveri	Hoover's spurge	FT/None/1B.2
Fritillaria pluriflora	adobe-lily	None/None/1B.2
Juncus leiospermus var. *leiospermus*	Red Bluff dwarf rush	None/None/1B.1
Limnanthes floccosa ssp. *Californica*	Butte County meadowfoam	FE/SE/1B.1
Monardella venosa	veiny monardella	None/None/1B.1
Paronychia ahartii	Ahart's paronychia	None/None/1B.1
Trifolium jokerstii	Butte County golden clover	None/None/1B.2
Tuctoria greenei	Greene's tuctoria	FE/SR/1B.1
Wildlife		
Invertebrates		
Branchinecta lynchi	vernal pool fairy shrimp	FT/None/NA
Lepidurus packardi	vernal pool tadpole shrimp	FE/None/NA
Amphibians		
Spea hammondii	western spadefoot	None/SSC/NA
Birds		
Falco peregrinus anatum	American peregrine falcon	FPD/FP, SCD/NA
Athene cunicularia	Burrowing owl	None/SSC/NA

Federal Status: FE: Federally Endangered; FT: Federally Threatened.
State Status: SE: State Endangered; ST: State Threatened; SCD: State candidate for delisting; SR: State Rare; FP: California Fully Protected Species; SSC: Species of Special Concern; FPD: Federally proposed for delisting.
CRPR (California Rare Plant Rank): 1B: Plants rare, threatened, or endangered in California and elsewhere; (.1) Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat); (.2) Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat). NA: Not Applicable.

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation Incorporated. The proposed Project has the potential to impact candidate, sensitive, or special status species, as discussed below. With the incorporation of mitigation, impacts would be reduced to **less than significant.**

Special-Status Plants

As previously discussed, the study area may provide habitat for ten special-status plant species, including species adapted to wetland and vernal pools such as Hoover's spurge (*Euphorbia hooveri*), Red bluff dwarf rush (*Juncus leiospermus* var. *leiospermus*), and Butte County meadowfoam (*Limnanthes floccosa* ssp. *Californica*). Grassland and woodland areas of the study area may also provide habitat for special-status plants such as adobe-lily (Fritillaria pluriflora) and veiny monardella (Monardella venosa) (Appendix B).

Development of the study area could result in impacts to special-status plants if present within or immediately adjacent to the development footprint. Impacts could include the destruction of individual plants or populations of plants that may become established in the construction footprint prior to ground disturbance. Impacts to special-status plant species would be a potentially significant impact. Mitigation measure **MM-BIO-1** (Botanical Inventory and Focused Rare Plant Survey) would require that a botanical inventory and focused rare plant survey of the Project footprint be conducted prior to the beginning of any ground disturbing activities. Should rare plant species be determined to be present within the Project area, additional avoidance or compensatory measures will need to be implemented prior to the initiation of construction activities.

As such, with the implementation of **MM-BIO-1**, impacts to candidate, sensitive, or special status plant species would be **less than significant with mitigation incorporated.**

Special-Status Wildlife

The study area may provide habitat for five special-status wildlife species, including species adapted to wetland and vernal pools, such as the vernal pool fairy shrimp (*Branchinecta lynchi)*, vernal pool tadpole shrimp (*Lepidurus packardi*), and western spadefoot (*Spea hammondii*). As federally listed threatened species, impacts to individual vernal pool fairy shrimp or tadpole shrimp would be considered a significant impact under CEQA. Additionally, impacts to western spadefoot, which is a California Species of Special Concern, would also be considered a significant impact under CEQA. **MM-BIO-2** (Aquatic Resources Jurisdictional Delineation) would require that an aquatic resources jurisdictional delineation be conducted prior to the commencement of construction activities, which would determine whether habitat for wetland and vernal pool species exists within the Project footprint. Should the jurisdictional delineation determine that habitat for these species is present on the within the Project footprint, then additional focused and/or pre-construction surveys would be necessary.

Open grassland within and adjacent to the study area provides potential breeding and foraging habitat for burrowing owl (*Athene cunicularia*). No burrows were observed during the field reconnaissance survey, however, this survey did not include full coverage of the Project Boundary. Direct or indirect impacts to this species would be considered a significant impact under CEQA. **MM-BIO-3** (Burrowing Owl Habitat

Assessment) would require that a burrowing owl habitat assessment be conducted prior to the commencement of construction activities to determine whether burrowing owls, suitable burrows and/or burrows with owl sign are present within the Project footprint. Should any suitable borrows and/or burrows with owl sign be detected during the habitat assessment, protocol surveys and/or passive relocation may be necessary.

Shrubs, open habitat, and/or human-made structures and buildings on the study area provide nesting habitat for numerous local and migratory bird or raptor species protected by the federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, including peregrine falcon (*Falco peregrinus anatum*). No active or inactive bird nests were observed during the survey reconnaissance of the Project site, however, a focused survey for nests was not conducted and the survey did not take place during the bird breeding season. Eventual development on the study area has the potential to impact nesting birds, which could violate the Migratory Bird Treaty Act and California Fish and Game Code and would be considered a significant impact under CEQA. **MM-BIO-4** (Nesting Bird Survey) would require that a nesting bird survey be required should any tree or vegetation removal activities be required during bird nesting season (February 1 – August 31). Should any active nests be identified within or adjacent to the Project footprint, an appropriate buffer would be established around the nest, and construction activities would not resume within the buffer until a qualified biologist has determined that the nest is no longer being used for breeding or rearing.

As such, with the implementation of mitigation measures **MM-BIO-2**, **MM-BIO-3,** and **MM-BIO-4**, impacts to candidate, sensitive, or special status wildlife species would be **less than significant with mitigation incorporated.**

MM-BIO-1 Botanical Inventory and Focused Rare Plant Survey. Prior the initiation of construction activities, a qualified biologist shall conduct a botanical survey and a focused rare plant survey of the Project footprint. The timing of the rare plant survey would need to coincide with the period or periods when all potentially occurring special-status plants are evident and identifiable. One survey pass in May would be adequate to capture most potentially occurring species, given environmental condition are suitable (e.g., normal rain year/no drought, no recent grading, vegetation management, etc.). If suitable habitat for late blooming species is identified on the Project footprint, a follow-up rare plant survey would be necessary in June or July. Should rare plant species be determined to be present within the Project footprint, additional avoidance or compensatory measures would need to be implemented prior to the initiation of construction activities.

MM-BIO-2 Aquatic Resources Jurisdictional Delineation. Prior to the initiation of construction activities, a qualified biologist shall conduct an aquatic resources jurisdictional delineation of the expansion area to determine which aquatic resources are present and which jurisdiction they fall under. Where possible, development shall avoid direct impacts to aquatic resource. In areas where direct impacts to jurisdictional aquatic resources can be avoided, exclusion fencing shall be installed between the avoided aquatic resource and limits of disturbance to protect from indirect impacts. Should the development of the Project result in permanent impacts to aquatic resources, additional compensatory mitigation may be required to ensure no not loss of these resources. Potential compensatory mitigation options including purchasing mitigation credits from an agency-approved wetlands mitigation bank or paying an agency-approved in-lieu fee.

MM-BIO-3 Burrowing Owl Habitat Assessment. Prior to the initiation of construction activities, a qualified biologist shall conduct a habitat assessment to determine whether burrowing owls, suitable burrows and/or burrows with owl sign are present within the Project footprint. Should any suitable borrows and/or burrows with owl sign be detected during the habitat assessment, protocol surveys and/or passive relocation may be necessary. The habitat assessment shall be conducted prior to the owl's breeding season (February 1 – August 31) to allow time for protocol surveys and/or passive relocation should these be required. Protocol surveys (if needed) should be conducted in accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation, and passive relocation (if needed) should be conducted in coordination with CDFW.

MM-BIO-4 Nesting Bird Survey. In conformance with the requirements of the Migratory Bird Treaty Act and California Fish and Game Code, should tree or vegetation removal activities be required during the nesting season (February 1 – August 31), a qualified biologist shall conduct a nesting bird survey within 72 hours of such activities. The survey shall consist of full coverage of the Project footprint and an appropriate buffer, as determined by the biologist. If no occupied nests are found, no additional steps shall be required. If nests are found that are being used for breeding or rearing young, the biologist shall recommend further avoidance measures, including establishing an appropriate buffer around the occupied nest. The buffer shall be determined by the biologist based on the species present, surrounding habitat, and existing environmental setting/level of disturbance. No construction or ground-disturbing activities shall be conducted within the buffer until the biologist has determined that the nest is no longer being used for breeding or rearing.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. As further discussed in Appendix B of this MND, no riparian habitat or other sensitive natural communities were identified within the project footprint during the BRA. As such, there would be **no impact** to any riparian habitat or other sensitive natural community.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact with Mitigation Incorporated. As further discussed in the BRA (Appendix B), aquatic resources are evident within the Project boundary due to the presence of visible sediment sorting, hydrology, and identified facultative wetland plants. **MM-BIO-2** would require that an aquatic resources jurisdictional delineation be conducted of the proposed expansion area to determine which aquatic resources are present and which jurisdiction they fall under. Should any jurisdictional aquatic resources be determined to be present, impacts to these resources would be considered a significant impact under CEQA. As such, should the Project result in any impacts to jurisdictional aquatic resources, the Project applicant would be required to aquatic resource permits from the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and or CDFW (e.g., 404 Individual or Nationwide Permit, 401 Water Quality Certification or Porter-Cologne Act Waste Discharge Requirements, and 1600 Streambed Alteration Agreement), as well as a Preliminary or Approved Jurisdictional Delineation from the USACE to identify aquatic resources on site within federal jurisdiction and a field verification with the USACE

to confirm jurisdictional boundaries. Furthermore, in accordance with **MM-BIO-2**, in areas where direct impacts to jurisdictional aquatic resources can be avoided, exclusion fencing would be installed between the avoided aquatic resource and limits of disturbance to protect from indirect impacts. Should the Project result in permanent impacts to aquatic resources, the Project applicant would adhere to any requirements associated with compensatory mitigation, including purchasing mitigation credits from an agency-approved wetlands mitigation bank or paying an agency-approved in-lieu fee. As such, with adherence to **MM-BIO-2**, the applicable permits, and required compensatory mitigation, the Project's impacts to state or federally protected wetlands would be **less than significant with mitigation incorporated.**

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact. Wildlife corridors are routes for wildlife to use when traveling between undisturbed habitat areas. Wildlife corridors provide shelter and sufficient food for wildlife and generally consist of riparian, woodland, or forested habitat. The Project site, including the proposed expansion area, may facilitate movement of resident wildlife species including birds, mammals, and other wildlife. The Project's expansion of the NRRWF would be minimal, however, as the general landscape in the vicinity of the facility would remain undisturbed. In addition, the Project site does not contain waterways that provide suitable fish habitat and, as such, the Project would not impact resident or migratory fish. Therefore, the Project's impacts on the movement of native resident or migratory fish or wildlife species would be **less than significant**.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact with Mitigation Incorporated. The Butte County General Plan COS-P7.7 requires fencing to be installed around sensitive resource on or adjacent to construction activities. In compliance with **MM-BIO-2** and **MM-BIO-4**, fencing would be installed around jurisdictional aquatic resources and nesting birds, should these resources be present on the Project site. In addition, Butte County General Plan COS-P7.9 requires a biologist to conduct construction monitoring in and adjacent to habitat for special status species. **MM-BIO-1** through **MM-BIO-4** would serve to identify any special status species present within the Project footprint. Should any special status species be detected, the applicable compliance monitoring would be carried out as applicable. As such, impacts associated with the conflict with any local policies or ordinances protecting biological resources would be **less than significant with mitigation incorporated.**

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project is located in the planning area of the Butte Regional Conservation Plan (BRCP). The BRCP has not yet been adopted and is unlikely to be adopted prior to Project implementation. Therefore, there is no potential for the Project to conflict with the plan. No other approved local, regional or state Habitat Conservation Plan (HCP) or Natural Community Conservation Plans (NCCP) exist or are planned in the Project vicinity. Therefore, there would be **no impact** associated with the conflict with the provisions of an adopted HCP, NCCP, or other approved, local, regional, or state habitat conservation plan.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Environmental Setting

As part of the CEQA analysis for the Project, Dudek prepared a cultural resources letter report which is included as Appendix C to this MND. Preparation of the letter report included a records search of the California Historical Resources Information System (CHRIS).by the Northeast Information Center (NEIC), review of previous technical studies, review of historical maps and aerial imagery, a search of the Native American Heritage Commission's (NAHC) Sacred Lands File, and an intensive pedestrian survey. All cultural resource fieldwork and reporting was conducted by archaeologists meeting the Secretary of the Interior's Professional Qualifications Standards.

Review of the records search and previous technical reports found no previously-recorded cultural resources with the project site and immediately-surrounding area, together referred to as the area of potential effect (APE). However, three previously-recorded cultural resources are located within one half-mile of the APE, one of which is within the boundary of the NRRWF. Also, two additional unmapped resources may fall within one half-mile of the APE. Results from NAHC Sacred Lands File search request returned a negative result.

On January 13, 2023, a Dudek archaeologist conducted an intensive pedestrian survey for the Project area using standard archaeological procedures and techniques that meet the Secretary of Interior's Standards and Guidelines for cultural resources inventory. During the survey, one previously unidentified resource was recorded outside the northwestern corner of the Project area. This resource consists of two associated historic-era archaeological features, a tailings pile and a prospect pit. The resource was evaluated and found not to be an eligible historic resource (Appendix C).

Potential for previous unidentified cultural resources in the vicinity was reviewed against geologic and topographic GIS data for the area and information from other near-by projects. The "archaeological sensitivity," or potential to support the presence of a buried prehistoric archaeological deposits, is generally interpreted based on geologic landform, environmental parameters (i.e., distance to water and landform slope), and an area's history of use. The Project area has been subject to disturbances related to the development of the NRRWF. The area was developed less than 20 years ago, based on review of historical aerial imagery and topographic maps. As discussed above, one historic-era archaeological resource was observed during pedestrian survey, and is located outside of the

Project APE. In consideration of this information, the Project area is considered to have low potential to support the presence of intact buried archaeological deposits.

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. As discussed above, no historic resources were identified within the Project site. Therefore, the Project would have **no impact** related to historical resources.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than Significant. A recorded archaeological resource (P-04-001561) is located within the Project APE; however, the site is over ¼-mile from the proposed Project site. A historic-era resource, consisting of a tailings pile and prospect pit was discovered near, but not within, the project era. This is not a significant historic or unique archaeological resource under CEQA. Therefore, no identified resources would be affected by the project. Nevertheless, the potential for unanticipated discovery exists in the project site. The disturbance of a previously undiscovered site could be a significant impact. Therefore, mitigation measure CUL-1 shall be implemented. With this implementation of CUL-1, impacts would be **less than significant with mitigation.**

MM-CUL-1 Unanticipated Discovery of Archaeological Resources. All employees should be alerted to the potential to encounter archaeological material. In the event that cultural resources (sites, features, or artifacts) are exposed during work activities for the proposed Project, all ground disturbing work occurring within 100 feet of the find shall immediately stop until a qualified specialist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether additional study is warranted. Prehistoric archaeological deposits may be indicated by the presence of discolored or dark soil, fire-affected material, concentrations of fragmented or whole freshwater bivalves shell, burned or complete bone, non-local lithic materials, or the characteristic observed to be atypical of the surrounding area. Common prehistoric artifacts may include modified or battered lithic materials; lithic or bone tools that appeared to have been used for chopping, drilling, or grinding; projectile points; fired clay ceramics or non-functional items; and other items. Historic-age deposits are often indicated by the presence of glass bottles and shards, ceramic material, building or domestic refuse, ferrous metal, or old features such as concrete foundations or privies. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f); PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant. The Project site does not possess a high sensitivity for cultural resources or human remains (Appendix C). Nevertheless, the potential exists for unanticipated discovery. Should human remains be discovered, California Health and Safety Code Section 7050.5 requires that no further disturbance or excavation of the site shall occur until the County coroner has examined the remains. This requirement is incorporated into mitigation Measure CUL-2. With implementation of CUL-2, Project impacts would be **less than significant with mitigation**.

MM-CUL-2 Unanticipated Discovery of Human Remains. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within 2 working days of notification of the discovery, if the potential remains are human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, the County Coroner shall notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant (MLD) from of the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The short-term construction and long-term operation of the proposed Project would require the consumption of energy resources in several forms at the Project site and within the Project area. Construction and operational energy consumption are evaluated in detail below.

Electricity

Construction Use

Temporary electric power for as-necessary lighting would be provided by Pacific Gas & Electric Company (PG&E). The electricity used for such activities would be temporary and would have a negligible contribution to the Project's overall energy consumption.

Natural Gas

Construction Use

Natural gas is not anticipated to be required during construction or operation of the proposed Project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the "petroleum" subsection. Any minor amounts of natural gas that may be consumed during Project construction would have a negligible contribution to the Project's overall energy consumption.

Petroleum

Construction Use

Heavy-duty construction equipment associated with construction activities would rely on diesel fuel, as would haul and vendor trucks involved in delivery of materials to the Project site. Construction workers

would travel to and from the Project site throughout the duration of construction. It is assumed in this analysis that construction workers would travel to and from the site in gasoline-powered light-duty vehicles.

Heavy-duty construction equipment of various types would be used during each phase of Project construction. The Project's construction equipment is estimated to operate a total combined 3,530 hours based on information from the applicant and the California Emissions Estimator (CalEEMod) Version 2022.1.1.13 default assumptions where Project information was not available.

Fuel consumption from construction equipment was estimated by converting the total carbon dioxide (CO_2) emissions from each construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2020). The estimated diesel fuel usage from construction equipment is shown in Table 3.6-1.

Table 3.6-1. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO_2 (MT)	Kg CO_2/Gallon	Gallons
Site Preparation	1	0.83	10.21	81.29
Grading	3	373.3	10.21	36,562.19
			Total	**36,643.49**

Sources: Pieces of equipment and equipment CO_2 (Appendix C); kg CO_2/Gallon (The Climate Registry 2020).
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.
See Appendix C.

Fuel estimates for total worker vehicles, vendor trucks, and haul trucks fuel consumption are provided in Table 3.6-2.

Table 3.6-2. Construction Worker, Vendor, and Haul Truck Petroleum Demand

Phase	Trips	Vehicle MT CO_2	Kg CO_2/ Gallon	Gallons
Worker Vehicles (Gasoline)				
Site Preparation	40	0.14	8.78	15.95
Grading	1,160	0.51	8.78	464.69
			Total	**480.64**
Vendor Trucks (Diesel)49.60				
Site Preparation	20	0.14	10.21	13.71
Grading	290	0.51	10.21	200.78
			Total	**214.50**

Sources: Trips and vehicle CO_2 (Appendix C); kg CO_2/Gallon (The Climate Registry 2020).
Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram.
See Appendix C.

In summary, construction of the Project is conservatively anticipated to consume approximately 481 gallons of gasoline and 36,858 gallons of diesel, for a total of 37,339 gallons of petroleum over a period of approximately 7 months. For comparison, approximately 28.7 billion gallons of petroleum are consumed in California annually (EIA 2020). Also, for comparison, Countywide total petroleum use by vehicles is expected to be 7.1 million gallons per year in 2021 (CARB 2020). The Project would be required

to comply with the California Air Resources Board's (CARB's) Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes, which would minimize fuel consumption. While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. Overall, because petroleum use during construction would be temporary, and would not be wasteful or inefficient, impacts would be **less than significant**.

Operational Use

As discussed under Section 3.3., Air Quality, operation of the Project site includes an approximate 130,680 square feet area proposed for expanding storage pile capacity at the NRRW. The expansion of the existing storage pile results in no new or additional truck operations, including hauling trucks or pile maintenance and operation off-road vehicles. Therefore, there would be no new operational emissions energy impacts with the proposed Project.

Given these considerations, the petroleum consumption associated with the proposed Project would not be considered inefficient or wasteful, and impacts would be **less than significant**.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The proposed Project would involve expanding the existing soil stockpile beyond the western boundary of the site into an undeveloped area, The expanded stockpile volume would be approximately 1,169,000 CY. No new or additional truck operations, including hauling trucks or pile maintenance and off-road vehicles.

As discussed in Section 3.8 Greenhouse Gas Emissions, the proposed Project would not conflict with the County's 2021 CAP, the County's General Plan goals, policies, and actions, and CARB's 2022 Climate Change Scoping Plan Update by diverting organic waste from the landfill and reducing GHG emissions and comply with Assembly Bill (AB) 32, which mandates the reduction of GHG emissions. Thus, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, impacts would be **less than significant.**

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The Project is not located within an Alquist-Priolo Earthquake Fault Zone. The closest Holocene-active fault to the facility is the Cleveland Hill Fault, located approximately 19.4 miles to the southeast, at the closest point (CDOC, 2015).. As such, no active fault segments traverse the NRRWF or immediately surrounding area and there is no evidence that fault rupture could occur on the site. Furthermore, construction and operation of the Project would not directly or indirectly cause fault rupture or exacerbate existing fault rupture risks. For these reasons, the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving surface rupture of a known earthquake fault, and **no impact** would occur.

ii) Strong seismic ground shaking?

Less Than Significant Impact. Butte County is relatively free from significant seismic and geologic hazards. There are, however, faults within the region that have the potential to cause strong seismic ground shaking, including the Holocene-active Cleveland Hill Fault, located approximately 19.4 miles southeast. However, the construction and operation of the Project would not exacerbate seismic ground shaking. Additionally, the Project does not include any habitable structures or components that would exacerbate the risk of loss, injury, or death involving seismic ground shaking events. Thus, impacts would be **less than significant**.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. As previously discussed, the Project site is in an area that may be subject to future seismic ground shaking events. However, the Project would not exacerbate the potential for seismic activity to occur and therefore would not directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Therefore, the seismic-related impacts during construction and operation of the Project would be **less than significant**.

iv) Landslides?

Less Than Significant Impact. Based on the gently sloping topography, the potential for slope instability and landslides is low. In addition, the project would not exacerbate the potential for landslides to occur and therefore would not directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving landslides. Therefore, landslide-related impacts during construction and operation of the Project would be **less than significant**.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The proposed Project involves the expansion of an existing soil stockpile at the NRRWF into an adjacent area. The Project would not result in activities that would result substantial erosion or the loss of topsoil, such as grading. Additionally, according to the 2020 Joint Technical Document

for the NRRWF, a stormwater pollution prevention plan (SWPPP) and monitoring program is currently in effect at the facility. The SWPPP erosion control measures include berms to control stormwater, downdrains to convey runoff down landfill slopes, usage of straw wattles and silt fencing, and temporary basins to provide additional sediment control for runoff from the facility. The SWPPP would be modified to include information and best management practices specific to the proposed Project, should they be necessary. Compliance with the best management practices described in the SWPPP would ensure that soil erosion or the loss of topsoil would be **less than significant**.

c) ***Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

Less Than Significant Impact. As previously discussed, the Project site is on gently sloping topography and landslide risk is low. The proposed Project would not require large groundwater withdrawal, and would therefore not exacerbate the potential for subsidence to occur (see Section 3.10, Hydrology and Water Quality, of this IS/MND regarding groundwater withdrawals). In addition, the project would not exacerbate the potential for seismic activity, subsidence, or collapse to occur. Therefore, impacts related to unstable soils during construction and operation of the proposed Project would be **less than significant**.

d) ***Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

No Impact. Linear extensibility is used to determine the shrink-swell, or expansion potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent, moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. The Project site is underlain by Wafap-Hamslough and Clearhayes-Hamslough soils (NRCS 2023). According to the Natural Resources Conservation Service, Wafap-Hamslough soils have a linear extensibility rating of 2 percent while Clearhayes-Hamslough soils have a linear extensibility of 3 percent (NRCS 2023). As such, the soils on the site have shrink-swell potential that ranges between low and moderate. The proposed Project, however, would not result in the development of any buildings or structures. As such, the Project would not create a substantial direct or indirect risk to life or property, and there would be **no impact.**

e) ***Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

No Impact. The project would not result in the development or use of any septic or wastewater treatment systems. **No impact** would occur.

f) ***Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

Less than Significant. The proposed Project would occur within the previously disturbed landfill area, as well as land adjacent to the NRRWF facility that has been highly disturbed. No excavation is expected for the Project. Therefore, potential impacts associated with paleontological resources would be **less than significant**.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

A greenhouse gas (GHG) is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g), for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (see also 14 CCR 15364.5).[8] Some GHGs, such as CO_2, CH_4, and N_2O, are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs have a much greater heat-absorption potential than CO_2 and include fluorinated gases, such as HFCs, PFCs, and SF_6, which are associated with certain industrial products and processes.

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2017). The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e).

The current version of the CalEEMod 2022.1.1.13 assumes that the GWP for CH_4 is 25 (meaning emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298. The GWP values identified in CalEEMod were applied to the Project.

Under CEQA, "the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific

[8] Climate-forcing substances include GHGs and other substances, such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in California Health and Safety Code Section 38505.

and factual data."[9] CEQA grants agencies with the general authority to adopt criteria for determining whether a given impact is "significant."[10] When no guidance exists under CEQA, the agency may look to and assess general compliance with comparable regulatory schemes.

The County's 2021 Climate Action Plan (2021 CAP) was adopted on December 14, 2021.The 2021 CAP is an update to the 2014 CAP, providing updated information, an expanded set of GHG reduction strategies, and a planning horizon out to 2050. The 2021 CAP provides goals, policies, and programs to reduce GHG emissions, address climate change adaptation, and improve quality of life in the County. The 2021 CAP also supports statewide GHG emission-reduction goals identified in AB 32 and Senate Bill (SB) 375. Programs and actions in the CAP are intended to help the County sustain its natural resources, grow efficiently, ensure long-term resiliency to a changing environmental and economic climate, and improve transportation. The 2021 CAP also serves as a Qualified GHG Reduction Strategy under CEQA, simplifying development review for new projects that are consistent with the CAP (Butte County 2021).

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

New projects are evaluated to determine consistency with the 2021 CAP and to identify which GHG emission reduction measures would be implemented with project approval, GHG emission estimates presented herein are for informational purposes only. A project-specific environmental document that relies on this 2021 CAP for its cumulative impact analysis must identify specific GHG reduction strategies applicable to the project and demonstrate the project's incorporation of the strategies. Project applicants and County staff will identify specific strategies applicable to each project during project review. If applicable strategies are not otherwise binding and enforceable, they must be incorporated as mitigation strategies for the project. If substantial evidence indicates that the GHG emissions of a proposed project may be cumulatively considerable, notwithstanding the project's compliance with specific strategies in this 2021 CAP, an EIR must be prepared for the project (Butte County 2021).

Construction

The analysis of GHG emissions uses the same methodology and assumptions as the analysis of air quality impacts in Section 3.3, Air Quality. Construction of the proposed Project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, vendor and haul trucks, and worker vehicles. CalEEMod was used to calculate the annual GHG emissions. A detailed depiction of the construction schedule—including information regarding phasing, equipment utilized during each phase, trucks, and worker vehicles—is included in Appendix A. The estimated Project-generated GHG emissions from construction activities are shown in Table 3.8-1.

[9] *CEQA Guidelines* Section 15064(b).
[10] See *Cal. Pub. Resources Code* Section 21082.

Table 3.8-1. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	R	CO_2e
	metric tons per year				
2023	321	0.01	<0.005	0.01	322
2024	58	<0.005	<0.005	<0.005	58.2
				Total	**380.2**

Notes: See Appendix A for detailed results.
MT = metric tons; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.

As shown in Table 3.8-1, the estimated total GHG emissions from the construction scenario would be approximately 380 MT CO_2e. Estimated Project-generated construction emissions amortized over 30 years would be approximately 12.7 MT CO_2e per year.[11]

Operation

As discussed under Section 3.3., Air Quality, operation of the Project includes an approximate 130,680 square foot area proposed for expanding storage pile capacity at the NRRW. The expansion of the existing storage pile results in no new or additional truck operations, including hauling trucks or pile maintenance and operation of off-road vehicles. Therefore, there are no new operational GHG emissions associated with the proposed Project.

2021 CAP Consistency

The Project's consistency with the County's 2021 CAP is evaluated below in Checklist Item 3.8 b). The proposed Project would support the County's CAP Measure W2 and County's General Plan goals, policies, and actions by supporting diversion of organic waste and reducing GHG emissions and thus comply with AB 32.

For the reasons discussed above, the proposed Project would have a **less-than-significant** impact related to generation of GHG emissions.

b) Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As stated above, the 2021 CAP is a long-term strategic document to reduce GHG emissions in the County. Reduction targets in the CAP call for a 15% reduction below baseline 2006 GHG emission levels by 2020 consistent with State guidelines, and a 42% reduction below baseline 2006 levels by 2030.

The County's 2021 CAP outlines a number of measures to reduce GHG emissions in the County, including Solid Waste Sector Strategy 10, to reduce the amount of solid waste sent to local landfills through

[11] BCAQMD does not have a recommended construction threshold for GHG emissions. Therefore, construction emissions are amortized over the life of the project (assumed to be 30 years) and added to operational emissions (which for this project would be zero). For the rationale behind this approach, see BAAQMD 2009.

innovative programs and partnerships, and to adopt a Countywide solid waste diversion rate targets of 50%, 60% and 75% for years 2030, 2040, and 2050, respectively.

CAP Solid Waste Sector Strategy 11 sets to reduce emissions from disposal and decomposition of organic waste, targets the percentage of organics recycled or composted to 70%, 75% and 90% for years 2030, 2040, and 2050, respectively.

The proposed Project includes the expansion of an existing soil storage pile and results in no new or additional truck operations, including hauling trucks or pile maintenance and operation off-road vehicles. Therefore, there would be no new operational GHG emissions associated with the proposed Project. Additionally, the proposed Project would not conflict with or prevent the County from pursuing CAP Strategies 10 and 11 and would not prevent the County from achieving solid waste diversion rate targets of 50%, 60% and 75% for years 2030, 2040, and 2050, respectively. Furthermore, the proposed Project would not conflict with CARB's 2022 Climate Change Scoping Plan Update Action to divert 75% of organic waste from landfills by 2025 (CARB 2022). As such, there would be **no impact** to applicable plans.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) 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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) 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 it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. Relatively small amounts of commonly used hazardous materials, such as gasoline, diesel fuel, lubricating oil, grease, and solvents may be used during the construction of the Project. These materials are not considered acutely hazardous and are commonly used for construction projects. Additionally, these materials would be transported and handled in compliance with all applicable federal,

state, and local laws regulating the management and use of hazardous materials. Therefore, the use of these materials for their intended purposes would not pose a significant risk to the public or the environment. The operation of the Project would not require additional hazardous materials to be on site, beyond those that are already used on the Project site for operation and maintenance of the facility. As such, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be **less than significant**.

b) Would the project 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?

Less Than Significant Impact. See response to Checklist Item 3.9(a). Impacts would be **less than significant**.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The Project would be located at the NRRWF site and a portion of an adjacent parcel. This site is located within a relatively remote location. There are no existing or proposed schools located within one-quarter mile of the Project site. As such, **no impact** would occur.

d) Would the project 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 it create a significant hazard to the public or the environment?

No Impact. The proposed Project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (EnviroStor 2023, Geotracker 2023). **No impact** would occur.

e) 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The Project site is not located within an airport land use plan or within two miles of an airport. The nearest airports to the site include Paradise Airport, located approximately 6.3 miles northwest of the Project site, and Ranchaero Airport, located approximately 7.5 miles northeast of the Project site. **No impact** would occur.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The Project would be located at and adjacent to the NRRWF, which is located in a relatively remote area. The Project site is accessed via SR-99. During an emergency, such as a regional fire, the Project would not result in a substantial increase in the vehicles exiting the landfill, because Project operation would not increase vehicle trips to or from the Project site. Therefore, the Project will not interfere or impeded nearby resident vehicles that may be attempting to leave the area. As such, impacts would be **less than significant.**

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. The Project site is located in a moderate Fire Hazard Severity Zone (FHSZ) in a State Responsibility Area (CALFIRE 2023). As such, the Project site is not located in an area designated as a high fire hazard area. In addition, the Project involves the expansion of a stockpile at a recycling and waste facility. While the Project does include an expansion of the facility's existing footprint, this expansion is minor when compared to the existing area of the NRRWF. The Project would not lead to a substantial increase in the exposure of the facility to wildland fire. Therefore, the proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fire. Impacts would be **less than significant.**

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. The Butte County Public Works would be required to implement erosion control measures during Project activities, stipulated in a SWPPP pursuant to Order 2014-0057-DWQ, National Pollutant Discharge Elimination System NPDES General Permit for Storm Water Discharges Associated with Industrial Activities, Order NPDES No. CAS000001 (industrial general permit). Landfills are

covered by this industrial general permit and are thus required to develop a site-specific SWPPP demonstrating compliance with its requirements (SWRCB 2015). According to the 2020 Joint Technical Document for the NRRWF, a SWPPP and monitoring program is currently in effect at the facility. The SWPPP includes an evaluation of drainage controls for the facility and the management of stormwater run-on and run-off, and a plan to regrade site surface drainage to avoid polluted stormwater flow into nearby water bodies, among other drainage and erosion control measures. Specific erosion and sediment controls described in the SWPPP include berms to control stormwater, downdrains to convey runoff down landfill slopes, usage of straw wattles and silt fencing, and temporary basins to provide additional sediment control for runoff from the facility.

In addition, the Project involves the expansion of a soil stockpile on an existing recycling and waste plant, as well as an adjacent area. The existing SWPPP would be modified to include best management practices specific to the expansion area, should they be necessary. With the implementation of these measures, the Project would not generate polluted runoff to offsite stormwater drainage systems, nor would the Project result in the violation of any water quality standards or waste discharge requirements. As such, impacts would be **less than significant.**

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact. The proposed Project does not involve any grading or construction of buildings or structures. Additionally, the Project does not involve drilling or deep grading and would result in the depletion of groundwater supplies or interference with groundwater recharge. **No impacts** would occur.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site?

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

iv) Impede or redirect flood flows?

No Impact. The proposed Project would not result in a substantial change in the existing drainage pattern, nor would it result in a substantial increase in the rate or amount of surface water runoff at the Project site. Additionally, the Project would not result in substantial erosion or siltation on- or off-site, nor would it result in the alteration of the course of a stream or river. Furthermore, the Project site is not located in a 100- or 500-year flood zone (Zone X) as designated by the Federal Emergency Management Agency (FEMA 2023). As such, the Project would not expose people or structures to flooding risks. Additionally, the Project site is not located within a dam inundation area. There would be **no impact.**

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact. As previously discussed, the Project site is not located within flood hazard area (FEMA 2023). Additionally, the Project site is not located in an area susceptible to tsunami or seiche hazards. Therefore, the Project would not result in any impacts associated with flooding, tsunamis, or seiche. There would be **no impact.**

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The proposed Project would not result in the obstruction of any water quality control plan or sustainable groundwater management plan. As described above, the NRWFF incorporates existing measures to protect surface and water quality, with which the proposed Project must comply. Additionally, the facility has 14 groundwater monitoring wells in addition to a surface water monitoring program. The proposed Project would not result in a substantial change in drainage conditions and would not have an adverse effect on water quality. Therefore, Project impacts would be **less than significant**.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

a) Would the project physically divide an established community?

No Impact. The Project is located in an undeveloped portion of unincorporated Butte County. The only existing development in the vicinity of the Project site is an industrial development directly south the site. There are no housing or other developments in the Project area. As such, the Project would not physically divide an established community and there would be **no impact.**

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The Project site is located on the existing NRRWF footprint as well as an area adjacent to the facility's western boundary. The NRRWF facility has a Public zoning and land use designation as shown in Figure 3 and Figure 4. The area adjacent to the existing facility has a land use designation of Agriculture (20-acre minimum) and a zoning designation of Agriculture – 20 (20-acre minimum). The entirety of the Project site, including the portion located outside of the existing NRRWF facility footprint, is located within the Neal Road Recycling, and Waste Facility overlay. The purpose of the overlay zone is to promote compatible development around the NRRWF (Butte County Code of Ordinances, Section 24-44). The overlay zone also ensures adequate separation between the NRRWF and land uses that are potentially incompatible with landfill activities. This overlay is intended to promote the diversion of solid wastes into appropriate recycling facilities, energy generation, and other uses that add value and benefit to the local economy (Butte County 2023). Additionally, according to Section 24-44 of the County's Municipal Code, agricultural uses are not allowed within the Neal Road Recycling, and Waste Facility overlay. Therefore, the Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and there would be **no impact.**

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

a) ***Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

No Impact. According to the County General Plan, the Project site does not contain any mineral resources that are designated as important to the State of California or are considered to be of local importance (Butte County 2012). In addition, the NRRWF, within which the majority of the Project site is located in, is not designated as a resource recovery facility. There would be **no impact**.

b) ***Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?***

No Impact. As previously discussed, the Project site is not designated in the County General Plan as containing locally important resources. As such, the Project would not result in the loss of availability of a locally important mineral resource recovery site. There would be **no impact**.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or 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, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a) ***Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

Less Than Significant Impact. The proposed Project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance. Section 41A-7 of the Butte County Code states that the hourly average (Leq) noise level ranges from 55 Leq in the urban daytime to 40 Leq in the non-urban nighttime (Butte County 2023). Considering the location within an already established waste and recycling facility and the distance from sensitive receptors (nearest is 5,500 feet southwest of the Project site), the Project would not cause any significant increases in noise. The hours of operation and on-road and off-road vehicles associated with the Project would be consistent with existing landfill activities. Impacts would be **less than significant**.

b) ***Would the project result in generation of excessive groundborne vibration or groundborne noise levels?***

No Impact. The proposed Project is not anticipated to result in any groundbourne vibration or noise. Additionally, as stated above, considering the location within and adjacent to an already established waste and recycling facility, and the distance to the nearest sensitive receptors (5,500 feet southwest of the Project site), the Project would not cause any significant increases in groundborne vibration or noise levels and impacts would be **less than significant**.

c) For a project located within the vicinity of a private airstrip or 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, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. Airport-related noise levels are primarily associated with aircraft engine noise made while aircraft are taking off, landing, or running their engines while still on the ground. The nearest airports to the Project site are Paradise Airport, located approximately 6.3 miles northwest of the site, and Ranchaero Airport, located approximately 7.5 miles northeast of the site. Additionally, the Project is not located within the vicinity of a private airstrip. Therefore, the Project would not expose people or residing or working the Project area to excessive noise levels. Furthermore, the Project would not introduce any new sensitive receptors to the study area. **No impact** would occur.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) ***Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

No Impact. The proposed Project would not induce substantial unplanned population growth, either directly or indirectly. The Project would not result in the development of any new homes or businesses. The Project would maximize landfill capacity to serve existing and future waste disposal demand, but would not promote unplanned growth. **No Impact** would occur.

b) ***Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

No Impact. The Project would result in the expansion of a soil stockpile at an existing landfill site and an adjacent undeveloped area. The Project would not result in the destruction of housing, and as such, would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing. **No Impact** would occur.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES – Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

Police protection?

Schools?

Parks?

Other public facilities?

No Impact. The Project would be located at the existing NRRWF site and an adjacent area. The proposed Project would not result in new residential, commercial, or industrial developments that would increase the need for fire protection, police protection, schools, parks, or other public facilities. Additionally, the Project is not anticipated to result in an increased demand for public services, including fire protection, at the NRRWF site. Therefore, the Project would have **no impact.**

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the project 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?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a) ***Would the project 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?***

b) ***Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?***

No Impact. The Project would be located at the NRRWF site and within an adjacent, undeveloped area. The Project would not result in new residential, commercial, or industrial developments that would increase the need for new recreational facilities or increase the use of existing recreational facilities. **No impact** would occur.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	☒
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact. The proposed Project would occur at an existing solid waste landfill operation and an adjacent, undeveloped area. The Project would not interfere with or impact any public roads or other circulation systems. Additionally, as discussed in the response the Checklist Item 3.17(b) below, the Project is not anticipated to increase vehicle miles traveled (VMT) in the Project area. As such, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. There would be **no impact.**

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Less Than Significant Impact. The Project would not result in a substantial increase in VMT in the Project area because the Project would not result in substantial changes in the facility's staffing and would not result in an increased demand for regular truck trips to and from the facility. Impacts would be **less than significant.**

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The Project does not involve the design or redesign of surface transportation facilities. Access to the Project would be provided at the existing landfill driveway via SR 99 and Neal Road. Additionally, the proposed soil stockpile expansion is compatible with the current landfill operation onsite. As such, the Project would not substantially increase hazards for vehicles due to a geometric design feature or incompatible uses, and **no impact** would occur.

d) Would the project result in inadequate emergency access?

No Impact. The Project would not affect or change conditions related to emergency access to the landfill site or nearby uses or change existing roadway design in the Project area. Therefore, **no impact** would occur.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☐	☒
b) 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 Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

Environmental Setting

As discussed in Section 3.5, Cultural Resources, a cultural resources letter report was prepared for the Project and is included as Appendix C to this MND. Preparation of the letter report included a search of the Native American Heritage Commission's (NAHC) Sacred Lands File. Results of the search were negative.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

No Impact. The cultural resources report prepared for the project found no previous records of cultural or tribal cultural resources on the Project site. The Project would have **no impact** on tribal cultural resources.

b) ***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 Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

No Impact. No California Native American tribe has requested notification of Projects, pursuant to Public Resources Code Section 21080.3.1(d), located in or near the NRRWF site. As noted above, the Project site consists entirely of previously disturbed land. The Project would have **no impact** related to tribal cultural resources.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the waste water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

a) ***Would the project require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

No Impact. The proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. The Project would be located at the existing NRRWF, as well as an undeveloped adjacent area, which is adequately served by utility providers under existing conditions. The proposed Project would not result in the need for expanded utility resources at the facility. As such, the Project would not require the relocation, expansion or construction of utility services, and there would be **no impact.**

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. The Project involves the expansion of a soil stockpile at an existing waste and recycling facility. The Project is not anticipated to result in an increased need for water supplies when compared to existing conditions. Additionally, the site has sufficient water supplies to meet the demand created by the current operations of the facility. Therefore, the Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years, and impacts would be **less than significant**.

c) Would the project result in a determination by the waste water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The Project would not result in the construction of any new sewers, nor would the Project generate sewer wastewater. As such, **no impact** would occur.

d) Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact. The Project would not result in the generation of solid waste. Alternatively, the Project would assist in the operations of the existing NRRWF. Additionally, the NRRWF operates in compliance with federal, state, regional, and local governmental statutes and regulations. **No impact** would occur.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The Project would serve to assist in the existing operations of the NRRWF, which is a recycling and waste facility that operates in compliance with federal, state, and local regulations. As such, there would be **no impact**.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

According to mapping produced by the California Department of Forestry and Fire Protection (CALFIRE), the Project site is located within a high fire hazard severity zone in the state responsibility area (SRA) (CALFIRE 2023),

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. A portion of Neal Road, located approximately 0.55 miles west of the site, is identified as an emergency evacuation route (Butte County 2023b). Additionally, SR-99, which is located 0.55 miles west of the Project site, is also designated as an emergency evacuation route (Butte County 2023b). The proposed Project, however, would not substantially impair the use of this route. Furthermore, the expansion of the existing soil stockpile would not result in an increase in fire risk at the Project site. The proposed Project would not add a significant amount of traffic such that there would be conflict with emergency evacuation. During an emergency, such as a regional fire, vehicles exiting the landfill would not interfere or impede nearby resident vehicles that may be attempting to leave the area. Impacts would be **less than significant.**

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The proposed Project does not include the development of new housing or other occupied structures. As such the Project would not expose people to pollutant concentrations from a wildfire, and **no impact** would occur.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less Than Significant Impact. The Project involves the expansion of a soil stockpile at an existing waste and recycling facility and an adjacent undeveloped area. The Project would not require the installation of roads, fuel breaks, emergency water sources, power lines, or other utilities. The Project components are not anticipated to exacerbate fire risk. Therefore, the Project would not result in temporary or ongoing impacts to the environment, and impacts would be **less than significant**.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. As previously mentioned, the Project involves the expansion of soil stockpile at an existing waste and recycling facility and an adjacent undeveloped area. The site is not in an area that is at risk of flooding or landslides. While the Project would increase the footprint of the facility, these increases would be minimal and would not result in an increase in the risk of exposure to flooding or landslides. Therefore, the Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slop instability, or drainage changes, and impacts would be **less than significant**.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

a) ***Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?***

Less Than Significant. As discussed in Section 3.4, the project has the potential to affect special status plants and wildlife. Implementation of mitigation measures would reduce this impact. The project would expand the existing stockpile site onto 1.4 acres of annual grassland. Therefore, the project would not substantially reduce habitat, substantially reduce or eliminate a population, or restrict the range of a rare or endangered plant or animal.

As discussed in Section 3.5, the cultural resources study area included resources that were evaluated and found not to be historically significant. Previously unknown resources may be encountered during project construction, and standard mitigation measures are included to avoid impacts to historical resources. Thus, the project would not eliminate important examples of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant. The County has identified other projects within the NRRWF. A compost transloading facility, to increase the diversion of compostable organic waste in the County, is proposed. The project would involve a small loading ramp and "push wall" to temporarily hold organic waste. This project would not have any adverse effects on the environment. The County proposes to upgrade the leachate management system at the leachate pond located south of the proposed project. This project would have limited construction effects that would not significantly overlap other proposed projects. Thus, there are no significant cumulative impacts to which the proposed soil stockpile expansion project would contribute.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

No Impact. As described in this Initial Study, the Project does not have the potential to adversely affect human beings, either directly or indirectly.

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4.2 List of Preparers

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Mikeala Bissell – Biologist
Armando Gonzales – Environmental Analyst
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Elizabeth Sivell - Archaeologist

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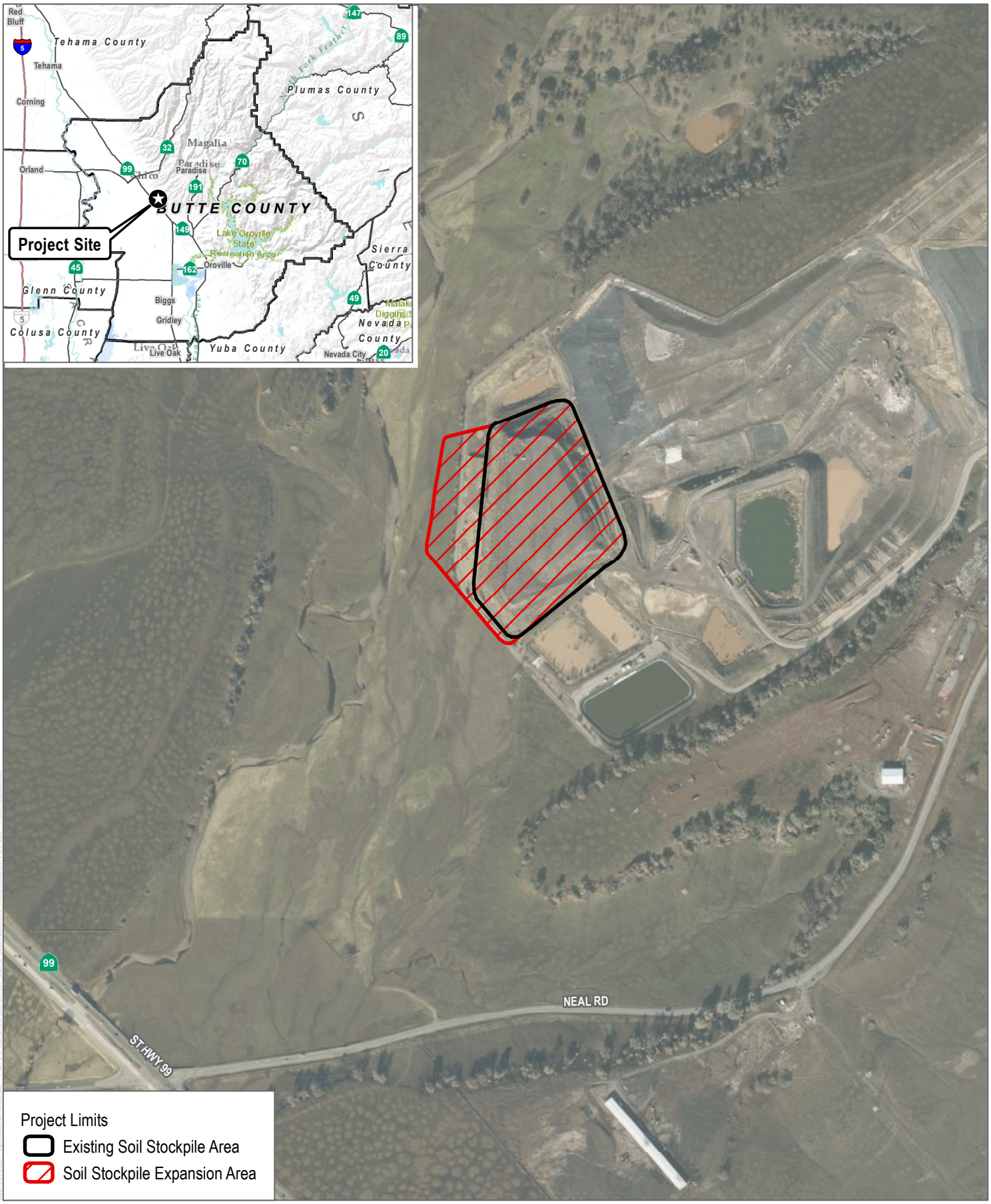

SOURCE: Bing Maps 2019, Butte County 2015

DUDEK

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FIGURE 1

Project Location

Neal Road Recycling and Waste Facility Soil Stockpile Expansion Project

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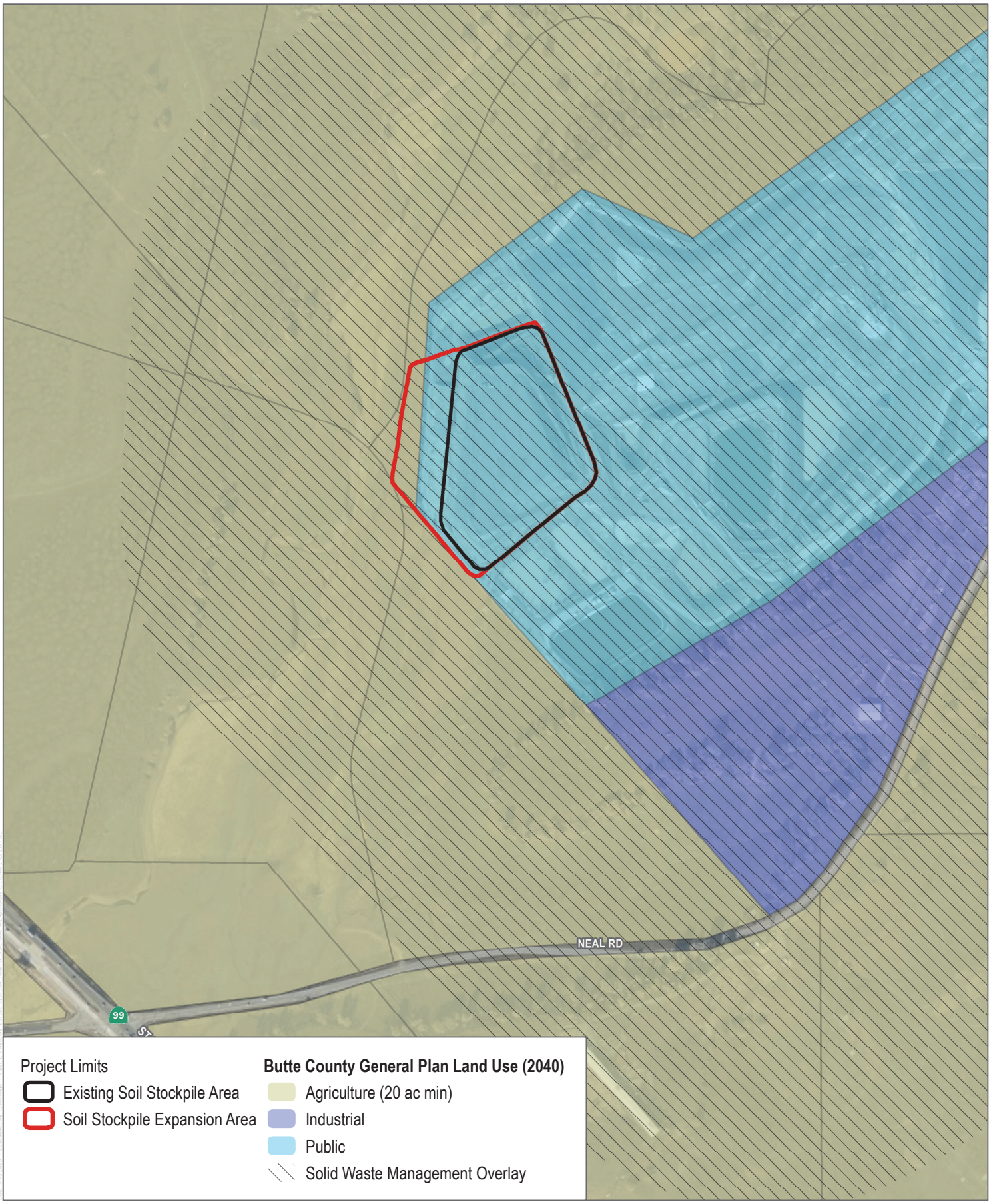

SOURCE: Bing Maps 2019, Butte County 2015

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FIGURE 2

General Plan Land Use

Neal Road Recycling and Waste Facility Soil Stockpile Expansion Project

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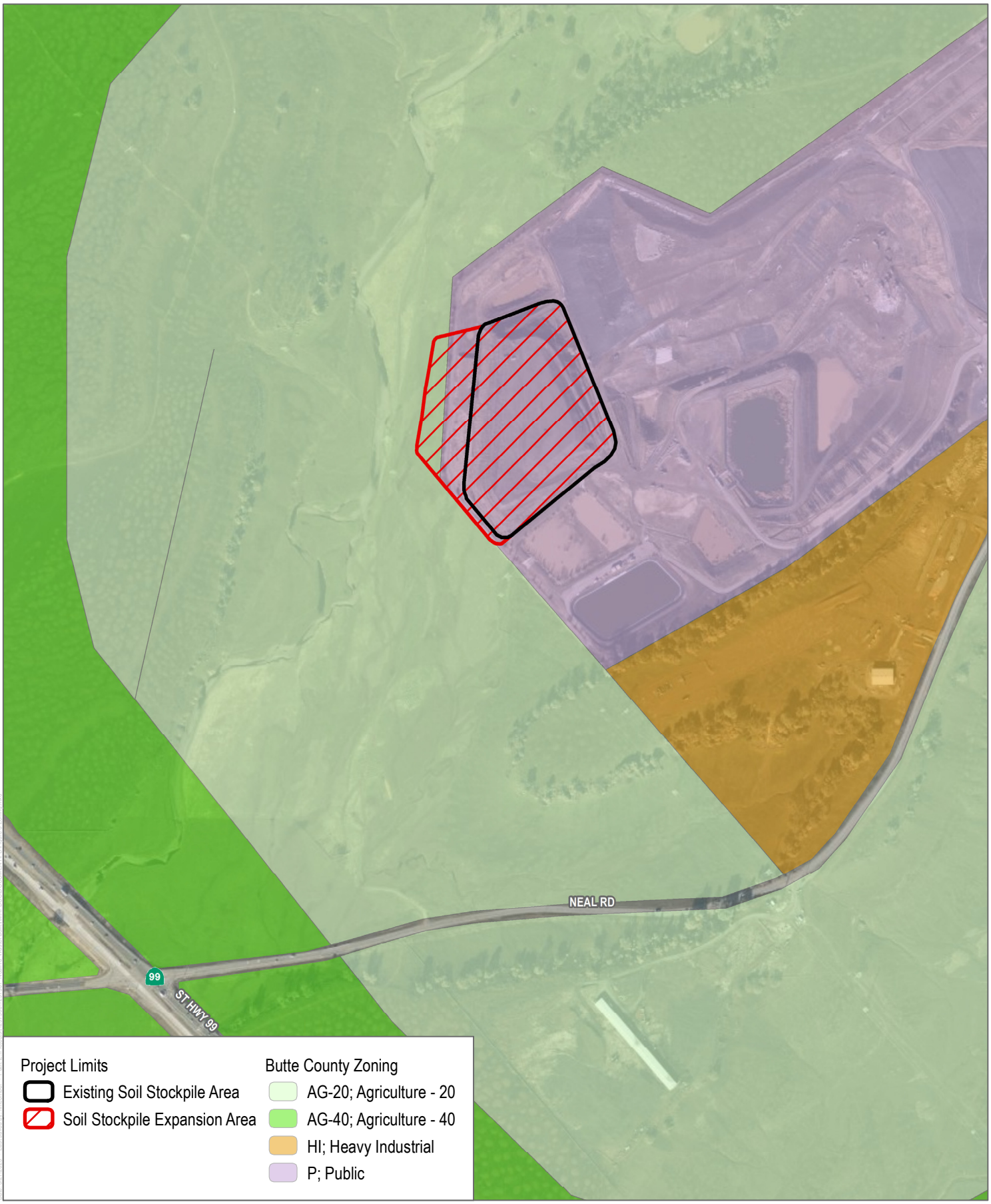

SOURCE: Bing Maps 2019, Butte County 2015, 2023

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FIGURE 3

Zoning

Neal Road Recycling and Waste Facility Soil Stockpile Expansion Project

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SOURCE: Bing Maps 2019, Butte County 2015

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FIGURE 4

Project Site Plan

Neal Road Recycling and Waste Facility Soil Stockpile Expansion Project

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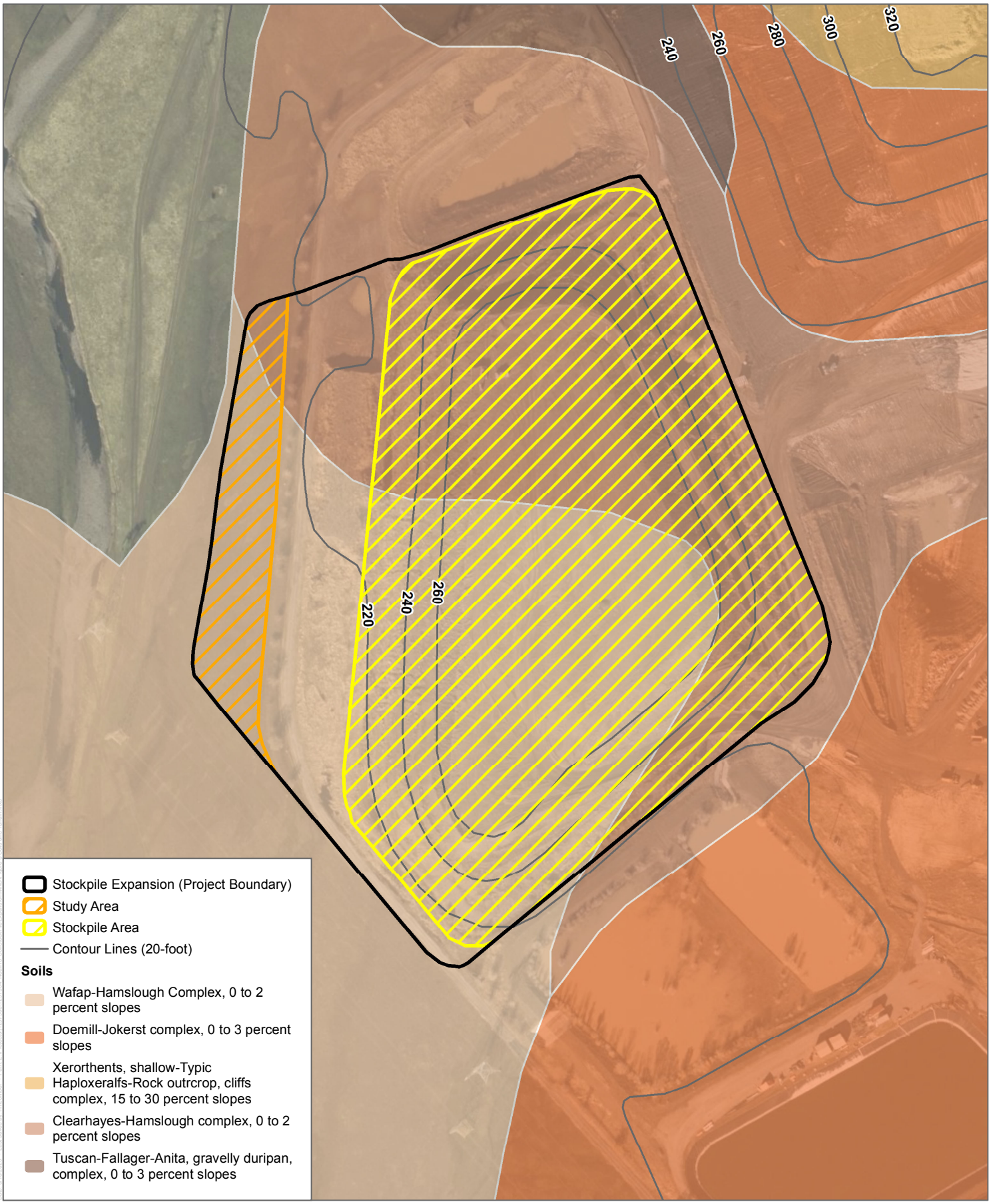

SOURCE: Bing Maps Aerial, USDA, USGS 1/3 Arc Second 2022

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FIGURE 5

Soils and Terrain

Neal Road Recycling Waste Facility Project

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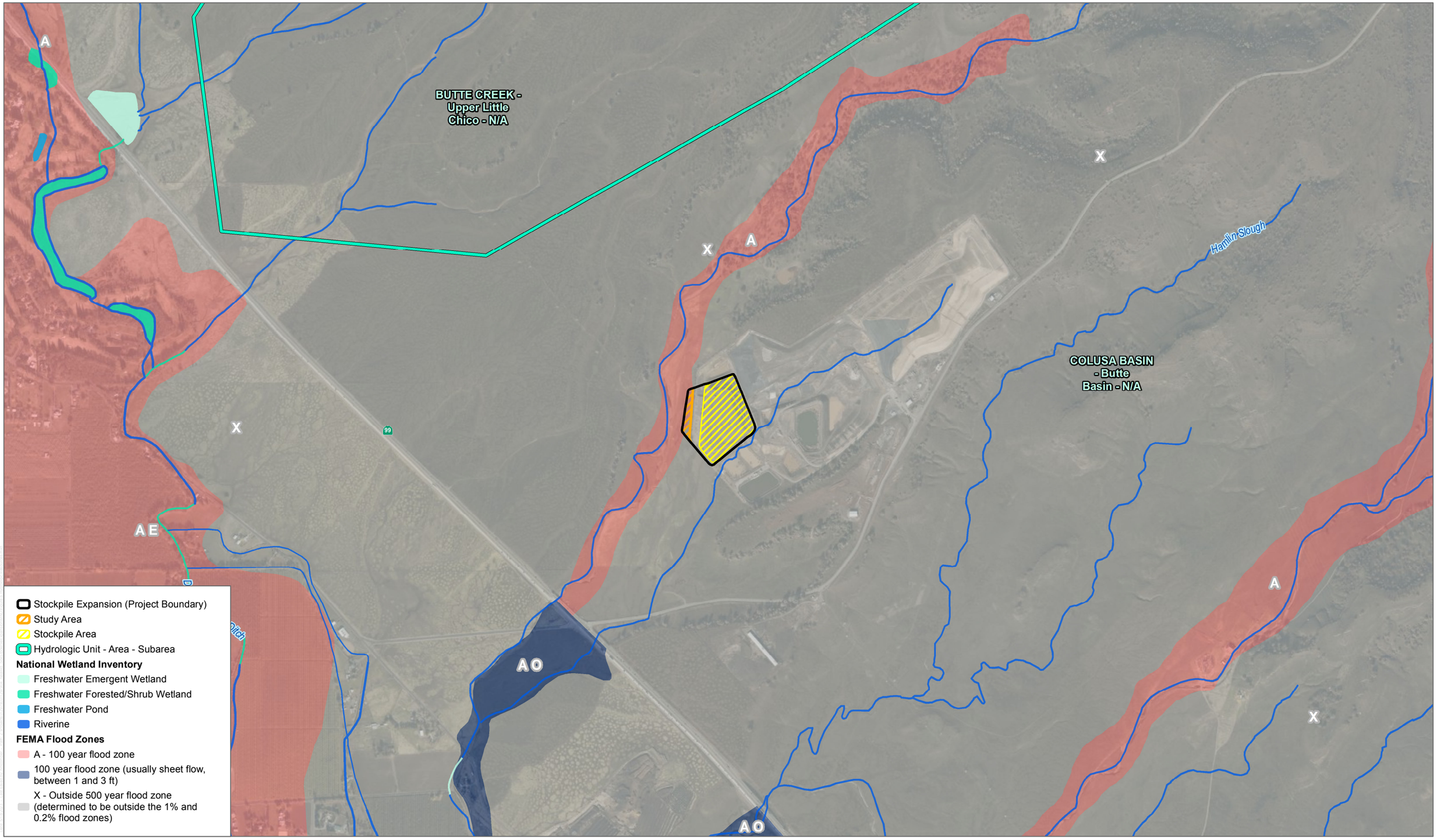

SOURCE: Bing Maps, USFWS, USGS, FEMA

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FIGURE 6

Hydrologic Resources

Neal Road Recycling Waste Facility Project

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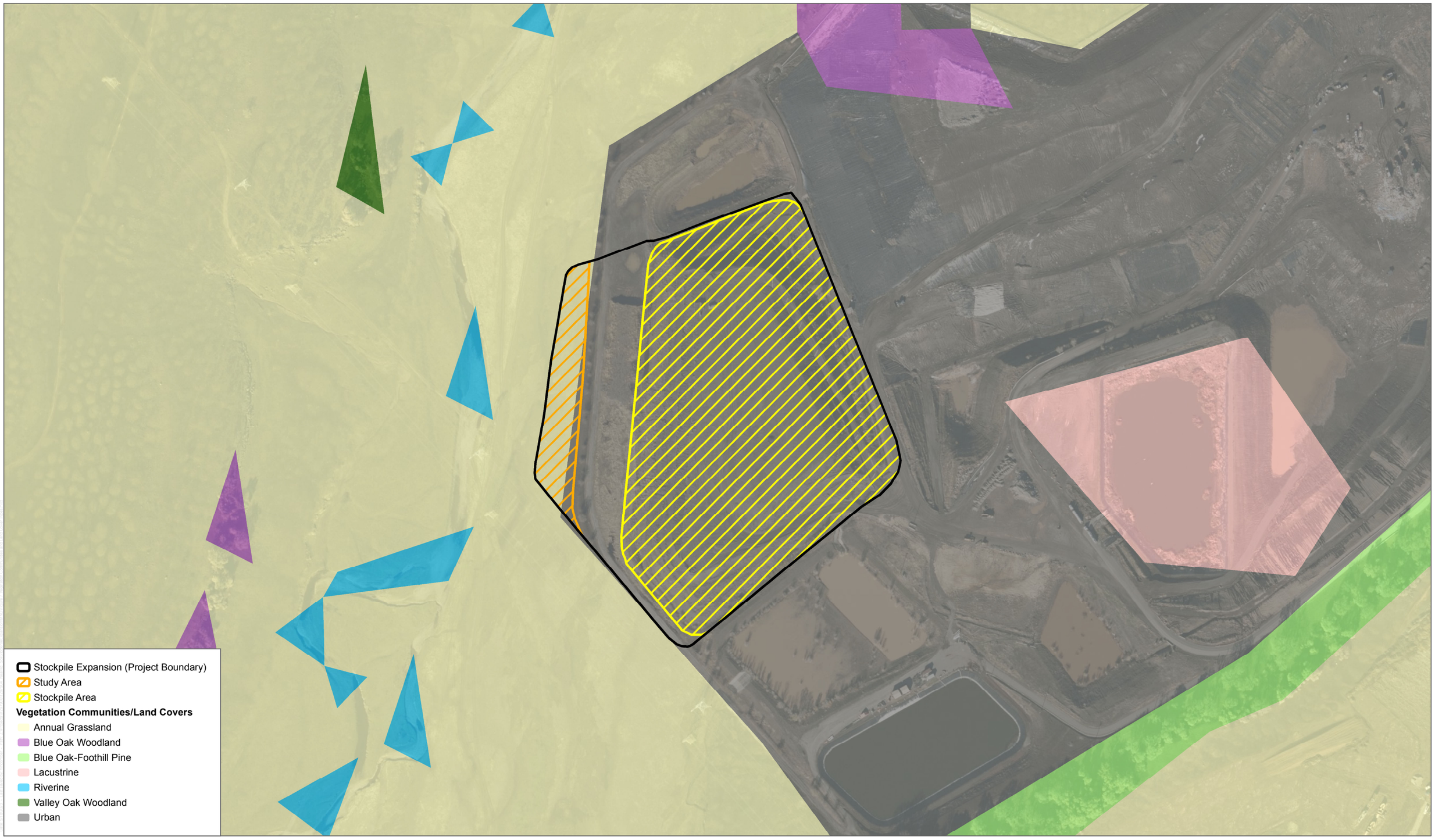

SOURCE: Bing Maps Aerial, FRAP 2015

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FIGURE 7

Vegetation Communities and Land Covers

Neal Road Recycling Waste Facility Project

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