Emergency Operations and Backup Dispatch Center

Draft Environmental Assessment | Carson City, NV
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FEMA

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ACRONYMS

ADA	Americans with Disabilities Act
APE	Area of Potential Effects
BMP	Best Management Practice
CFR	Code of Federal Regulations
CWA	Clean Water Act
DEM	Nevada Department of Emergency Management
EA	Environmental Assessment
EJScreen	EPA Environmental Justice Screening Tool
EO	Executive Order
EOBDC	Emergency Operations and Backup Dispatch Center
EOC	Emergency Operations Center
EOCGP	Emergency Operations Center Grant Program
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FONSI	Finding of no Significant Impact
FPPA	Farmland Protection Act
HUD	U.S. Department of Urban Development
IPaC	Information for Planning and Consultation
IT	Information technology
NAAQS	National Ambient Air Quality Standards
NDEP	Nevada Department of Environmental Protection
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act
NHO	Native Hawaiian Organization
NNHP	Nevada Natural Heritage Program
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHSA	Operational Health and Safety Administration
Project	EOBDC and reconstructed parking lot
RCRA	Resource Conservation and Recovery Act
SHPO	State Historic Preservation Office
Station 51	Fire Station 51
THPO	Tribal Historic Preservation Officer
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1.0 INTRODUCTION

1.1 Overview

The Nevada Division of Emergency Management and Carson City Public Works Department has applied to the Federal Emergency Management Agency (FEMA) for federal grant funds from the Emergency Operations Center Grant Program (EOCGP) to construct a new Emergency Operations and Backup Dispatch Center (EOBDC) in Carson City, Nevada. The EOCGP is intended to improve emergency management and preparedness capabilities by supporting flexible, sustainable, secure, strategically located, and fully interoperable EOCs with a focus on addressing identified deficiencies and needs. The EOCGP is authorized by section 614 of the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (42 U.S.C. 5196c) as amended by section 202 of the *Implementing Recommendations of the 9/11 Commission Act of 2007* (FEMA, 2019).

FEMA has prepared this Environmental Assessment (EA) to analyze the potential environmental consequences associated with the proposed action, while providing a framework for the evaluation of Federal and State laws and regulations. The Proposed Action Alternative and No Action Alternative are being analyzed in accordance with NEPA, the Council on Environmental Quality (CEQ) implementing regulations,[1] and the Department of Homeland and Security (DHS) Instruction and Directive, and FEMA Instruction and Directive[2] addressing environmental and historic preservation (EHP) requirements. This EA is designed to meet FEMA's responsibilities under NEPA and to determine whether to prepare a Finding of No Significant Impact (FONSI) or a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the proposed project.

1.2 Purpose and Need

A new EOBDC would provide more efficient and reliable emergency response capabilities. The proposed EOBDC would include an information technology (IT) department, additional space for city staff, and consist of an emergency operations center, backup dispatch center, and neighborhood fire station. The facility would provide the infrastructure needed to handle high volume communications during major disasters or other emergencies. The proposed EOBDC facility would eliminate crowded working conditions for personnel and allow the facility to operate at a high capacity. The proposed EOBDC would improve emergency management and preparedness capabilities and address the deficiencies of the existing Emergency Operations Center (EOC) located at Fire Station 51 (Station 51) providing a fully capable emergency operation facility that can serve multiple counties is essential for emergency management and to ensure continuity of operations during disasters or other emergency activations.

During the COVID-19 pandemic in 2020, a single EOC was consolidated in Carson City at Station 51 to include Carson City and Douglas, Lyon, and Storey counties. When Station 51 EOC became overwhelmed, it became apparent that a new EOC was needed. The EOC relocated to the Carson City Community Center, and it became apparent that this facility was not designed for EOC activity.

[1] Section 102 of NEPA, as amended by Pub. L. 118-5 (June 3, 2023); 40 CFR parts 1500-1508

[2] Department of Homeland Security Instruction Manual 023-01-001-01, Rev. 01 (Nov. 2, 2018) and DHS Directive 023-01 (Nov. 2, 2018); FEMA EHP Instruction, 108-1-1 (Nov. 2, 2018) and FEMA EHP Directive, 108-1 (Nov. 2, 2018).

Station 51 currently serves as a Fire Department and includes administrative functions as well as space to accommodate fire station operational staffing needs. Station 51's EOC is comprised of a small meeting room measuring 30 feet by 25 feet; its primary purpose is for training and meetings. Communications connectivity at Station 51's EOC is limited and takes one to two hours to set up during emergency activations. The Carson City Community Center took considerable time to establish temporary connectivity communications and communications and IT connectivity overwhelmed the infrastructure.

It is essential that Carson City, the capital of Nevada, has a fully functional EOC for command, control, and support during emergencies or disasters to ensure continuity of operations Statewide. During the COVID-19 pandemic, consolidating a single EOC to include the surrounding four counties proved beneficial as it provided regional communication, planning, and operations during a major emergency and is recognized as a model of efficiency and capability by the Natural Disaster and Emergency Management. The proposed EOBDC facility would continue the efficiency of emergency response and management of future emergencies (i.e., earthquakes, fires, pandemics, impacts of climate change, etc.) that may affect multiple counties in Nevada.

1.3 Project Location

The EOBDC Project Area consists of an EOBDC building and an adjacent parking lot (EOBDC facility) as well as a parking lot across the street (on the north side of Butti Way) which will be reconstructed (reconstructed parking lot). The Project would be located at 3645 Butti Way, Carson City, Nevada. The main cross street, located east of the EOBDC facility, is Fairview Drive which leads to U.S. Route 50 to the north and interstate 580 to the south (**Figure 1**).

The Project Area is in the SE 1/4 of the NW 1/4 of Section 15, Township 15 North, Range 20 East, of the Mount Diablo Baseline and Meridian.

The EOBDC would be adjacent to the Carson City Public Works Corporation Yard to the south and other city managed facilities and open space to the east. The undeveloped parcels to the north are zoned as Multi-Family Apartments and the undeveloped parcels to the west are zoned as General Commercial. The EOBDC adjacent parking lot borders the Jump Around Carson Transit Operations building to the east and vacant land to the west, and a residential area to the north. The EOBDC will be located on a parcel that is zoned as Public Regional; defined as a federal, state or city building with the main purpose of sustaining wide regional needs (Carson City, 2023a).

2.0 ALTERNATIVES CONSIDERED

In accordance with NEPA (40 CFR 1502.14), an EA must consider reasonable alternatives that present the environmental impacts of the proposed action and the alternatives in comparative form based on the information and analysis presented in the sections on the affected environment (§ 1502.15) and the environmental consequences (§ 1502.16). This EA addresses two alternatives, the No Action Alternative, and the Proposed Action Alternative. Prior to evaluating all feasible alternatives, Carson City considered two alternative building options.

2.1.1 Alternative One - No Action

Under the No Action Alternative, the new EOBDC and reconstructed parking lot located on the north side of Butti Way would not be constructed. The building lot would remain vacant, and the parking lot would not be reconstructed. Carson City would continue to use the EOC at Station 51 or seek alternative locations as needed for large-scale emergency activations such as earthquakes, fires, pandemics, and impacts of climate change.

The No Action Alternative would not resolve the need for an EOBDC that would ensure improved emergency management and preparedness capabilities by supporting a flexible, sustainable, secure, strategically located, and interoperable facility. Additionally, Carson City has only one Emergency Dispatch Center, which creates a vulnerability if it becomes overwhelmed or inoperable.

2.1.2 Alternative Two - Proposed Action

The Project Area for the Proposed Action consists of two parcels (Accessor Parcel Numbers 01003104 and 01003702) which are owned by Carson City. The portion of the Project Area to house the EOBDC building, located on the south side of Butti Way, is currently vacant. The parking lot to be reconstructed, located on the north side of Butti Way, is currently a paved lot used by the Carson City Public Works department.

Under the Proposed Action Alternative, the EOBDC would be constructed with associated parking that would provide 20 stalls for secure staff parking, 28 stalls for unsecure staff and public parking, and four Americans with Disabilities Act (ADA) visitor parking spaces.

The new facility would provide the space needed for personnel during emergency activations, as well as the infrastructure required to manage effective multi-county emergency response operations and communications. The existing parking lot to be reconstructed is located north of Butti Way and will include 50 parking spaces for staff and visitors. The total Project Area is approximately 2.5 acres, which includes 1.9 acres for the EOBDC building and infrastructure improvements south of Butti Way, and 0.6 acres for the reconstruction of the existing parking lot north of Butti Way (**Figure 1**).

The EOBDC would be constructed adjacent to the existing Carson City Public Works Corporation Yard. The EOBDC would house a 10,000 square foot fire station, 5,000 square foot EOC, and a 3,000 square foot office space for IT. Construction of the facility would include connection of sewer, water, fiber optic, cable, and gas and electric. The facility would have access to established waste and recycling services. The EOBDC would be connected to the public water supply.

Utilities will extend from existing main lines within or directly adjacent to the Project Area. Water and sewer utilities would be buried a maximum of 10 feet below the proposed finish grade. Electrical, gas, and communication utilities would be within five feet below the proposed finish grade.

Stormwater drainage is planned to be redirected along the south side of Butti Way which currently travels along the existing ditch on the south side of the road. The portion of the Project Area that would house the EOBDC building would receive up to approximately four feet of structural fill material to mitigate potential hazardous flooding above the FEMA 500-year flood-line.

The EOBDC would be designed to accommodate the U.S. General Services Administration anti-terrorism design guidelines. A site perimeter fence would be installed for secure personnel access and parking, and entrances would require coded secure key access. The building would be set back from the street with

protective landscaping or bollards. Backup power, and redundant air handling and conditioning systems would be incorporated into the facility design.

The EOBDC would be designed to the local code standard for 126 miles per hour wind gusts, with the exposure category defaulting to "C" per American Society of Civil Engineers 7-10 (Carson City, 2015). Exterior windows of the facility would be equipped with rated window assemblies to withstand wind-born debris.

The facility would be constructed to address fire protection and indoor air quality. A minimum 30-foot landscaping buffer would be implemented around the building and infrastructure. An enhanced air filtration and cycling system is incorporated in the EOBDC design to mitigate smoke-born issues.

The EOBDC building would be designed to Seismic Design Category "E" (Carson City, 2015).

An Overall Civil Grading Plan has been developed for the Project Area that includes erosion control, curb and gutter, sidewalk, and accessibility parameters for long term site drainage (**Appendix A**). Existing vegetation would be removed from the building site and approximately two feet of soil would be cleared to establish an adequate sub-grade foundation. Up to approximately four feet of structural fill material would be imported to raise the EOBDC building above the floodplain and bring the site to the same elevation as the road and existing facility to the west. The parking lot is within a previously disturbed site, in an area of minimal flood hazard, outside the 500-year flood level (Zone X) therefore construction would include re-grading and compaction, prior to paving.

Best management practices (BMPs) for sediment and erosion control during construction, in accordance with Nevada Department of Environmental Protection's (NDEP's) Construction Stormwater Permit requirements would be implemented to prevent the erosion of soils and discharge of sediment. Stormwater and erosion control measures would include site monitoring, temporary silt fencing, staging of construction equipment in already-developed areas, revegetating bare soils, dust abatement for fugitive dust, and utilizing stormwater drainage systems.

BMPs for construction would include dust control. Bare soils would be limited as possible and watered as necessary to control dust. To reduce impacts from exhaust from construction equipment, appropriate exhaust devices would be used. Construction vehicles would be kept in good condition and regular maintenance of equipment would be performed. No fueling of equipment would occur on site.

Construction would be conducted under the oversight of a qualified and licensed Construction Manager(s) according to the safety standards and conditions required by the City building development code. Carson City would utilize a Construction Manager-at-Risk method to provide construction phase management services.

Final construction of the EOBDC facility and parking lot would result in 2.5 total acres of impervious surfaces within the Project Area. A permanent stormwater capture system is incorporated in the final Project design (**Appendix A**). Stormwater infrastructure would include culverts, catch basins, storm drains, and stormwater detention features. Unpaved areas would be landscaped and/or revegetated. Stormwater drainage of the finished facility would be redirected along the south side of Butti Way to an existing ditch on the south side of the road.

2.1.3 Alternatives Considered and Dismissed

During the COVID-19 pandemic, the Carson City Fire Station 51 EOC became overwhelmed, thus was temporarily relocated to the Carson City Community Center. The EOC was consolidated to include Carson City and Douglas, Lyon, and Storey counties. However, The Carson City Community Center is not intended to support long-term use for emergency management. It does not provide the infrastructure for IT connectivity, and communications in the event of other multi-county emergency activations including earthquakes, fires, pandemics, and impacts of climate change.

Carson City considered expanding the current EOC at the Carson City Fire Station 51 by adding a second floor. A conditions assessment was conducted in October 2022 to address three Carson City fire stations including Station 51. Operational issues as well as best management practices in current fire station design, and health and safety and fire personnel were assessed (COAR, 2022). The assessment determined the station design and site layout provide minimal opportunities for station expansion that would accommodate an EOC. Also, Station 51 site is compact, parking is limited to 23 parking spaces and one ADA space. While Station 51 supports regular emergency operations, it can easily become overwhelmed during large-scale emergency activations during which the EOC is required. Due to the structural design deficiency, building space constraints, and access and parking limitations, the expansion of Station 51 or other existing fire stations to accommodate an EOC was dismissed.

Carson City also considered constructing a standalone EOC facility and a separate standalone fire station, as compared to a combined facility that supports both operations. Through multiple design iterations of the two buildings, it was determined that a single building capitalized on cost efficiencies of shared spaces between the two operations. The size of the footprint for the two buildings combined (21,350 square feet) was larger in comparison to building one EOBDC (17,458 square feet). Costs associated with two separate buildings including mechanical, electrical, communication rooms, site grading, fill material, and other site improvements increased due to the need for a larger area necessary to construct two buildings, provide adequate separation, and accessibility. The total cost to build two buildings was estimated at $18,106,723, which is $2,300,767 over the cost of a combined EOBDC and fire station.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Geology and Soils

Carson City is entirely within the Central Basin and Range level III Ecoregion and the Sierra Nevada-Influenced Semiarid Hills and Basins level IV Ecoregion. The Project Area is within the Sierra Nevada-Influenced Semiarid Hills and Basins level IV ecoregion (EPA, 2022a)**.**

A Geotechnical Evaluation completed for the Project Area in March 2022 indicated that there are no known geologic or geotechnical conditions that would prevent development of the Project (**Appendix B**). This evaluation provides recommendations for construction considerations for the EOBDC and reconstructed parking lot.

3.1.1 Affected Environment

The Project Area is flat with little potential for erosion and soil instability. The Natural Resources Conservation Service (NRCS) Web Soil Survey (**Appendix C**) was used to determine soil information for the Project Area. Soil types present in the vicinity of the Project Area include:

Dalzell Variant Fine sandy loam, 0 to 4 percent slopes – The Dalzell series consists of moderately deep, somewhat poorly drained soils that form in lacustrine materials. These soils are typically found in valleys in western Nevada. This soil is not considered prime farmland (NRCS, 2022).

Vamp fine sandy loam, slightly saline-alkali – The Vamp series consists of moderately deep, somewhat poorly drained soils that formed in alluvium derived from mixed rocks. This soil is typically found in valleys in southwestern Nevada. This soil is not considered prime farmland (NRCS, 2022).

3.1.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, no new disturbance or construction would occur and there would be no impact to soils or geological resources within the Project Area.

Alternative 2 – Proposed Action

Impacts to soils are anticipated to be short-term and limited to construction. During construction of the EOBDC, existing vegetation would be removed from the building site and approximately two feet of soil would be cleared to establish an adequate sub-grade foundation. Up to approximately four feet of imported structural fill material would be imported to raise the EOBDC above the floodplain as discussed in **Section 3.2.3.** Water and sewer utilities would be buried a maximum of 10 feet below the proposed finish grade. Electrical, gas, and communication utilities would be within five feet below the proposed finish grade. The parking lot to be reconstructed is within a previously disturbed site therefore impacts to soil would be short-term and limited to re-grading and compaction prior to paving.

Short-term impacts to soils during construction would be minimized with the use of Best Management Practices (BMPs) for sediment and erosion control. BMPs would be implemented in accordance with NDEP's Construction Stormwater Permit requirements to prevent soil loss and erosion. These BMPs for sediment and erosion control include routine inspections and site monitoring, temporary silt fencing, staging of construction equipment in already-developed areas, revegetating bare soils, dust abatement for fugitive dust, and utilizing stormwater drainage systems.

Final construction of the EOBDC and reconstructed parking lot would result in approximately 2.5 total acres of impervious surfaces within the Project Area. A permanent stormwater capture system is incorporated in the final Project design. Remaining unpaved areas would be landscaped and/or revegetated. Stormwater drainage of the finished facility would be redirected to an existing stormwater ditch. Construction practices, BMPs and Project design would significantly reduce or eliminate long-term impacts to soils.

3.2 Land Use Planning and Zoning

3.2.1 Affected Environment

The proposed Project Area is in the Consolidated Municipality of Carson City, Nevada and within parcels zoned as Public Regional. Areas zoned as Public Regional are reserved for federal, state, or city buildings which primarily serve to sustain wide regional needs. Zoning within Carson City is controlled by the Board of Supervisors who have the authority to divide and regulate the structures and land within the districts of Carson City. The Board of Supervisors must abide by Title 18 of the Carson City Code of Ordinances when engaging in zoning activities. The purpose of Title 18 of the Caron City Code of Ordinances primarily promotes orderly and appropriate use of land throughout Carson City consistent with the goals, policies, and programs set forth by the master plan and its elements (Carson City, 2022).

No areas with special designation such as conservation areas, wildlife refuges, parklands, and/or other ecologically critical or sensitive areas were identified within the proposed Project Area.

3.2.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, there would be no development of EOBDC or improvements to the existing parking lot. The Project Area would remain in City ownership. No impacts would occur due to the No Action Alternative.

Alternative 2 – Proposed Action

The Project Area consists of two parcels (Accessor Parcel Numbers 01003104 and 01003702) which are owned by Carson City. It is bordered by vacant land, the Carson City Public Works, the Jump Around Carson Transit Operations building, and a residential area. The EOBDC would be a city-owned building and would provide local and regional emergency response services and serve as a neighborhood fire station. It would not be necessary to change the zoning designation for the parcels within the Project Area as the Proposed Action is consistent with the parameters of the Public Regional zone designation. The Proposed Action would not result in short-term or long-term changes to the current zoning designation.

3.3 Prime Farmland

3.3.1 Affected Environment

The Farmland Protection Policy Act (FPPA) (P.L. 97-98, Sec. 1539-1549; 7 U.S. Code [USC]. 4201, et seq.) was enacted in 1981 (P.L. 98-98) to minimize unnecessary conversion of prime and important farmland to non-agricultural uses because of Federal actions. The FPPA stipulates Federal programs be compatible with State, local units of government, and private programs and policies to protect farmland. Prime and important farmland includes all land defined as prime, unique, or farmlands of statewide or local importance. Prime farmland is land with the best combination of physical and chemical characteristics to produce food, feed, forage, fiber, and oilseed crops and is also available for these uses. Prime farmland does not include urban, built-up land, or water.

The NRCS is responsible for protecting significant agricultural lands from irreversible conversion that

would result in the loss of an essential food or environmental source. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are implemented or assisted by a federal agency.

As discussed in **section 3.1**, the NRCS Web Soil Survey database indicates that no prime farmland exists within or near the Project Area (NRCS, 2022).

3.3.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative there would be no impact to prime farmlands.

Alternative 2 – Proposed Action

The Project Area is not located within areas identified as prime farmland; therefore, the Project is not subject to the FPPA and no coordination with the U.S. Department of Agriculture (USDA) or the draft completion of a USDA Form 100-6 is required. The Proposed Action would not impact prime farmland.

3.4 Floodplain Encroachment

3.4.1 Affected Environment

Executive order (EO) 11988 (Floodplain Management), as amended,[3] requires Federal agencies to avoid, minimize, or mitigate adverse impacts associated with the occupancy and modification of floodplains. Specifically, Federal agencies must take action to reduce the risk and impacts from floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains. FEMA regulations at 44 CFR Part 9 implement EO 11988 and EO 11990 (Protection of Wetlands). (*See* Section 3.13 for analysis under EO 11990.)

EO 13690 establishes the Federal Flood Risk Management Standard (FFRMS; FEMA, 2015). The EO requires federal agencies to take action, informed by the best-available and actionable science, to improve the Nation's preparedness and resilience against flooding. The EO is a flexible, resilience standard and requires federal agencies to select one—or a combination—of three approaches to establish the floodplain. These approaches include the use of the "freeboard value approach" (FVA) and the 0.2% annual chance flood elevation (also known as the "500-year flood"). The FVA consists of elevating the structure, at a minimum, to two feet above the base flood elevation (BFE)(also known as the 1% annual chance flood elevation) for non-critical actions, and 3 feet above BFE for critical actions (such as hospitals, fire stations, nursing homes, et al.). By policy, EOCGP has partially implemented the FFRMS and requires that new construction (among other project types) in the Special Flood Hazard Area (SFHA) involving non-critical actions be elevated, at a minimum, to the lower of 2 feet above the FVA or 0.2% elevation. (*See* EOCGP NOFO 2023).[4] FEMA has determined that the structure will be elevated to an additional 2 feet above the BFE (or to the 0.2%, as applicable]. Carson City has adopted the FEMA Flood Insurance Rate

[3] EO 13690, Establishing the Federal Flood Risk Management Standard and a Process for Furthering Soliciting and Considering Stakeholder Input, was reinstated on May 25, 2021 (per EO 14030) and amends EO 11988.

[4] The Department of Homeland Security (DHS) Notice of Funding Opportunity (NOFO) Fiscal Year 2023 Emergency Operations Center Grant Program | FEMA.gov

Map dated, March 4, 1986, and prohibits construction in SFHAs (Zones A, AE, and X) unless the Flood Insurance Rate Map is amended or revised (Title 12, Chapter 12.09. 12.09.060. 2 & 3). In accordance with Carson City code (Title 12, Chapter 12.09.070), a development permit must be obtained prior to the start of construction within any area of special flood hazard. This permit is for all structures and for all development including fill and other activities.

Carson City code, Title 12, Chapter 15.20.330 states that critical structures are not authorized in a SFHA, unless it is determined that it is the only practical alternative location for the development of a new or substantially improved critical structure, all alternative locations have been considered, and a public notice is posted. A critical structure is defined as any structure for which even a slight chance of flooding would reduce or eliminate its designed function of supporting a community in an emergency and includes fire stations (Storey County, 2022).

FEMA documents its decision-making for EO 11988 (and EO 11990) by completing an eight-step decision-making process which ensures that FEMA considers how its actions affect floodplains (or wetlands). The eight-step decision-making process requires FEMA to review opportunities to relocate the facility out of the floodplain, consider practicable alternatives to locating proposed projects within floodplains, determine appropriate project design features to minimize harm to or within the floodplain, and include public notice (**Appendix D**).[5] The eight-step decision-making process is required when a project is proposed within a floodplain.

A portion of the Project Area to house the EOBDC is within Flood Zone AE. Areas defined as Flood Zone AE are subject to flooding by the 100-year floodplain or base floodplain (one-percent annual chance floodplain) and are considered high risk areas (FEMA, 2021b). An AE Zoned regulatory floodway exists outside of the Project Area, located approximately 100 feet south of the Project Area. (**Appendix E**). Up to approximately four feet of structural fill material would be imported to raise the EOBDC building above the floodplain and bring the site to the same elevation as the road and existing facility to the west. The fill would reduce the floodplain volume (House of Moran Consulting, 2023)

The reconstructed parking lot portion of the Project Area is in Flood Zone X which is an area of minimal flood hazard and outside the 500-year flood level (**Appendix E**).

A Technical Memorandum and Overall Civil Grading Plan were developed for the Project to demonstrate how Project design would minimize impacts to FEMA floodplains and provides a hydraulic analysis for the Project design. This documentation was provided to FEMA in April 2023 for review. FEMA completed the eight-step planning process, and a Public Notice was posted on May 9, 2023 (**Appendix E**). The public comment period ended May 24, 2023. No comments were received.

3.4.2 Environmental Consequences

Alternative 1 – No Action

No short- or long-term impacts would occur under the No Action Alternative, and floodplains would not be affected.

[5] 44 C.F.R. § 9.6.

Alternative 2 – Proposed Action

Mitigation efforts have been incorporated in the EOBDC facility design which includes using structural fill to elevate the building foundation to minimize impacts to the FEMA floodplains and to minimize impacts of hazardous flooding above the FEMA 500-year flood line as described by the Technical Memorandum and Overall Civil Grading Plan for the Project (**Appendix A**). Up to approximately four feet of imported structural fill material would be placed in the left overbank of the floodplain, outside of the regulatory floodway which would reduce the floodplain volume (House of Moran Consulting, 2023). The Project would not increase the one percent annual chance flood event and the flood plain volume would be reduced by 1.23 acre-feet. Although not required by Carson City's floodplain ordinance, the Project is considered a "No-Rise" or no adverse impact. Because the Project would result in a "No-rise" condition, compensatory floodplain storage is not required (House Moran Consulting, 2023). FEMA determined that the proposed Project design is compliant with the FFRMS.

In accordance with Carson City code (Title 12, Chapter 12.09.070) a development permit would be obtained prior to the start of construction activities.

The reconstructed parking lot is a previously disturbed and existing parking lot within an area of minimal flood hazard, therefore no short-term or long-term impacts to the Flood Zone X floodplain would occur in this portion of the Project Area.

3.5 Traffic Circulation, Volume, and Parking Access

3.5.1 Affected Environment

The Project Area would be constructed adjacent to the existing Carson City Public Works Department on Butti Way, approximately 265 feet west of the intersection of Butti Way and Fairview Drive. Butti Way is a two-lane road with a stop sign at the T-intersection of Fairview Drive with dedicated turn lanes to access Fairview Drive. According to the most recent Nevada Department of Transportation Traffic Report published in 2021, the annual average daily traffic count from 2013 to 2022 on Butti Way 300-feet west of Fairview Drive was 428 vehicles. The annual average daily traffic count from 2013 to 2022 on Fairview Drive one-quarter mile north of 5th Street was 10,155 vehicles (NDOT, 2022).

It is anticipated that the EOBDC facility would regularly employ approximately 19 staff (16 IT and seven fire staff) with a potential to expand to 23 staff in the future and up to 50 staff in an emergency event. Up to seven personnel would remain on site at a time with multiple shifts to operate the neighborhood fire station. The main hall of the EOBDC would be used for training, meetings, and during events that require emergency activations. Fire staff are expected to be on 48-hour shifts, with shift changes in the morning.

Parking would be provided at the reconstructed parking lot north of Butti Way and at the EOBDC. Parking in the reconstructed parking lot would consist of unsecure staff parking spaces, customer parking, and spaces that meet ADA standards. A crosswalk would be installed across Butti Way. Parking at the EOBDC would consist of secure fire staff parking, unsecure staff parking and/or customer parking, and spaces that meet ADA standards. Approximately a total of 102 parking spaces would be available for personnel: 50 at the reconstructed parking lot and 52 at the EOBDC.

A Carson City Fire Station and Emergency Operations Facility Trip Generation Memorandum was prepared

to accompany the Special Use Permit for the construction of the Carson City Fire Station located at 3505 Butti Way providing anticipated trip generation for the Project (**Appendix F**). About 129 total daily trips are anticipated which includes staff, visitors, and emergency response. Of the 129 daily trips traffic during peak hours is anticipated to be approximately 24 light vehicles entering and seven exiting the EOBDC parking lot in the morning, and seventeen light vehicles exiting the EOBDC parking lot in the evening. The generated trips are less than the 80 peak hour trips and 500 trips per day set by the Carson City Planning Department, therefore a formal traffic study was not necessary. The number of trips for an emergency event where additional staff is needed was not included in the daily trip calculation as it would not be a regular occurrence (Lumos & Associates, 2023).

3.5.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative there would be no change to the existing volume or flow of traffic. There would be no impacts to traffic circulation, volume, and parking access.

Alternative 2 – Proposed Action

The construction and operation of the EOBDC will increase traffic circulation and volume on Butti Way during construction and operation. During construction minor short-term impacts may temporarily close a portion of Butti Way. Carson City would utilize a Construction Manager-at-Risk method to provide construction phase management services and assist with traffic.

Once completed, an increase to traffic on Butti Way may occur during emergency activations, however impacts would be temporary and intermittent. The existing infrastructure, traffic infrastructure, and parking access would accommodate the daily increase in use for staff. During activation of the EOBDC for emergencies, approximately 102 parking spaces would be available to accommodate an additional 50 plus personnel required. Access to the residential area would not be impeded by daily use of the fire station or during emergency activations. Traffic on Butti Way would not significantly increase, thus impacts to the area from the additional traffic would be negligible.

3.6 Public Health and Safety

3.6.1 Affected Environment

Carson City is within the jurisdiction of the Carson City Sheriff's Office which provides emergency, and nonemergency policing services. Fire and emergency medical services are provided by the Carson City Fire Department which has three full-time fire stations and one seasonal station. The fire stations in Carson City provide engines and ambulance services to respond to emergencies. Carson City currently has one Emergency Dispatch Center (Carson City, 2023b).

The EOBDC facility would provide additional emergency response infrastructure and capacity during large emergencies or disasters. It would also serve as a backup dispatch center should the Emergency Dispatch Center become inoperable or overwhelmed. The EOBDC would be used as a neighborhood fire station, operated by the Carson City Fire Department, to serve the community on a regular basis.

3.6.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, Carson City would continue to use the EOC at Station 51 or utilize alternative locations as needed for large-scale emergency activations. There would be no change to the existing condition.

Alternative 2 – Proposed Action

Short-term impacts to public health and safety would be minor and temporary as any closures to Butti Way during connection of utilities and other construction activities would not prevent access for emergency services to surrounding City buildings or residential areas. Active construction areas would be fenced or marked, as appropriate to prevent public access.

Long-term impacts to public health and safety would be positive as the Proposed Action would provide a strategically located, and fully interoperable EOBDC to address deficiencies in the existing emergency response and management system in Carson City. It would provide a back-up dispatch center and additional fire station to serve the community on a regular basis. The proposed facility would expand the existing public health and safety capacity in the County and surrounding area during emergencies and disasters. Additionally, the EOBDC building design would include backup power, consider U.S. General Services Administration anti-terrorism design guidelines, and would include a site perimeter fence secure personnel access and parking. The EOBDC building would be set back from the street with protective landscaping or bollards.

3.7 Socioeconomic Issues and Environmental Justice

3.7.1 Affected Environment

Environmental Justice recognizes that low-income and minority communities across the nation suffer from disparities in access to resources. EO 12898, Environmental Justice in Minority Populations and Low-Income Populations, directs federal agencies to avoid disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Socioeconomic and demographic data for the Project Area were analyzed to determine if the proposed Project may potentially adversely affect a disproportionate number of minority or low-income persons. Environmental justice includes health and safety, aesthetics, social, and economic concerns.

The Project Area is located on a parcel zoned as Public Regional and directly borders the Carson City Public Works Department to the west, vacant land to the south and east, and the Jump Around Transit Center to the northeast. Residential dwellings north of the Project Area include single family homes and multi-family apartments.

In 2022, FEMA prioritized the development of guidance to assist applicants with addressing Environmental Justice in their project implementation (FEMA, 2022b). Within this guidance is the use of the Environmental Protection Agency (EPA) Environmental Justice Screening Tool (EJScreen). The EJScreen assists users in identifying environmental and demographic information for the Project Area plus a one-mile radius and compares the information to the rest of the state and the United States. The EJScreen also

assists in identifying areas with environmental and demographic indicators that are greater than usual.

In accordance with EPA EJ guidelines, minority populations should be identified when either: 1) the minority population of the affected area exceeds 50 percent; or 2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate units of geographic analysis (EPA, 2022d).

In 2021, Carson City had an estimated population of 58,993 people. The Project Area is within census tract 6.02. The most recent census estimates indicate the population within census tract 6.02 is 51 percent white, 40 percent Hispanic or Latino, five percent from two or more races, one percent African American, and one percent Asian. Minority populations do not exceed 50 percent. The median household income for the area is $55,700 and approximately 5.6 percent of people are below the poverty line (U.S. Census Bureau, 2021).

An EJScreen Report was generated for this EA using a one-mile radius (3.4 square miles: **Appendix G**). EJScreen generates twelve EJ indexes that are calculated for the area and compared to the State and the US which combines two demographic factors, percent low income and percent people of color. **Table 1** presents six EJ indices that are above the 50th percentile in the United States. EJScreen generates seven socioeconomic indicators. **Table 2** presents four socioeconomic indicators that are above the 50th percentile in the US.

Table 1: Highest Percentile of EPA's EJScreen Index Results

Environmental Justice Indexes	State Percentile	U.S. Percentile
Ozone	24	88
Traffic Proximity	65	73
Superfund Proximity	95	72
Hazardous Waste Proximity	57	76
Underground Storage Tanks	60	72
Wastewater Discharge	44	76

Table 2: EPA's EJScreen Socioeconomic Indicators Above the 50th Percentile

Socioeconomic Indicators	Value (%)	State Average (%)	State Percentile	U.S. Average (%)	U.S. Percentile
People of Color	48	52	49	40	65
Low Income	38	32	63	30	66
Limited English-Speaking Households	5	6	61	5	74
Less Than High School Education	16	13	65	12	72

Based on the information provided from the EJScreen, the Project is in an area that is in the 88th percentile in the US for Ozone, 73rd percentile for traffic proximity, 72nd percentile for superfund proximity and underground storage tanks, and 76th percentile for hazardous waste proximity and wastewater discharge. Although the Ozone percentile is higher in comparison to the rest of the US, the Project is in an attainment zone for all criteria pollutants (EPA, 2023a). There are no anticipated impacts that could give rise to disproportionate impacts to minority and low-income populations; therefore, environmental justice

impacts would not be significant. Additionally, the proposed Project would not increase impacts of existing environmental justice indexes.

3.7.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, the Project Area would remain vacant land and no increase to emergency services would occur. Citizens, including minority and low-income populations, may be negatively impacted if emergencies or disasters such as earthquakes, fires, pandemics, or impacts of climate change occur that overwhelm the existing systems.

Alternative 2 – Proposed Action

Under the Proposed Action there would be no direct or indirect environmental effects on low-income or minority populations. The long-term existence of the EOBDC would be centrally located to provide additional County-wide emergency response infrastructure and capacity required for effective communication and management during larger emergency activations. It would also serve as a neighborhood fire station which would provide emergency services and first responders to adjacent neighborhoods and businesses. The Proposed Action would provide services for all populations present and within the service area. It would also relieve the use of these resources in other areas of the County, regardless of socioeconomic status.

The EOBDC facility would provide employment opportunities in the area as it would regularly employ approximately 19 staff (16 IT and seven fire staff) with a potential to expand to 23 staff in the future and up to 50 staff in an emergency event. Up to seven personnel would remain on site at a time with multiple shifts to operate the neighborhood fire station. As discussed in **Section 3.2**, the Proposed Action is consistent with current land use designations and would not displace any low income or minority populations. Regarding public health and safety, no impacts would occur to minority or low-income populations, and are discussed further in **Sections**, **3.6**, **3.7**, **3.9**, and **3.10**.

3.8 Air Quality

3.8.1 Affected Environment

The Clean Air Act (42 U.S.C 7401 et seq.) federally regulates air emissions from area, stationary and mobile sources and authorizes the EPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. NAAQS include primary and secondary standards. Primary standards provide protection to public health particularly to sensitive populations including asthmatics, children, and elderly. Secondary standards provide protection to public welfare including decreased visibility, damage to animals, crops, vegetation, and buildings. Criteria pollutants for NAAQS include Carbon Monoxide, Lead, Nitrogen Dioxide, Ozone, Particle Pollution, and Sulfur Dioxide (EPA, 2022b). The City of Carson City is in attainment with all criteria pollutants (EPA, 2023a).

In addition to the Clean Air Act, NDEP is tasked with the protection of natural resources in Nevada, including Air Quality. At construction sites, Nevada Administrative Code 445B.22037 requires fugitive dust to be controlled using the best practical methods, to prevent particulate matter from becoming airborne.

3.8.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, no change to existing condition or new disturbance would occur.

Alternative 2 – Proposed Action

During construction of the Proposed Action, short-term impacts to air quality may occur. Short-term impacts include fugitive dust and exhaust from construction equipment. Construction practices would include fugitive dust control during clearing and blading. Dust control methods include covering exposed soils where appropriate, watering bare soil as needed, and limiting the amount of bare soil exposed at one time. To reduce impacts from exhaust from construction equipment, appropriate exhaust devices would be used. Construction vehicles would be kept in good condition and regular maintenance of equipment would be performed.

Long-term impacts to air quality are not anticipated during operation of the EOBDC facility. Concern for wildfire protection and indoor air quality would be addressed in the design of the EOBDC facility. Enhanced filtration and air cycling to mitigate any interior air quality have been incorporated into the building design.

3.9 Climate Change

CEQ guidance for NEPA analysis[6] directs Federal agencies to consider the extent to which a proposed action and its reasonable alternatives would contribute to climate change, through greenhouse gas (GHG) emissions, and consider the ways in which a changing climate may impact the proposed action and any alternative actions, change the action's environmental effects over the lifetime of those effects, and alter the overall environmental implications of such actions. GHGs are emitted by both natural processes and human activities, and their accumulation in the atmosphere regulates temperature. GHGs include water vapor, carbon dioxide, methane, nitrous oxides, and other compounds.

A review of the EPA's analysis for climate change for Nevada titled, "What Climate Change means for Nevada," (August 2016)[7] states that Nevada has warmed about two degrees (F) in the last century which is becoming common in the southwestern United States. It is expected that heat waves will increase, and snow will melt earlier in spring. In the coming decades, EPA believes that the changing climate is likely to decrease the flow of water in the Colorado and other rivers in Nevada, increase the frequency and intensity of wildfires, decrease the productivity of ranches and farms, shorten the season for skiing and other forms of winter tourism and recreation due to diminishing snowpack, increase the need for water but reduce the supply, and increase droughts that will interfere with Nevada's farms and cattle ranches.

[6] National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change", 88 Fed. Reg. 1196 (Jan. 9, 2023).
[7] EPA 430-F-16-030.

3.9.1 Affected Environment

3.9.2 Environmental Consequences

Alternative 1 – No Action

The no-action alternative would not result in any increase in GHG emissions and would not increase the effects of climate change in the project area.

Alternative 2 – Proposed Action

Implementation of the proposed action would result in a temporary increase in GHG emissions during construction activities due to fuel usage by the construction equipment. These temporary emissions would be expected to be below regulatory standards and would have a minor impact. Long-term increases in GHG due to an increase in vehicular traffic in the project area and from heating and air-conditioning required for the new facility would be minor. The proposed action would increase the capacity to respond and recover from disasters which will help reduce the harmful impacts of climate change. This would be a beneficial impact for residents and visitors in the region and overall, as the proposed action would result in beneficial impacts by improving the resiliency of the community from the effects of climate change.

3.10 Noise

3.10.1 Affected Environment

The Noise Control Act of 1972 (42 U.S.C. subpart 4901 et seq.) serves to regulate noise pollution which poses a danger to public health and welfare, however, the primary responsibility of noise control rests with state and local governments. Major sources of noise include vehicles, equipment and machinery, appliances, and other products in commerce, climate, or recreation (EPA, 2022c).

Noise is measured in decibels which can have varying impacts to human health depending on the level, time of exposure, and the environment. According to the EPA, exposure to 70 decibels for 24-hours is considered a level that will not have measurable impact to human health (EPA, 1974). The Occupational Safety and Health Administration requires employers to implement a hearing conservation program when noise exposure is at or above 85 decibels averaged over eight working hours (Occupational Safety and Health Administration, 2023). According to the Centers for Disease Control and Prevention, average noise levels for fire stations including the testing alarms, tools, and fire engines are between 88-101 decibels with maximum noise levels of 92 to 116 decibels (Centers for Disease Control and Prevention, 2013). The U.S. Department of Housing and Urban Development (HUD) acceptable average noise level is not to exceed 65 decibels (HUD, 2023a).

The HUD Day/Night Noise Level Calculator is an electronic assessment tool that is primarily used to determine noise impacts for HUD funded projects under 24 CFR 51. The Day/Night Noise Level Calculator was used for the proposed Project to estimate noise levels from the anticipated additional 129 vehicle trips per day on Butti Way. The Day/Night Noise Level Calculator estimated the noise level of the average annual daily trips between 2013 and 2022 (428 trips) at approximately 50 decibels. The added 129 trips (557 total trips) are estimated to elevate noise level to 51 decibels (HUD, 2023b).

The Project Area is zoned as Public Regional by Carson City. Although Carson City does not have noise

ordinances, excessive noise is regulated by the Sheriff's Office which can be reported as noise complaints (Carson City, 2023c). The nearest residential area is approximately 300 feet north of the Project Area.

3.10.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, the Project would not be implemented, and no change would occur to the existing condition for noise.

Alternative 2 – Proposed Action

Under the Proposed Action, the construction of the EOBDC and associated parking lot may temporally generate an increase in noise pollution. During construction, noise would be limited to a typical daytime construction schedule (6:00 a.m. to 7:00 p.m.). Equipment and machinery would meet all State and Federal noise regulations and be equipped with sound control devices such as mufflers or other standard noise abatement devices.

During the operation of the EOBDC, noise impacts would occur temporarily and intermittently from sirens and alarms from emergency response vehicles such as fire trucks or during emergency activations. This noise is anticipated to be short term and not to have a noticeable impact on the surrounding area. Traffic noise is not anticipated to impact the surrounding area as indicated by the HUD Day/Night Noise Level Calculator estimate of 51 decibels which is well below HUD's 65 decibel acceptable average noise limit and the EPA 70 decibel exposure for 24-hours which is considered a level that will not impact human health. Noise protection for fire fighters would be provided in accordance with OHSA standards.

3.11 Public Services and Utilities

3.11.1 Affected Environment

Utilities associated with the Project include water, sanitary sewer, fiber optic, cable, gas, and electrical. These services are provided by the City of Carson City. During construction, some interruptions to local services may occur while connections are established. Once complete, the Project would support and supplement Public Services available in the County with an auxiliary Dispatch Center, new Fire Station, and other Emergency Service support.

3.11.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, there would be no change to public services and utilities.

Alternative 2 – Proposed Action

Short-term impacts to public services and utilities would be minor and temporary. Existing utilities may be temporarily shut-off during connection to the EOBDC. It is not anticipated that this would impact the surrounding business or residential area. Construction would not impede access for emergency services as there are multiple access points for the residential areas north of the Project Area and public buildings near the Project Area. No long-term impacts are anticipated as part of the Proposed Action.

3.12 Water Quality – Water Resources

3.12.1 Affected Environment

The Clean Water Act (CWA) of 1977 regulates discharges of pollutants into waters of the United States. Section 404 of the CWA is administered by the U.S. Army Corps of Engineers (USACE) and establishes a program to regulate the discharge of dredged or fill material into waters of the United States including wetlands. A permit is required before dredged or fill material may be discharged into waters of the United States unless the activity is exempt from Section 404 regulation.

The EPA's National Pollutant Discharge Elimination System permit program controls discharges. Under EPA regulation 40 CFR subpart 122.26(b)(14) discharge permits are required for certain activities that discharge stormwater to water of the United States. In Nevada, NDEP issues General Permits for stormwater discharges including for Construction Sites that disturb one acre or more. A Stormwater Pollution Prevention Plan (SWPPP) which describes Best Management Practices (BMPs) used for erosion and sediment control and prevention of stormwater contamination is required for these permits.

The Project Area is within the Great Basin Watershed, Eagle Valley-Carson River sub watershed (U.S. Geological Service [USGS] Hydrologic Unit Code [HUC] 160502010505). The National Hydrographic Database (NHD) indicated a perennial stream exists approximately 420 feet south of the Project Area. The USFWS National Wetland Inventory indicated a freshwater emergent wetland exists approximately 320 feet southwest of the Project Area. The Project Area is within an area of 0.2 percent annual chance of flood hazard, discussed in **Section 3.2**.

Carson City draws groundwater and surface water from three groundwater basins: Ash Canyon and Kings Canyon Creek, Carson River, and the Marlette/Hobart system. Drinking water within the Project Area would be acquired through the municipal water system (Carson City, 2023d).

3.12.2 Environmental Consequences

Alternative 1 – No Action

There would be no change to the existing condition for water resources under the No Action Alternative.

Alternative 2 – Proposed Action

The Project Area is within a predominantly urban landscape. No wetlands or perennial, intermittent, or perennial streams are present within the Project Area. The topography surrounding the Project Area is relatively flat.

During construction, an NDEP Construction Stormwater Permit would be in place. BMPs for stormwater and erosion control would be implemented according to the SWPPP developed for the Project. These measures would significantly reduce or negate impacts to surface waters. Stormwater and erosion control measures include site monitoring, temporary silt fencing, staging of construction equipment in already-developed areas, revegetating bare soils, dust abatement for fugitive dust, and utilizing stormwater drainage systems.

Permanent stormwater capture systems would be incorporated in the final Project design, and unpaved areas within the Project Area would be landscaped, as appropriate. Stormwater infrastructure would

include culverts, catch basins, storm drains, and stormwater detention features. The use of permanent stormwater capture systems, landscaping, the relatively flat terrain, and natural vegetation between the Project Area and the nearest water resource significantly reduce or eliminate potential long-term impacts to surrounding water resources.

The proposed facility would be connected to public utilities managed by Carson City. Municipal water and sewer systems would ensure safe and clean water usage by the facility. No impacts to water quality are anticipated.

3.13 Wetlands

3.13.1 Affected Environment

EO 11990, Protection of Wetlands, recognizes that wetlands have unique and significant public values and directs federal agencies to minimize loss and degradation of wetlands, and preserve the beneficial values served by wetlands. Wetlands are those areas which are inundated or saturated by surface or ground water with a frequency sufficient to support, or that under normal hydrologic conditions does or would support, a prevalence of vegetation or aquatic life typically adapted for life in saturated or seasonally saturated soil conditions. Examples of wetlands include, but are not limited to, swamps, fresh and saltwater marshes, estuaries, bogs, beaches, wet meadows, sloughs, potholes, mud flats, river overflows and other similar areas. This definition includes those wetlands areas separated from their natural supply of water because of activities such as the construction of structural flood protection methods or solid fill roadbeds and activities such as mineral extraction and navigation improvements. This definition is intended to be consistent with the definition utilized by the U.S. Fish and Wildlife Service in the publication entitled *Classification of Wetlands and Deep-Water Habitats of the United States* (Cowardin, et al., 1977).[8]

The proposed Project Area is an upland site lacking surface water connection or wetlands. The USFWS NWI National Wetlands Inventory (NWI) database indicated that no wetlands exist within the Project Area (**Appendix E**), however a freshwater emergent wetland was identified approximately 320 feet southwest of the Project Area (USFWS, 2019).

3.13.2 Environmental Consequences

Alternative 1 – No Action

No impacts to wetlands would occur as part of the No Action Alternative.

Alternative 2 – Proposed Action

An NDEP Construction Stormwater Permit would be in place. BMPs for stormwater and erosion control would be implemented according to the SWPPP developed for the Project. These measures would significantly reduce or negate impacts to surface waters. Stormwater and erosion control measures include site monitoring, temporary silt fencing, staging of construction equipment in already-developed areas, revegetating bare soils, dust abatement for fugitive dust, and utilizing stormwater drainage systems.

[8] 44 CFR 9.4 – Definitions.

The existing vegetation surrounding the Project Area would remain undisturbed, which would further reduce the potential of sediment mobility from construction. The closest wetland is over 300 feet from the proposed Project and would be protected from impacts given distance, terrain, limited disturbance, and stormwater controls. Section 404 permitting would not be required, and compliance with EO 11990 would be met.

Permanent stormwater capture and drainage is incorporated in the EOBCD facility and reconstructed parking lot design. Stormwater infrastructure would include culverts, catch basins, storm drains, and stormwater detention features. The use of permanent stormwater capture systems, landscaping, the relatively flat terrain, and natural vegetation between the Project Area and the nearest wetland significantly reduce or eliminate long-term impacts to wetlands.

3.14 Threatened and Endangered Species

3.14.1 Affected Environment

The Endangered Species Act (ESA) of 1973 provides protection to fish, wildlife, and plant species listed as Threatened or Endangered and the ecosystems upon which they depend. Section 7 of the ESA directs federal agencies in the conservation of these species and requires agencies to ensure their activities do not jeopardize continued existence of ESA listed species or destroy critical habitats. In addition, migratory birds are federally protected under the Migratory Bird Treaty Act; Bald and golden eagles receive additional protection under the Bald and Golden Eagle Protection Act.

The USFWS Information for Planning and Conservation (IPaC) report identified Carson wandering skipper (*Pseudocopaeodes eunus obscurus*) and monarch butterfly (*Danaus plexippus*) as potentially occurring within the Project Area (**Appendix H**). Carson wandering skipper is listed as Endangered under the ESA, and monarch butterfly is a Candidate for listing (USFWS, 2023).

Carson wandering skipper is found in lowland grassland habitats on alkaline substrates and relies on saltgrass (*Distichlis spicata*) to complete its lifecycle (ECOS, 2023). Habitat for this species does not occur in the Project Area.

Monarch butterflies rely on milkweed (*Asclepias* spp.) for breeding. Milkweed may occur in the Project Area, but as a Candidate species monarch butterfly is not afforded the same protection as a species fully listed under the ESA. No critical habitats were identified within the Project Area by the IPaC report.

The Nevada Department of Wildlife (NDOW) provided data for Nevada state protected species with potential to occur in the vicinity of the Project Area (**Appendix H**). Potential occupied mule deer (*Odocoileus hemionus*) distribution within the Project Area was identified by NDOW. Although high quality mule deer habitat is not present within the Project Area, mule deer may occasionally pass through. Other state protected wildlife identified with potential to occur within or near the Project Area include American beaver (*Castor canadensis*), Mexican free-tailed bat (*Tadarida brasiliensis*), and several migratory bird species. Suitable aquatic habitat for American beaver is not present in the Project Area. Roosting habitat for Mexican free-tailed bats (i.e., caves, rock crevices, buildings, hollow trees, or other structures) is not present in the Project Area. There is no known greater sage-grouse habitat in the vicinity of the Project Area (NDOW, 2023).

NDOW reported several raptor species and raptor nests have been documented within ten miles of the Project Area. Suitable roosting and nesting substrate for raptors (i.e., large trees, utility poles, cliffs, or tall buildings) is not present within the immediate Project Area but may be present nearby. Raptors may occasionally forage within or fly over the Project Area.

The Nevada Natural Heritage Program (NNHP) provided data on documented occurrences of four sensitive species in the general vicinity of the Project Area, none of which occur immediately within the Project Area (**Appendix H**). Two sensitive plant species, Carson Valley monkeyflower (*Erythranthe carsonensis*) and starcup (*Gymnosteris nudicaulis*), were documented more than 0.4 miles from the Project Area. Two northwestern pond turtle (*Actinemys marmorata*) occurrences were documented within 1.2 miles from the Project Area. These species are unlikely to occur within the Project Area because of the lack of aquatic habitat (NNHP, 2023).

3.14.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, no new disturbance or alteration of existing habitat would occur. No impacts to listed species, their habitats, or designated critical habitat would occur.

Alternative 2 – Proposed Action

The proposed Project is currently a vacant lot in an urban setting. Vegetation on site is primarily composed of grass and brush. Wildlife is not anticipated to utilize the Project Area for more than an access thoroughfare as it lacks trees and cover.

Due to the adjacency of the Project Area to urban development it is not expected to provide habitat essential to the survival of the species considered. No aquatic habitat is present within the Project Area, precluding the occurrence of aquatic species.

Due to the urban setting of the Project Area, it is unlikely that it is regularly occupied by mule deer. The Project Area is not within a mule deer migration corridor. No significant short-term or long-term impacts are likely to occur to mule deer due to the Proposed Action.

No roosting substrate, water sources, or unique foraging habitat suitable for Mexican free-tailed bat is present within the Project Area. Therefore, no significant long-terms impact to Mexican free-tailed bad is expected. Construction would be limited to daylight hours to eliminate short-term impacts to noise and light pollution at night.

No suitable nesting and roosting substrate for raptors was identified within the Project Area but perching substrates that may be used as perches to forage (i.e., trees and fenceposts) are present nearby. However, due to the urban setting, along with the lack of nesting and roosting substrate, no significant short-term or long-term impacts to raptors are expected. Other migratory bird species may occur within the Project Area and may use the shrubs within or trees nearby for nesting. Nesting habitat within the Project Area is limited due to the urban setting, the existing parking lot, and previous disturbance. During construction, birds would likely self-relocate to adjacent areas.

3.15 Historic and Cultural Resources

3.15.1 Affected Environment

In addition to review under NEPA, consideration of effects to historic properties is mandated under Section 106 of the National Historic Preservation Act, as amended, and implemented by 36 CFR Part 800. Requirements include the identification of significant historic properties that may be affected by the Proposed Action. Historic properties are defined as archaeological sites, standing structures, or other historic resources listed in or eligible for listing in the National Register of Historic Places (36 CFR 60.4).

As defined in 36 CFR Part 800.16(d), the area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. Based on this definition and the nature and scope of the undertaking, FEMA has determined the direct APE comprises the Project Area which is as an area totaling three acres located at 3645 Butti Way, Carson City, Nevada. The Project Area and APEs are depicted on the 1994 7.5 USGS *New Empire, Nev.* topographic map (**Appendix E**).

In addition to identifying historic properties that may exist in the Project's APE, FEMA must also determine, in consultation with the appropriate State Historic Preservation Office (SHPO)/Tribal Historic Preservation Officer (THPO), what effect, if any, the Proposed Action will have on historic properties. Additionally, if the Project would have an adverse effect on these properties, FEMA must consult with SHPO/THPO on ways to avoid, minimize, or mitigate the adverse effect.

In the event unanticipated cultural resources are discovered during Project construction, reasonable efforts will be made to avoid, minimize, or mitigate adverse effects consistent with the procedures at 36 CFR 800.13 (b). Mitigation measures include notifying SHPO and FEMA within 48 hours of the discovery. The notification shall describe the assessment of national register eligibility of the property and proposed actions to resolve adverse effects. Typically, regulatory agencies will respond within 48 hours.

3.15.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, there will be no construction and no impacts to historic or cultural resources.

Alternative 2 – Proposed Action

The indirect APE for the proposed Project encompasses one half mile in all directions from the Project's direct APE and is situated within the urban development of Carson City, Nevada. Existing buildings and topography limit the line of sight from the Project Area. Per 36 CFR 800.5 potential adverse effects were assessed by analyzing four factors with potential indirect effects to historic properties that include atmospheric, vibrational, auditory, and visual factors (**Appendix I**). For the current undertaking, only visual factors are considered. Because Project elements are limited to a building and a parking lot within an existing landscape of urban development, limits of potential visual effects are anticipated to be limited to a half mile. Past this area, the Project is expected to be completely obscured by the existing built environment and natural topography. The remaining factors are temporary and negligible and are

associated with the construction phase of the Project. Any auditory, vibrational, or atmospheric changes resulting from the Proposed Action will be temporary and minor during the construction only, and pre-construction conditions would be returned after completion. Consequently, no potential was identified for long-term indirect impacts because of the introduction of minor, short-term auditory, vibrational, or atmospheric changes.

Kautz Environmental Consultants, Inc. reviewed the Nevada Cultural Resources Information System database and conducted a pedestrian inventory to identify historic properties in the APE and surrounding area. Other resources reviewed for background data include historic maps, aerial imagery, and the National Register of Historic Places and Nevada State Register of Historic Places files. Two previously conducted surveys conducted in 1977 and 2006 partially overlap with the direct APE (**Table 3**). The records review identified one previously recorded isolated resource (26Or129) that was identified in the Nevada Cultural Resources Information System database, and partial overlaps the Project Area. Field inventory of the parcel failed to identify any resources within the direct APE.

Table 3. Previously Conducted Surveys for Cultural Resources

SHPO/NSM[1] Report Number	Report Year	Title	Authors
13 – 13	1977	Archaeological Resources Short Report: Carson City Treatment Plant Expansion Project – will hi Mark Reconnaissance (Project # 13 – 13, contract NAS #234 – C) (from NADB)	Seelinger, Evelyn
505	2006	Cultural Resources Inventory of Carson City, Nevada, Corporate Yard Hydraulic Improvements	Simmons, Dwight; Monique Kimball; and Robert Kautz

[1]NSM= Nevada State Museum

The Advisory Council on Historic Preservation explains in its online Section 106 guidance that:

"Indian tribes and Native Hawaiian Organizations (NHOs) play a special consultative role in the Section 106 process. Section 101(d)(6)(B)[3] of the National Historic Preservation Act requires the federal agency official to consult throughout the Section 106 process with any Indian tribe or NHO that attaches religious and cultural significance to historic properties that may be affected by an undertaking. The regulations implementing Section 106 remind federal agencies, in carrying out their Section 106 responsibility to consult with Indian tribes and NHOs, that 'frequently historic properties of religious and cultural significance are located on ancestral, aboriginal, or ceded lands of Indian tribes and [NHOs]' and therefore, Indian tribes and NHOs participate in Section 106 reviews both on and off tribal lands" (ACHP, 2018).

On April 18, 2023, a consultation letter was sent to the Tribal Historic Preservation Officer (THPO) of Washoe Tribe of Nevada and California requesting knowledge of historic properties or cultural resources in the Project vicinity. On April 28, 2023, a consultation letter was sent to the Chairman of the Washoe Tribe requesting knowledge of historic properties or cultural resources in the Project vicinity. As of June 14, 2023, no Tribes have commented on the proposed Project.

On May 1, 2023, a letter and supporting documentation was submitted to the SHPO requesting their review and concurrence on the finding of effects for the proposed federal undertaking. Also included a

hardcopy of the cultural resource inventory report prepared by Kautz Environmental Consultants, Inc. on historic properties around the proposed Project Area. On May 24, 2023, SHPO requested supplemental information for their records. This information was provided to SHPO on May 25, 2023. On May 30, 2023, the SHPO provided concurrence with the determination that no historic properties will be affected by the Proposed Action (**Appendix I**).

Under the Proposed Action, no historic properties were identified within the direct APE and no indirect effects to historic properties are anticipated.

3.16 Hazardous Materials and Waste

3.16.1 Affected Environment

Hazardous and toxic materials are regulated under the Comprehensive Environmental Response Compensation and Liability Act of 1980 (42 U.S.C. §9601 et seq.) and the Resource Conservation and Recovery Act of 1976 (RCRA; 42 U.S.C. §6901 et seq.). The major objective of Comprehensive Environmental Response Compensation and Liability Act, commonly known as Superfund, is to identify hazardous and toxic material sites, determine liability, and oversee the cleanup. The RCRA addresses the handling, disposal and recycling of debris and solid waste, including hazardous materials. RCRA is also concerned with the transportation, treatment, and storage of hazardous waste.

A hazardous materials database search and review of GIS datasets of existing and former underground storage tanks, superfund sites, landfills, brownfields, and other hazardous material storage or use facilities was completed for the Project Area. This included a review of the NDEP e-Map which contains GIS information from multiple Bureaus inside NDEP such as Water Pollution Control, Air Quality, and Corrective Actions (NDEP, 2023). The Project Area was not identified in the databases searched by NDEP or the EPA EnviroMapper (EPA, 2023b).

The American Society of Testing and Materials (ASTM) (1994) Standard E 1527-94 defines a recognized environmental condition as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. This can include release from waste sites, disposal sites, dump pits, etc.

3.16.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, no short- or long-term impacts from hazardous materials would occur.

Alternative 2 – Proposed Action

The Project is in an urban setting with access to public water and sanitation facilities. No recognized environmental concerns were found in the database searches through NDEP or the EPA EnviroMapper, although unlikely, if hazardous materials are encountered during construction or operation, these would be handled and disposed of in accordance with the appropriate local, state, and federal regulations. No short- or long-term impacts from hazardous materials are anticipated under the Proposed Action. During

construction, a SWPPP would be in place in accordance with NDEP permitting requirements which would include measures for spill prevention, response, and cleanup.

3.17 Summary of Environmental Impacts

Table 4 summarizes mitigation measures and permits required for the Project.

Table 4. Summary of Environmental Impacts, Mitigation Measures, and Permits

Affected Environment	No Action Impacts	Proposed Action Impacts	Mitigation Measures and Permits
Soils and Geology	No impact.	Short-term impacts during construction would be limited to regrading and compaction prior to paving.	BMPs for sediment and erosion control (i.e., silt fencing, revegetating bare soils, dust abatement, routine inspections, staging equipment in previously developed areas) implemented during construction per the NDEP Construction Stormwater Permit and SWPPP.
		Negligible to minimal long-term impacts during operations.	A permanent stormwater capture system incorporated in final Project design, landscaping/revegetation of unpaved areas, and BMPs used during construction would significantly reduce or eliminate long-term impacts to soils.
Land Use and Planning	No impact.	No impact. No changes in current zoning would occur and the proposed use is consistent with Carson City planned land use for the Project Area.	No mitigation measures required.
Prime Farmland	No impact.	No Impact as no prime farmland present.	N/A
Floodplain Encroachment	No impact.	Moderate long-term impact would occur as the Project Area is within the AE flood zone designated by FEMA.	Implementation of structure fill that would elevate the facility above the FEMA 500-year flood line. In accordance with Carson City code (Title 12 Chapter 12.09.070) a development permit would be obtained prior to the start of construction activities.
Traffic Circulation, Volume and Parking Access	No impact.	Short-term impacts during construction may occur due to temporary closures to portions of Butti Way.	A Construction Manager-at-Risk method would be used to provide construction phase management and assist with traffic.

Table 4. Summary of Environmental Impacts, Mitigation Measures, and Permits

		Short-term temporary and intermittent impacts during operations due to increased traffic during emergency activities.	The existing infrastructure, traffic infrastructure, and parking access would accommodate the daily increase in use for staff. Parking would be available to accommodate the personnel needed for daily operations of the EOBDC and additional personnel during emergency operations.
Public Health and Safety	No impact.	Short-term impacts during construction would be minor and temporary as temporary as closures to Butti Way would not affect access of the area for emergency services.	Active construction areas would be fenced or marked, as appropriate to prevent public access.
		Long-term impacts would be positive due to the presence of a strategically located, fully interoperable EOBDC and neighborhood fire station.	The EOBDC would expand existing public health and safety capacity in the County and surrounding area during emergencies and disasters. Building design would include secure parking and site perimeter fencing, consider U.S. antiterrorism design guidelines, and backup power.
Socioeconomic Issues and Environmental Justice	Negative Impact.	No adverse effects on minority or low-income populations are anticipated.	No mitigation measures required.
		Long-term impacts would be positive due to the presence of a strategically located, fully interoperable EOBDC and neighborhood fire station, regardless of socioeconomic status.	No mitigation measures required.

Table 4. Summary of Environmental Impacts, Mitigation Measures, and Permits

Air Quality	No Impact	Short-term impacts may occur during construction from fugitive dust and exhaust from equipment.	Fugitive dust abatement measures (i.e., limiting areas of disturbance, watering bare soils, covering soil piles) would be implemented during clearing and blading activities.
		Long-term impacts to air quality are not anticipated.	The EOBDC building design includes enhanced air filtration and air cycling to mitigate indoor air quality.
Climate Change	No Impact	Short-term impacts may occur during construction. Long-term increases in GHG due to an increase in vehicular traffic in the project area and from heating and air-conditioning required for the new facility would be minor.	Emissions would be expected to be below regulatory standards. Project would comply with all applicable building codes and local community ordinances to withstand potential harm from disasters caused by climate change.
Noise	No impact.	Short-term, temporary, and intermittent impacts may occur due to increased noise may occur during construction.	During construction, noise would be limited to a typical daytime construction schedule (6:00 a.m. to 7:00 p.m.).
		Noise impacts would occur temporarily and intermittently from sirens and alarms from emergency response vehicles such as fire trucks or during emergency activations. Noise is not expected to have a noticeable impact on the surrounding area.	Noise protection for fire fighters would be provided in accordance with OHSA standards
Public Services and Utilities	No impact.	Short-term impacts from construction would be minor and temporary during connection of utilities, however this is not likely to impact the surrounding businesses or residential areas.	No mitigations measures required.

Table 4. Summary of Environmental Impacts, Mitigation Measures, and Permits

		Long-term impacts would be positive due to the presence of a strategically located, fully interoperable EOBDC and neighborhood fire station.	No mitigations measures required.

Water Quality and Water Resources	No impact.	Minimal short-term impacts to water resources from stormwater runoff.	An NDEP Construction Stormwater Permit would be in place. BMPs for stormwater and erosion control would be implemented according to the SWPPP.
		No impacts to water quality are anticipated.	Municipal water and sewer systems would ensure safe and clean water usage by the facility. Permanent stormwater capture systems would be incorporated in the final Project design, and unpaved areas within the Project Area would be landscaped, as appropriate.
Wetlands	No impact.	No impact as no wetlands are present within the Project Area. No impacts to wetlands near the Project Area are anticipated.	Existing vegetation surrounding the Project Area would remain undisturbed, which would further reduce the potential of sediment mobility from construction. An NDEP Construction Stormwater Permit would be in place. BMPs for stormwater and erosion control would be implemented according to the SWPPP.
Threatened and Endangered Species	No Impact.	No significant short-or long-term impacts to threatened and endangered species, migratory birds, or raptors would occur due to lack of habitat within the Project Area to support these species. No critical habitat was identified within the Project	Construction would be limited to daylight hours to eliminate short-term impacts to noise and light pollution at night.

		Area.	
Areas with Special Designation	No Impact.	No areas with special designation such as conservation areas, wildlife refuges, parklands, and/or other ecologically critical or sensitive areas were identified.	N/A

Historic and Cultural Resources	No Impact.	Short-term and minor impacts during construction due to auditory, vibrational, or atmospheric changes.	Reasonable efforts would be made to avoid, minimize, or mitigate adverse effects consistent with the procedures at 36 CFR 800.13 (b) if any cultural resources are discovered during construction. SHPO and FEMA would be notified within 48 hours of any discovery of cultural resources.
		No impacts during operations as no historic properties were identified within the direct APE and no indirect effects to historic properties are anticipated.	No mitigation measures required.
Hazardous Materials	No impact.	No short-term impacts are anticipated as no hazardous materials will be used during construction and are not known to exist within the Project Area.	Hazardous materials encountered during construction would be handled and disposed of in accordance with the appropriate local, state, and federal regulations. An NDEP Construction Stormwater Permit would be in place. Spill prevention, response, and cleanup would be implemented according to the SWPPP.
		No long-term impacts are anticipated as no hazardous materials will be used during operation of the EOBDC facility and are not known to exist within the Project Area.	Hazardous materials encountered during operation would be handled and disposed of in accordance with the appropriate local, state, and federal regulations.

4.0 CUMULATIVE IMPACTS

Cumulative impacts are those impacts on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes those other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time (40 CFR 1508.7).

The urban setting of the Project Area and access to public services in an appropriately zoned location reduce potential cumulative impacts resulting from the development of this Project. Reasonably foreseeable actions near the proposed Project Area that may contribute to cumulative impacts of implementing the Proposed Action could include additional City, commercial, and/or residential development in the area. The Project would be compatible with the existing surrounding land use. Once complete, the Project would provide additional emergency services to support the surrounding area. It is well suited to accommodate additional development. The cumulative incremental impacts of these foreseeable actions would include a slight increase in general use of the area and localized traffic in the future. The release of GHGs into the atmosphere from this project would be minor and would help address and reduce risk/harm from climate change by providing emergency services in disasters.

In consideration of the overall impact of the proposed project in relation to impacts from past, present, and reasonably foreseeable future activities, the proposed action is not expected to have significant adverse cumulative impacts on any resource.

5.0 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

Table 5 summarizes the federal, state, and local agencies that were consulted or were contacted to request resource information during the preparation of this EA:

Table 5. Agency Correspondence

Agency	Contact	Address	Phone Number	Date of Correspondence	Discussion in EA
Nevada Department of Wildlife	Katie Andrle, Western Region Supervising Habitat Biologist	Reno, NV	775-688-1145	January 23, 2023	Section 3.13.2 Biological Resources
Nevada Division of Natural Heritage	Eric Miskow, Aquatic Biologist/Data Manager	901 S. Stewart St., Suite 5002 Carson City, NV 89701	775-684-2905	January 23, 2023	Section 3.13.2 Biological Resources
U.S. Fish and Wildlife Service	Reno Fish and Wildlife Office	1340 Financial Blvd., Suite 234 Reno, NV 89502	775-861-6300	January 30, 2023	Section 3.13.2 Biological Resources
State Historic Preservation Office	Rebecca Palmer	901 S. Stewart St., Suite 5004 Carson City, NV 89701	775-684-3448	March 27, 2023 May 1, 2023	Cultural Resources Section 3.17

Public Involvement

The NEPA process requires that Federal agencies provide opportunities for public involvement and comments. The publication of this draft EA will mark the start of a 30-day public comment period, offering

an additional informal opportunity for public involvement. The 30-day comment period will begin from the date of posting on the FEMA website and advertisement in the XXX newspaper. Once finalized, the Draft EA document will be made available at the following public locations, XXX. The Draft EA will also be posted on the XXX website (https://www.xxx.com) and posted online at the FEMA website (https://www.xxx.gov). Written comments can be submitted by email to (XXX@fema.dhs.gov) or by mail, addressed to XXX, ATTENTION: XXX NEPA Comments. If no substantive comments are received, the Draft EA will become final, and this initial public notice will also serve as the final Public Notice. Substantive comments will be addressed as appropriate in the final document.

6.0 LIST OF PREPARERS

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Appendices are available for review upon request to GPDEHPinfo@fema.dhs.gov.