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Title:	**Biological Assessment Summaries for the CMRR Supplement EIS**
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Intended for:	Public release

Biological Assessment Summaries for the CMRR Supplement EIS

Compiled by Charles D. Hathcock

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Abstract

Information from several biological assessments are required for the CMRR Supplement EIS being prepared by SAIC; however, these reports are official use only. The pertinent information from each of the biological assessments is being summarized in this document and will receive a LA-UR number. The project description, maps of project footprints, and required reasonable and prudent measures will be summarized here for each biological assessment.

Biological Assessment: The Potential Effects of the Chemistry and Metallurgy Research Facility Replacement Project on Federally Listed Threatened, Endangered, and Sensitive Species, Los Alamos National Laboratory, Los Alamos, New Mexico (LA-CP-04-0921)

Project Description

Los Alamos National Laboratory (LANL) is proposing to construct a replacement for the Chemistry and Metallurgy Research (CMR) facility along Pajarito Road in the central portion of the Laboratory (Figure 1). The proposed action would construct additional buildings and their associated parking lots on the north and south of the existing Pajarito Road. The proposed location for the CMR replacement (CMRR) facility contains and is surrounded by suitable Mexican spotted owl habitat.

The original CMR facility was designed and constructed to comply with the uniform building codes in effect at the time. In subsequent years, a series of upgrades have been performed to address changing building and safety requirements. By the mid-1990s, the CMR facility had been operating continuously for over 40 years and was approaching its 50-year design life. In 1992, the Department of Energy (DOE) initiated planning and implementation of CMR facility upgrades to address specific safety, reliability, consolidation, and safeguards issues. These upgrades were intended to extend the useful life of the CMR facility for an additional 20 to 30 years.

In 1997 and 1998, a series of operational, safety, and seismic issues surfaced regarding the long-term viability of the CMR facility. In responding to these issues, DOE determined that originally planned extensive upgrades to the CMR facility would be much more expensive, time consuming, and only marginally effective in providing the required operational risk reduction and program capabilities to support DOE and National Nuclear Security Administration (NNSA) missions. As a result, in 1999 the CMR Upgrades Project was reduced to accommodate only upgrades necessary to ensure safe and reliable operations through 2010 consistent with an overall strategy for managing risk at the CMR facility. This risk management strategy recognized that the 50-year-old CMR facility could not continue mission support at an acceptable level of risk to public and worker health and safety without operational restrictions. It also committed NNSA and LANL to manage the CMR facility to a planned end of life in or about the year 2010 and to develop long-term facility and site plans to replace and relocate CMR capabilities. Since this strategy was adopted, CMR capabilities have been restricted substantially, both

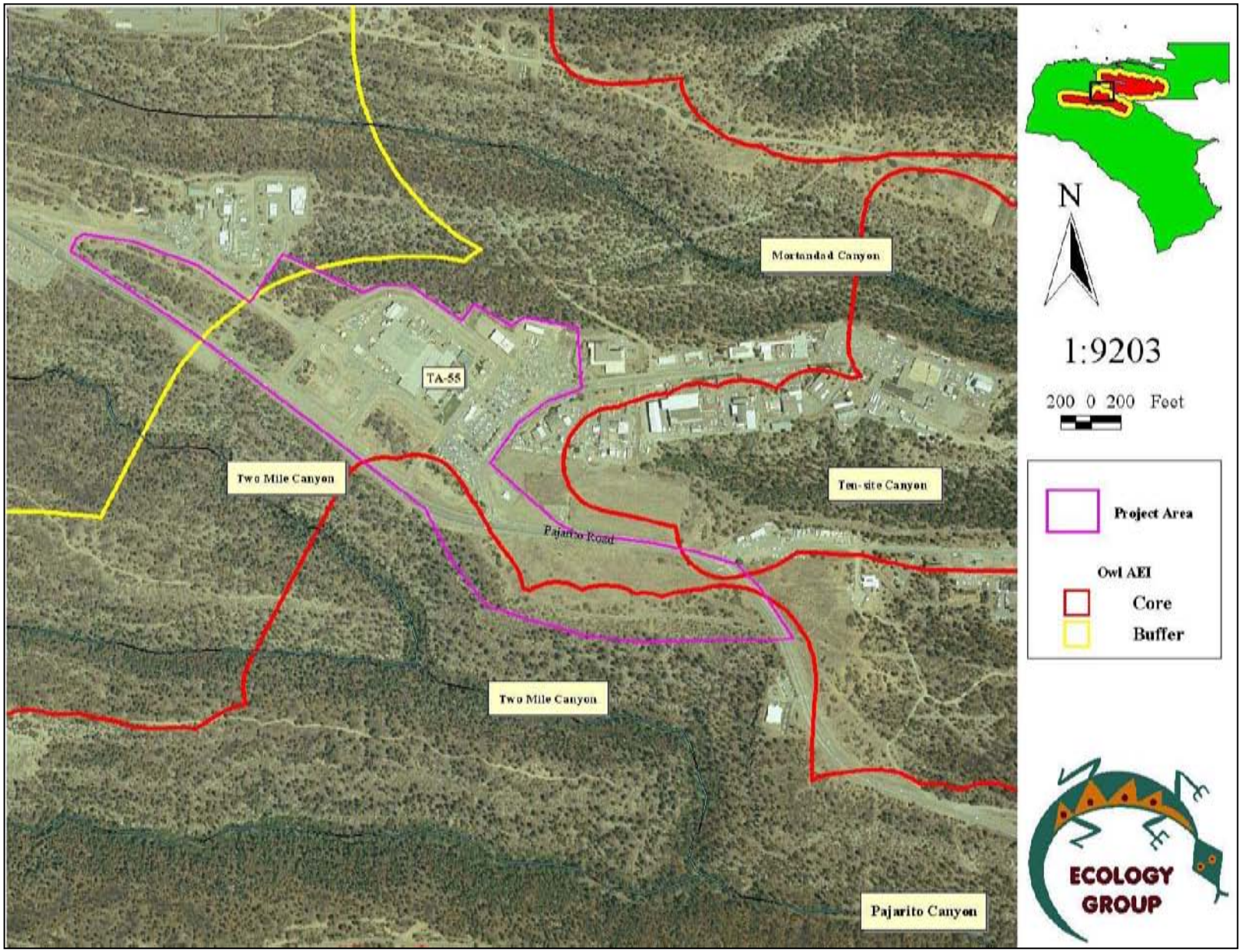
by planned NNSA actions and by unplanned facility outages that have included the operational loss of two of the seven wings of the CMR facility.

Because of the need to have this critical facility operating in a safe manner, the NNSA proposes to relocate the associated research and development capabilities that currently exist primarily at the CMR facility to a newly constructed facility (CMRR) and to continue to perform those operations and activities at the new facility for the foreseeable future. The proposed action would construct three to five new buildings on the north and south side of Pajarito Road within Technical Area (TA) 55 to house the CMR capabilities (Figure 2), including supporting roads and parking lots to accommodate the increase in personnel.

As a result of these new facilities and roads, suitable core and buffer habitat on the mesa top would be removed from the Pajarito and Sandia-Mortandad Canyons areas of environmental interest (AEIs). The construction of the CMRR could disturb up to 16.2 ha (40 ac) of currently undeveloped land. The total project area of this action, including buildings and roads, covers an area of 37.8 ha (93.4 ac). Sensitive habitat that could be disturbed includes up to 7.8 ha (19.3 ac) of core and 6.8 ha (16.8 ac) of buffer habitat. This is less than 1% of the total Pajarito or Sandia-Mortandad Canyons Mexican spotted owl AEIs. The land proposed for the construction activity is approximately 60% disturbed with the remainder of the location covered with native vegetation. The site consists of ponderosa pine (*Pinus ponderosa* P. & C. Lawson), piñon (*Pinus edulis* Engelm.)-juniper (*Juniperus monosperma* Englem. Sarg.), and grassland on the mesa top with mixed conifer forest in Mortandad, Ten-site, Two-mile, and Pajarito Canyons. Ecology Group biologists conducted surveys to determine the status of any threatened, endangered, and sensitive (TES) species or habitat at the proposed CMRR location and adjacent habitats. This assessment discusses specific survey methodologies and the subsequent results, potential impacts, and required best management practices for this project.

Ecology Group biologists conducted TES surveys to ensure compliance with an array of state and federal legislation. These include the federal Endangered Species Act (ESA), New Mexico's Wildlife Conservation Act, New Mexico's Endangered Plant Species Act, 10 CFR 1022, and the National Environmental Policy Act. Section 7 of the ESA requires federal agencies to ensure that their activities and programs do not jeopardize the continued existence of any federally listed threatened or endangered species or its designated critical habitat. The Wildlife Conservation Act and the Endangered Plant Species Act mandate similar measures for protecting species under state protection.

Project Footprint


Mortandad Canyon
TA-55
Two Mile Canyon
Pajarito Road
Ten-site Canyon
Two Mile Canyon
Pajarito Canyon
N
1:9203
200 0 200 Feet
Project Area
Owl AEI
Core
Buffer
ECOLOGY GROUP

Required Reasonable and Prudent Measures

Mexican Spotted Owl

- Keep disturbance and noise to a minimum at the proposed CMRR construction site.
- Areas of lowest tree density should be used when choosing routes.
- No cutting of trees larger than 20 cm (8 in.) diameter at chest height can take place in the canyon or on the canyon rim.
- Trees on the rims of canyons will be left to provide a screen for the canyon habitat.
- No thinning of the trees smaller than 20 cm (8 in.) diameter or ground clearing can take place in the canyons until the area has been surveyed.
- Seasonal occupancy surveys will be done by the Ecology Group before the construction of the new facility and any detection will be reported to project personnel and the USFWS.
- The final lighting of the facilities and roads will be kept as limited as possible and designed to limit lighting of the surrounding forest and canyon as much as possible.
- Appropriate erosion and runoff controls must be employed to reduce erosion to storm water standards and limit sedimentation reaching the canyon and periodically checked throughout the life of the project.
- Excessive parking areas or equipment storage areas, off-road travel, materials storage areas, and crossing of streams or washes must be avoided throughout the life of the CMRR construction.
- All exposed soils must be re-vegetated with approved native seed mix as soon as possible after construction to minimize erosion.
- All trees planted in association with the construction of the CMRR must be native species appropriate for this elevation and forest type.
- All equipment maintenance and fueling must be completed at least 30 m (100 ft) from the stream channel.

Bald Eagle

- Presence or absence of bald eagles would be monitored during construction in the fall and winter (November 1–March 31). If a bald eagle is present within 400 m (0.25 mi) of the project area in the morning before project activity begins, or arrives during breaks in project activity, the contractor would be required to suspend all activity until the bird leaves of its own volition; or an Ecology Group biologist, in consultation with the USFWS, determines that the potential for harassment is minimal.

- If bald eagles are consistently found in the immediate project area during the construction period, the biologist would informally contact the USFWS to determine if formal consultation under the ESA is necessary.
- The same best management practices for the Mexican spotted owl apply.

Amended Biological Assessment (Cons. # 2-22-03-1-0302): The Potential Change in Project Effects of the Chemistry and Metallurgy Research Facility Replacement Project on Federally Listed Threatened and Endangered Species, Los Alamos National Laboratory, Los Alamos, New Mexico (LA-CP-06-0020)

Project Description

Los Alamos National Laboratory (LANL) is proposing to construct a replacement for the Chemistry and Metallurgy Research (CMR) facility along Pajarito Road in the central portion of the Laboratory (Figure 1). The proposed action would construct additional buildings, a 115-kV substation, and their associated parking lots on the north and south sides of the existing Pajarito Road. The proposed location for the CMR replacement (CMRR) facility contains and is surrounded by suitable Mexican spotted owl (*Strix occidentalis lucida*) habitat.

The original CMR facility was designed and constructed to comply with the uniform building codes in effect at the time. In subsequent years, a series of upgrades have been performed to address changing building and safety requirements. By the mid-1990s, the CMR facility had been operating continuously for over 40 years and was approaching its 50-year design life. In 1992, the Department of Energy (DOE) initiated planning and implementation of CMR facility upgrades to address specific safety, reliability, consolidation, and safeguards issues. These upgrades were intended to extend the useful life of the CMR facility for an additional 20 to 30 years.

In 1997 and 1998, a series of operational, safety, and seismic issues surfaced regarding the long-term viability of the CMR facility. In responding to these issues, DOE determined that originally planned extensive upgrades to the CMR facility would be much more expensive, time consuming, and only marginally effective in providing the required operational risk reduction and program capabilities to support DOE and National Nuclear Security Administration (NNSA) missions. As a result, in 1999 the CMR Upgrades Project was reduced to accommodate only upgrades necessary to ensure safe and reliable operations through 2010 consistent with an overall strategy for managing risk at the CMR facility. This risk management strategy recognized that the 50-year-old CMR facility could not continue mission support at an acceptable level of risk to public and worker health and safety without operational restrictions. It also committed NNSA and LANL to manage the CMR facility to a planned end of life in or about the year 2010 and to develop long-term facility and site plans to replace and relocate CMR capabilities. Since this strategy was adopted, CMR capabilities have been restricted substantially, both

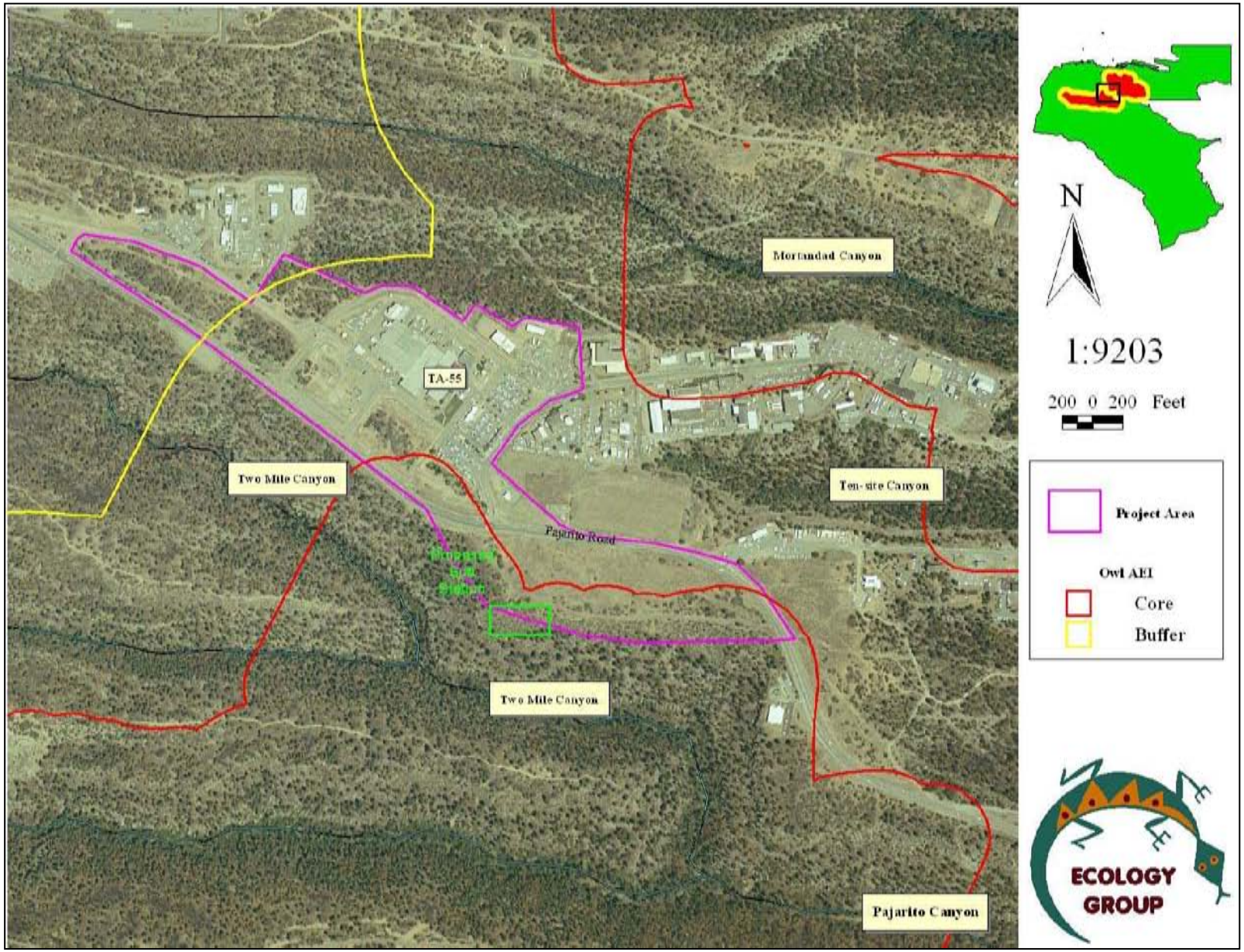
by planned NNSA actions and by unplanned facility outages that have included the operational loss of two of the seven wings of the CMR facility.

Because of the need to have this critical facility operating in a safe manner, the NNSA proposes to relocate the associated research and development capabilities that currently exist primarily at the CMR facility to a newly constructed facility (CMRR) and to continue to perform those operations and activities at the new facility for the foreseeable future. The proposed action would construct three to five new buildings on the north and south sides of Pajarito Road within Technical Area (TA) 55 to house the CMR capabilities (Figure 2), including supporting roads and parking lots to accommodate the increase in personnel. In addition, a 61- by 122-m (200- by 400-ft) 115-kV electrical substation will be added to this project location on the southern edge of the project area adjacent to Twomile Canyon. This new addition to the project is needed to meet required electrical needs at the new combined TA- 55 and CMRR complex.

As a result of these new facilities and roads, suitable Mexican spotted owl core and buffer habitat on the mesa top would be removed from the Pajarito and Sandia-Mortandad Canyons areas of environmental interest (AEIs). The construction of the CMRR and associated substation could disturb up to 16.2 ha (40 ac) of currently undeveloped land. The total project area of this action, including buildings and roads, covers an area of 37.8 ha (93.4 ac). Sensitive habitat that could be disturbed includes up to 7.8 ha (19.3 ac) of core and 6.8 ha (16.8 ac) of buffer habitat. This is less than 1% of the total Pajarito or Sandia-Mortandad Canyons Mexican spotted owl AEIs. The land proposed for the construction activity is approximately 60% disturbed with the remainder of the location covered with native vegetation. The site consists of ponderosa pine (*Pinus ponderosa* P. & C. Lawson), piñon (*Pinus edulis* Engelm.)-juniper (*Juniperus monosperma* Englem. Sarg.), and grassland on the mesa top with mixed conifer forest in Mortandad, Ten-site, Two-mile, and Pajarito Canyons. Ecology Group biologists conducted surveys to determine the status of any threatened and endangered species (TES) at the proposed CMRR location and adjacent habitats. This assessment discusses specific survey methodologies and the subsequent results, potential impacts, and required best management practices for this project.

Ecology Group biologists conducted TES surveys to ensure compliance with federal legislation. These include the Endangered Species Act (ESA), 10 CFR 1022, and the National Environmental Policy Act. Section 7 of the ESA requires federal agencies to ensure that their activities and programs do not jeopardize the continued existence of any federally listed threatened or endangered species or its designated critical habitat.

Project Footprint


Mortandad Canyon
TA-55
Two Mile Canyon
Ten-site Canyon
Pajarito Road
Two Mile Canyon
Pajarito Canyon
N
1:9203
200 0 200 Feet
Project Area
Owl AEI
Core
Buffer
ECOLOGY
GROUP

Required Reasonable and Prudent Measures

Mexican Spotted Owl

- The 115-kV substation shall be designed and constructed with bird-friendly protective devices in places where the clearance between hot-phase conductors is less than 152 cm (60 in.).
- The lighting will meet the New Mexico Sky Lighting Act requirements.
- Any tree cutting adjacent to the proposed substation will be selective to limit tree removal as much as possible and approved by an Ecology Group biologist before removal.
- Keep disturbance and noise to a minimum at the proposed CMRR construction site.
- Areas of lowest tree density should be used when choosing any access routes.
- No cutting of trees larger than 20 cm (8 in.) in diameter at chest height can take place in the canyon or directly on the canyon rim.
- At least a single row of trees on the rims of canyons will be left to provide a screen for the canyon habitat.
- No thinning of the trees smaller than 20 cm (8 in.) in diameter or ground clearing can take place in the canyons until the area has been surveyed.
- Seasonal occupancy surveys will be done by the Ecology Group before the construction of the new facility and any detection will be reported to project personnel and the USFWS.
- The final lighting of the facilities and roads will be kept as limited as possible and designed to limit lighting of the surrounding forest and canyon as much as possible.
- Appropriate erosion and runoff controls must be employed to reduce erosion to storm water standards and limit sedimentation reaching the canyon and periodically checked throughout the life of the project.
- Excessive parking areas or equipment storage areas, off-road travel, materials storage areas, and crossing of streams or washes must be avoided throughout the life of the CMRR construction.
- All exposed soils must be re-vegetated with approved native seed mix as soon as possible after construction to minimize erosion.
- All trees planted in association with the construction of the CMRR must be native species appropriate for this elevation and forest type.
- All equipment maintenance and fueling must be completed at least 30 m (100 ft) from the stream channel.

Bald Eagle

- The 115-kV substation shall be designed and constructed with bird-friendly protective devices in places where the clearance between hot-phase conductors is less than 152 cm (60 in.).
- The lighting will meet the New Mexico Sky Lighting Act requirements.
- Any tree cutting adjacent to the proposed substation will be selective to limit tree removal as much as possible and approved by an Ecology Group biologist before removal.
- No potential bald eagle winter roosting trees would be disturbed during construction.
- Presence or absence of bald eagles would be monitored during remediation in the fall and winter (November 1–March 31). If a bald eagle is present within 400 m (0.25 mi) of the project area in the morning before project activity begins, or arrives during breaks in project activity, the contractor would be required to suspend all activity until the bird leaves of its own volition; or an Ecology Group biologist, in consultation with the USFWS, determines that the potential for harassment is minimal.
- If bald eagles are consistently found in the immediate project area during the construction period, an Ecology Group biologist would informally contact the USFWS to determine if formal consultation under the ESA is necessary.
- Disturbance and noise would be kept to a minimum during construction.
- Appropriate LANL-approved erosion and runoff controls will be employed and periodically checked throughout the life of the project.
- Avoid unnecessary disturbance to vegetation. Examples include excessive parking areas or equipment storage areas, off-road travel, materials storage areas, and crossing of streams or washes.
- All exposed soils must be revegetated as soon as feasible after remediation to minimize erosion. All trees and other plant species that are used for revegetation purposes will be native species appropriate for the natural vegetation and the habitat conditions of the surrounding area.
- The same best management practices for the Mexican spotted owl apply.

Amended Biological Assessment (Cons. # 2-22-03- 1-0302): The Potential Change in Project Effects of the Chemistry and Metallurgy Research Facility Replacement Project on Federally Listed Threatened and Endangered Species, Los Alamos National Laboratory, Los Alamos, New Mexico (LA-CP-07-0823)

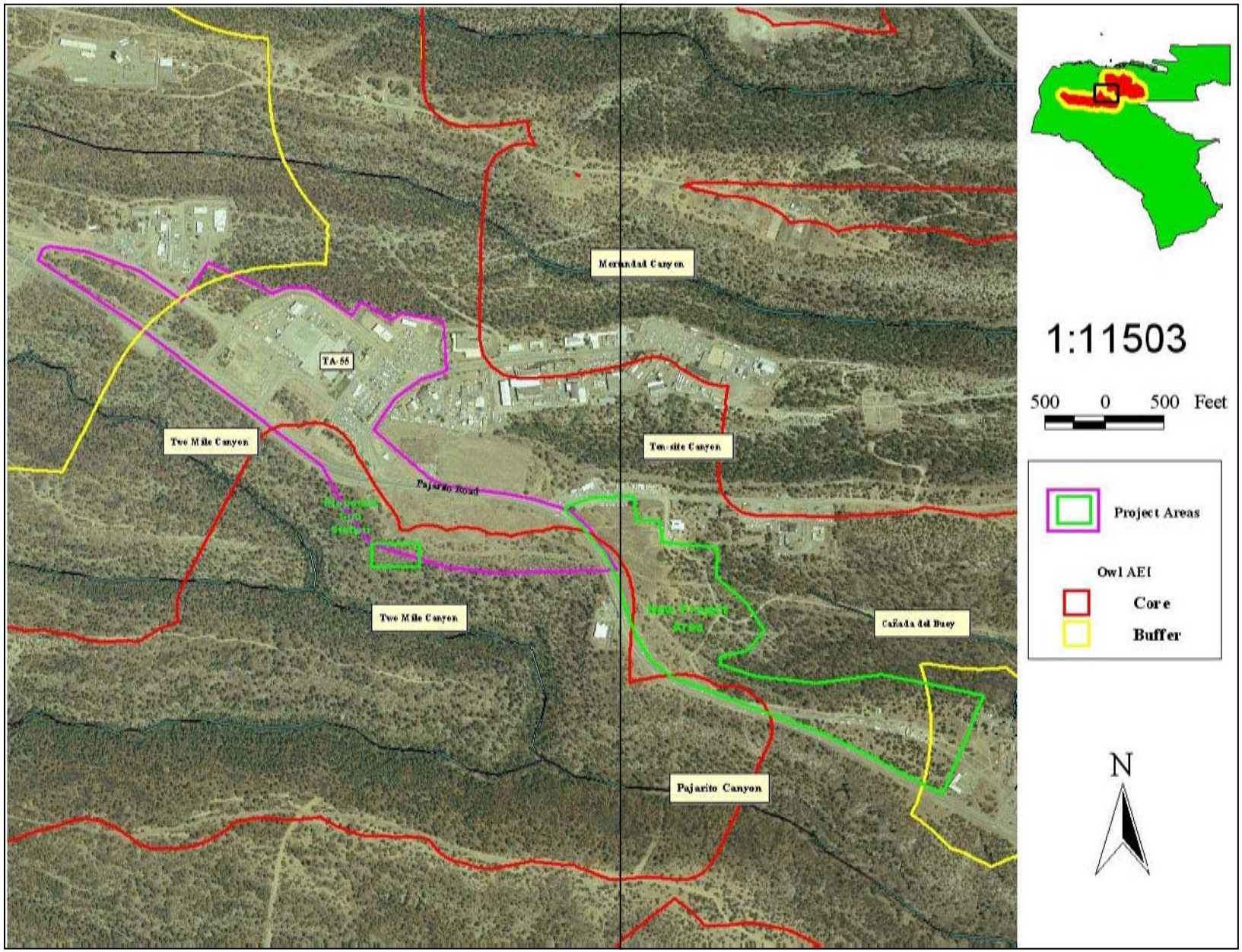
Project Description

Los Alamos National Laboratory (LANL) is constructing a replacement for the Chemistry and Metallurgy Research (CMR) facility (Figure 1). This action includes new buildings, a 115-kV substation, and associated parking lots on the north and south sides of the existing Pajarito Road. Construction and operation of these facilities were assessed in the Biological Assessment: The Potential Effects of the Chemistry and Metallurgy Research Facility Replacement Project on Federally Listed Threatened, Endangered, and Sensitive Species (Keller 2003, 2004) and the Amended Biological Assessment: The Potential Change in Project Effects of the CMR Facility Replacement Project on Federally Listed Threatened and Endangered Species (Keller 2006). This assessment describes development of an additional lay down area for storage of soil spoils and staged equipment and construction and operation of a cement production plant.

The proposed location for the CMR replacement (CMRR) facility contains and is surrounded by suitable Mexican spotted owl (*Strix occidentalis lucida*) habitat. Once the CMRR is completed, the spoils, equipment, cement plant, and any associated fencing will be removed and the site rehabilitated unless a subsequent assessment addresses future use of the site. The proposed additional lay down area will comprise an area of 21.62 ha (53.43 ac) mostly undisturbed mesa habitat just east of the existing project area. The total project area of this action, including buildings and roads, covers an area of 57.37 ha (141.76 ac). Sensitive habitat that could be disturbed includes up to 11.23 ha (27.76 ac) of core and 54.41 ha (134.45 ac) of buffer habitat. This is less than 1% of the total Pajarito or Sandia-Mortandad Canyons Mexican spotted owl Areas of Environmental Interest (AEIs). The land proposed for the new lay down area is approximately 60% disturbed with the remainder of the location covered with native vegetation. The site consists of ponderosa pine (*Pinus ponderosa* P. & C. Lawson), piñon pine (*Pinus edulis* Engelm.)-juniper (*Juniperus monosperma* Englem. Sarg.), and grassland on the mesa top with mixed conifer forest in Mortandad, Ten-site, Two-mile, and Pajarito Canyons. Ecology and Air Quality Group (EAQ) biologists conducted surveys to determine the status of any threatened and endangered species (TES) at the proposed CMRR location and adjacent habitats. This assessment discusses specific survey methodologies and the subsequent results, potential impacts, and required reasonable and prudent alternatives for this project.

EAQ biologists conducted TES surveys to ensure compliance with federal legislation. These include the Endangered Species Act (ESA), 10 CFR 1022, and the National Environmental Policy Act. Section 7 of the ESA requires federal agencies to ensure that their activities and programs do not jeopardize the continued existence of any federally listed threatened or endangered species or its designated critical habitat.

Project Footprint


Mortandad Canyon
TA-55
Two Mile Canyon
Pajarito Road
Ten-site Canyon
Two Mile Canyon
Cañada del Buey
Pajarito Canyon
1:11503
500 0 500 Feet
Project Areas
Owl AEI
Core
Buffer
N

Required Reasonable and Prudent Measures

Mexican Spotted Owl

- The lighting will meet the New Mexico Sky Lighting Act requirements.
- Keep disturbance and noise to a minimum at the site.
- Areas of lowest tree density should be used when choosing any access routes.
- No cutting of trees larger than 20 cm (8 in.) in diameter at chest height can take place in the canyon or directly on the canyon rim.
- At least a single row of trees on the rims of canyons will be left to provide a screen for the canyon habitat.
- Seasonal occupancy surveys will be done by LANL biologists and any detection will be reported to project personnel and the USFWS.
- The final lighting of the facilities and roads will be kept as limited as possible and designed to limit lighting of the surrounding forest and canyon as much as possible.
- Appropriate erosion and runoff controls must be employed to reduce erosion to storm water standards and limit sedimentation reaching the canyon and periodically checked throughout the life of the project.
- Excessive parking areas or equipment storage areas, off-road travel, materials storage areas, and crossing of streams or washes must be avoided throughout the life of the CMRR construction.
- All exposed soils must be re-vegetated with approved native seed mix as soon as possible after construction to minimize erosion.
- All trees planted in association with the construction of the CMRR must be native species appropriate for this elevation and forest type.
- All equipment maintenance and fueling must be completed at least 30 m (100 ft) from the stream channel.
- The new temporary staging areas will be rehabilitated using native vegetation following the action or re-consultation will be provided to describe the new use of the site.

Bald Eagle

Note: Once formal delisting of the bald eagle occurs on 8 August 2007, the reasonable and prudent alternatives listed in this Biological Assessment will be retained as suggested practices. Bald eagles will continue to be protected as mandated under the Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act.

- The lighting will meet the New Mexico Sky Lighting Act requirements.
- Any tree cutting adjacent to the proposed substation will be selective to limit tree removal as much as possible and approved by an EAQ biologist before removal.
- No potential bald eagle winter roosting trees would be disturbed during construction.
- Presence or absence of bald eagles would be monitored during remediation in the fall and winter (November 1–March 31). If a bald eagle is present within 400 m (0.25 mi) of the project area in the morning before project activity begins, or arrives during breaks in project activity, the contractor would be required to suspend all activity until the bird leaves of its own volition; or an EAQ biologist, in consultation with the USFWS, determines that the potential for harassment is minimal.
- If bald eagles are consistently found in the immediate project area during the construction period, an EAQ biologist would informally contact the USFWS to determine if formal consultation under the ESA is necessary.
- Disturbance and noise would be kept to a minimum during construction.
- Appropriate LANL-approved erosion and runoff controls will be employed and periodically checked throughout the life of the project.
- Avoid unnecessary disturbance to vegetation. Examples include excessive parking areas or equipment storage areas, off-road travel, materials storage areas, and crossing of streams or washes.
- All exposed soils must be revegetated as soon as feasible after remediation to minimize erosion. All trees and other plant species that are used for revegetation purposes will be native species appropriate for the natural vegetation and the habitat conditions of the surrounding area.
- The same reasonable and prudent alternatives for the Mexican spotted owl apply.

Amended Biological Assessment (Cons. # 2-22-03-1-0302): The Potential Change in Project Effects of the Chemistry and Metallurgy Research Facility Replacement Project on Federally Listed Threatened and Endangered Species, Los Alamos National Laboratory, Los Alamos, New Mexico (LA-CP-09-00626)

Project Description

Los Alamos National Laboratory (LANL) is constructing a replacement for the Chemistry and Metallurgy Research (CMR) facility (Figure 1). This action includes new buildings, a 115-kV substation, and associated parking lots on the north and south sides of Pajarito Road. Construction and operation of

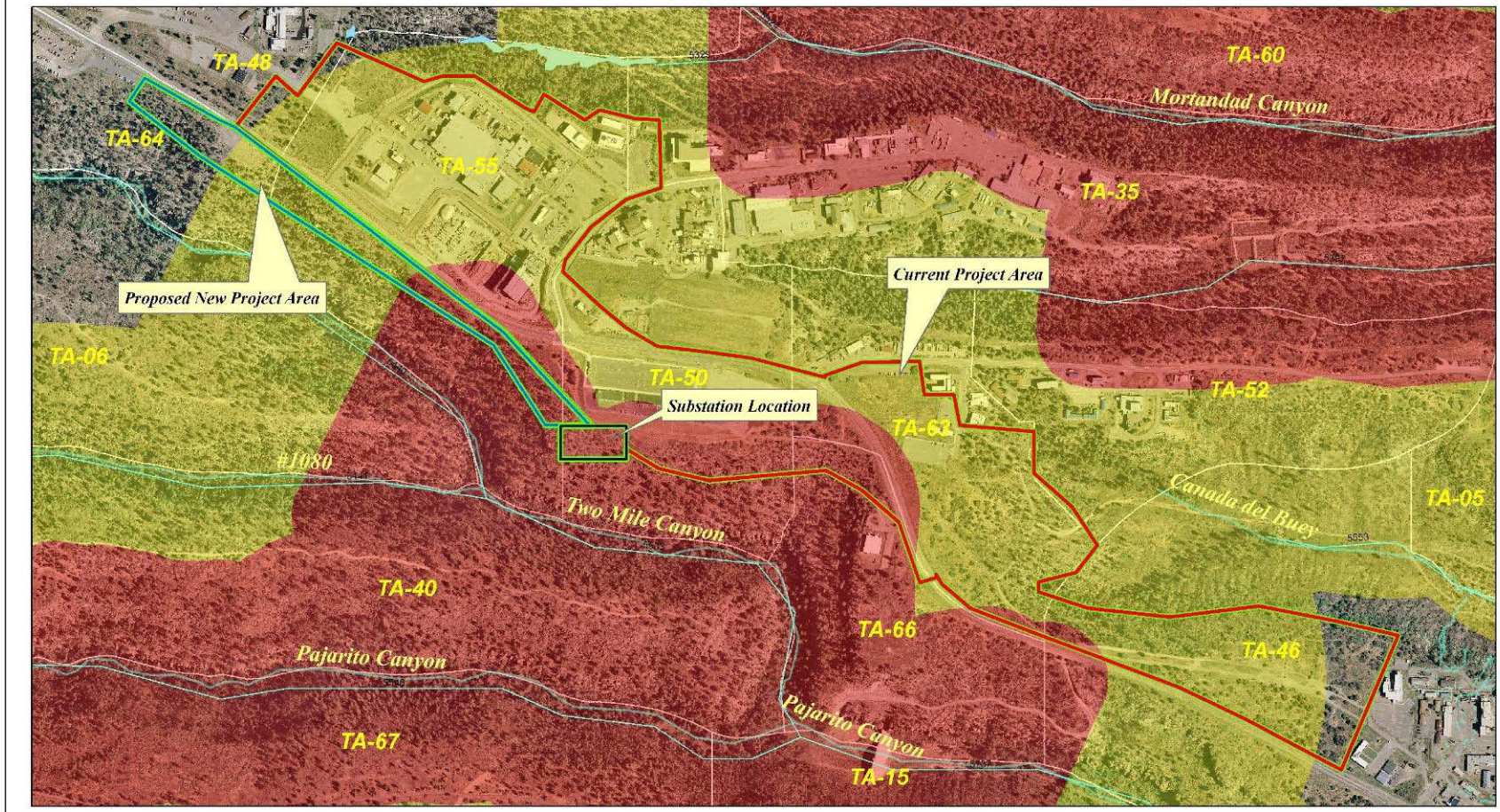
these facilities were assessed in the *Biological Assessment: The Potential Effects of the Chemistry and Metallurgy Research Facility Replacement Project on Federally Listed Threatened, Endangered, and Sensitive Species (Keller2003, 2004) and the Amended Biological Assessment: The Potential Change in Project Effects of the CMR Facility Replacement Project on Federally Listed Threatened and Endangered Species (Keller 2006, 2007a).* This assessment describes movement of the project area to the edge of Two-mile Canyon, including moving underground utilities followed by the movement of Pajarito Road to the south by one roadbed width and moving the 115-kV substation to the south edge of the canyon. As part of the road construction, a retaining wall will be built at the canyon edge, including across the three small side drainages (Figure 2) and then backfilled to make the new road way. Culverts that exist in these drainages will be extended to the new wall at the canyon edge. The project area for the CMR replacement (CMRR) facility contains and is surrounded by suitable Mexican spotted owl (Strix occidentalis lucida) habitat. Once the CMRR is completed, the spoils, equipment, cement plant, and any associated fencing will be removed and the site rehabilitated, unless a subsequent assessment addresses future use of the site.

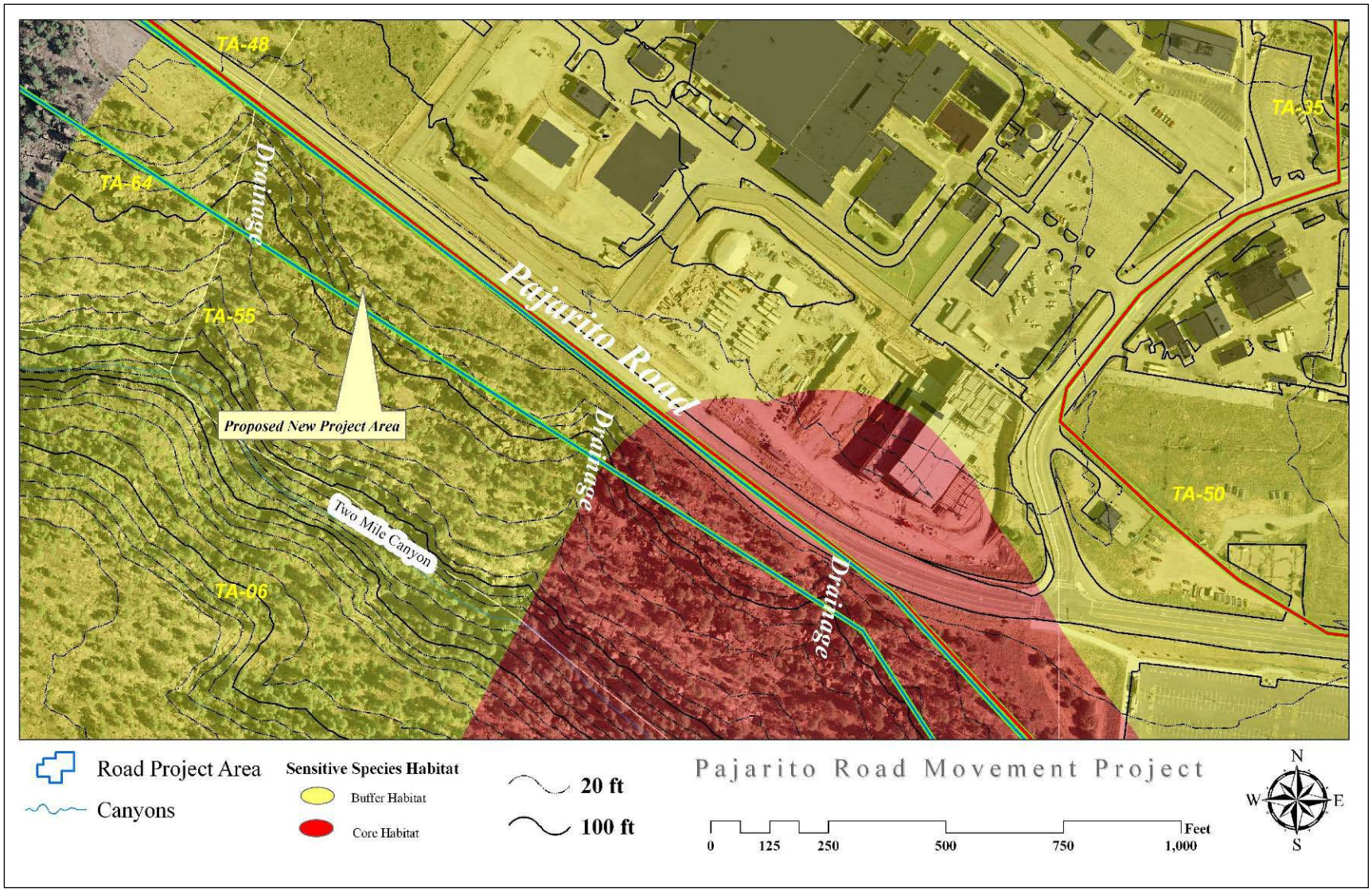
The proposed additional habitat removal will comprise an area of 6 ha (14 ac) of mostly undisturbed mesa habitat just south of the existing Pajarito Road. The total of approximately 58.61 ha (144.85 ac) of sensitive habitat includes approximately 12.91 ha (31.89 ac) of core and 45.71 ha (112.96 ac) of buffer habitat within Mexican spotted owl Areas of Environmental Interest (AEIs). This is an increase of 4.21 ha (10.40 ac) of sensitive habitat in the new 5.61-ha (13.87-ac) proposed project area from the previous consultation. This is less than 1% of the total habitat in Pajarito or Sandia-Mortandad canyons Mexican spotted owl AEIs. The land proposed for the road move is approximately 40% disturbed with the remainder of the location covered with native vegetation. The site consists of ponderosa pine (*Pinus ponderosa* P. & C. Lawson), piñon pine (*Pinus edulis* Engelm.)-juniper (*Juniperus monosperma* Englem. Sarg.), and grassland on the mesa top with mixed conifer forest in Mortandad, Ten-site, Two-mile, and Pajarito canyons.

Ecology and Air Quality Group (EAQ) biologists conducted surveys to determine the status of any threatened and endangered species (TES) at the proposed CMRR location and adjacent habitats. This assessment discusses specific survey methodologies and the subsequent results, potential impacts, and reasonable and prudent alternatives for this project.

EAQ biologists conducted TES surveys to ensure compliance with federal legislation. These include the Endangered Species Act (ESA), 10 CFR 1022, and the National Environmental Policy Act. Section 7 of the ESA requires federal agencies to ensure that their activities and programs do not jeopardize the continued existence of any federally listed threatened or endangered species or its designated critical habitat.

Project Footprint


TA-48
TA-64
TA-55
TA-60
Mortandad Canyon
TA-35
Proposed New Project Area
Current Project Area
TA-06
TA-50
Substation Location
TA-52
TA-63
#1080
Two Mile Canyon
Canada del Buey
TA-05
TA-40
TA-66
TA-46
Pajarito Canyon
Pajarito Canyon
TA-67
TA-15
Substation
Road Project Area
Current Project Area
Canyons
Sensitive Species Habitat
Buffer Habitat
Core Habitat
Pajarito Road Movement Project
0
375
750
1,500
2,250
3,000
Feet
N
W
E
S


TA-48
TA-64
TA-55
TA-06
TA-35
TA-50
Drainage
Drainage
Drainage
Pajarito Road
Proposed New Project Area
Two Mile Canyon
Road Project Area
Canyons
Sensitive Species Habitat
Buffer Habitat
Core Habitat
20 ft
100 ft
Pajarito Road Movement Project
0
125
250
500
750
1,000
Feet
N
W
E
S

Required Reasonable and Prudent Measures

Mexican Spotted Owl

- The lighting will meet the New Mexico Sky Lighting Act requirements.
- The lighting of the road will be limited to the south side of the road and will be shielded and face north to limit the light pollution in Two-mile Canyon as much as possible.
- Keep disturbance and noise to a minimum at the site.
- Areas of lowest tree density should be used when choosing any access routes.
- No cutting of trees larger than 20 cm (8 in.) in diameter at chest height can take place in the canyon or directly on the canyon rim outside of the road relocation area.
- At least a single row of trees on the rims of canyons will be left to provide a screen for the canyon habitat, including where possible in the new road area.
- Seasonal occupancy surveys will be done by LANL biologists and any detection will be reported to project personnel and the USFWS.
- The final lighting of the facilities and roads will be kept as limited as possible and designed to limit lighting of the surrounding forest and canyon as much as possible.
- Appropriate erosion and runoff controls must be employed to reduce erosion to storm water standards and limit sedimentation reaching the canyon and periodically checked throughout the life of the project.
- Excessive parking areas or equipment storage areas, off-road travel, materials storage areas, and crossing of streams or washes must be avoided throughout the life of the CMRR construction.
- All exposed soils must be re-vegetated with approved native seed mix as soon as possible after construction to minimize erosion.
- All trees planted in association with the construction of the CMRR must be native species appropriate for this elevation and forest type.
- All equipment maintenance and fueling must be completed at least 30 m (100 ft) from the stream channel.
- The new temporary staging areas will be rehabilitated using native vegetation following the action or re-consultation will be provided to describe the new use of the site.

Biological Assessment of the Continued Operation of Los Alamos National Laboratory on Federally Listed Threatened and Endangered Species (LA-CP-06-0188)

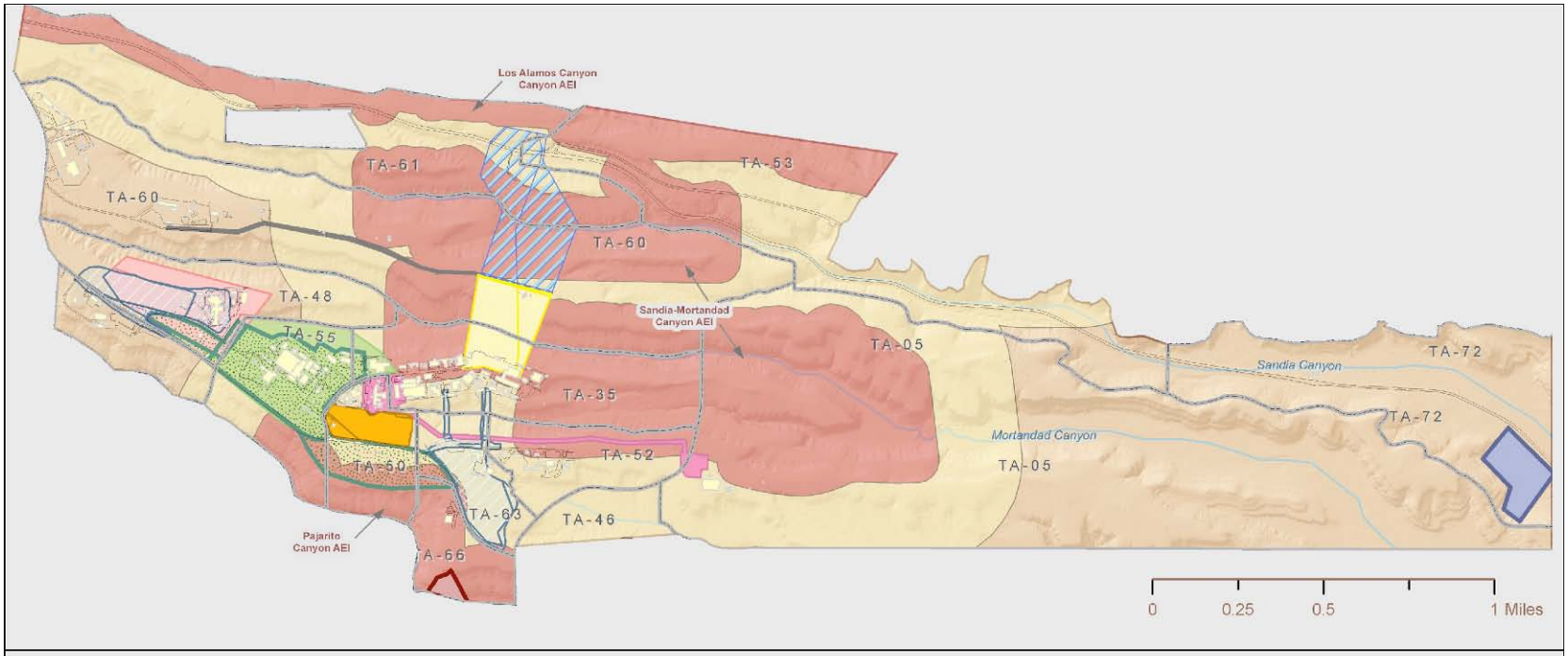
Project Description

The current LANL warehouse facility at TA-3 is not properly equipped or constructed to meet the post-9/11 security requirements. Furthermore, the location of the current TA-3 warehouse facility requires offsite vehicles to travel through the densely populated TA-3 areas. The relocation and construction of a consolidated Warehouse Replacement Facility and Truck Inspection Complex would solve existing operational problems and provide many long-term benefits.

The Warehouse Replacement Facility Project would relocate functions from TA-3 to a site in TA-72 on the south side of East Jemez Road about 1 mile (1.6 kilometers) west of SR 4 (see Figure 6-3). In addition, the truck inspection station would be relocated from its current location, on the northwest corner of SR 4 and East Jemez Road, to the new Warehouse Replacement Facility site. The site is approximately 0.5 mile (0.8 kilometer) east of the PTLA shooting range that is located north of East Jemez Road, and is in Santa Fe County not far from lands belonging to San lldefonso Pueblo.

There would be an 85,000-square-foot (7,650-square-meter) warehouse, a 12,000-squarefoot (1,080-square-meter) office building, a 400-square-foot (36-square-meter) truckers' rest lounge, a dog kennel, and a 600-square-foot (54-square-meter) guardhouse. The truck inspection station would entail approximately 50,000 square feet (4,500 square meters) of paved area. Upon completion of the proposed project, the location of the current truck inspection station on East Jemez Road would be returned to natural condition. The area affected by construction of the Warehouse Replacement Facility Project and truck inspection station could comprise up to 16 acres (6.5 hectares) and include the actual facilities, parking, staging areas, and perimeter fencing. There would also be modifications made along East Jemez Road to accommodate safety and access improvements. Construction would take between 18 and 24 months.

Project Footprint



Legend

- Drainages
- Roads, paved
- Buildings/Structures
- TA Boundaries
- Sigma Mesa-Pajarito West Corridor Planning Area

Mexican Spotted Owl AEIs

- Buffer Habitat
- Core Habitat

Proposed Project Areas

- FRS and Retaining Wall
- MDA C
- NMSSUP
- New CMRR
- Option A - Bridge in Mortandad Canyon
- Option B - Bridge in Sandia Canyon
- Paving Sigma Mesa Road
- RLWTF
- TA-48 Radiological Institute
- TA-72 Warehouse and Truck Replacement Station
- Transportation Modifications

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Required Reasonable and Prudent Measures

Bald Eagle

- No potential bald eagle winter roosting trees would be disturbed during project activities.
- Presence or absence of bald eagles would be monitored during project activities in the fall and winter (November 1–March 31). If a bald eagle is present within 400 m (0.25 mi) of the project area in the morning before project activity begins, or arrives during breaks in project activity, the contractor would be required to suspend all activity until the bird leaves of its own volition; or a ENV-ECO biologist, in consultation with the USFWS, determines that the potential for harassment is minimal.
- If bald eagles are consistently found in the immediate project area during the construction period, an ENV-ECO biologist would informally contact the USFWS to determine if formal consultation under the ESA is necessary.
- All new lighting must be in compliance with the New Mexico Night Sky Protection Act which states that light rays emitted by the fixture, either directly from the lamp or indirectly from the fixture, must be projected below a horizontal plane running through the lowest point on the fixture where light is emitted. Lights will be directed away from canyons.
- Disturbance and noise would be kept to a minimum during project activities.
- Appropriate LANL-approved erosion and runoff controls will be employed and periodically checked throughout the life of the project.
- Avoid unnecessary disturbance to vegetation. Examples include excessive parking areas or equipment storage areas, off-road travel, materials storage areas, and crossing of streams or washes.
- All exposed soils must be re-vegetated as soon as feasible after project activities to minimize erosion. All trees and other plant species that are used for re-vegetation purposes will be native species appropriate for the natural vegetation and the habitat conditions of the surrounding area.