



Bohn Park Construction Phase II

Environmental Assessment
Bohn Park Construction Phase II
Project Number: PW 1078 (20E-2)
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FEMA

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SECTION ONE INTRODUCTION	1
1.1 OVERVIEW	1
1.2 BACKGROUND	1
SECTION TWO PURPOSE AND NEED.....	3
2.1 STATEMENT OF PURPOSE	3
2.2 DESCRIPTION OF PROPOSED ACTION	3
2.3 EXISTING CONDITIONS AND TRENDS.....	4
SECTION THREE ALTERNATIVES	5
3.1 INTRODUCTION	5
3.2 ALTERNATIVES CONSIDERED	6
3.2.1 Alternative 1: No Action	6
3.2.2 Alternative 2: Bohn Park Phase II Project Construction (Proposed Action).....	6
3.3 ALTERNATIVES NOT CONSIDERED	6
SECTION FOUR AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	7
4.1 PHYSICAL ENVIRONMENT	7
4.1.1 Geology and Soils	7
4.1.2 Water Resources and Water Quality	7
4.1.3 Air Quality.....	9
4.2 BIOLOGICAL ENVIRONMENT	10
4.2.1 Terrestrial and Aquatic Environment.....	10
4.2.2 Threatened and Endangered Species	10
4.2.3 Migratory Birds.....	13
4.3 HAZARDOUS MATERIALS	14
4.4 SOCIOECONOMICS	15
4.4.1 Zoning, Land Use, Town Revenue	15
4.4.2 Visual Resources.....	16
4.4.3 Noise.....	17
4.4.4 Public Services and Utilities.....	18
4.4.5 Transportation.....	19
4.4.6 Environmental Justice	19
4.4.7 Health and Safety	20
4.5 HISTORIC AND CULTURAL RESOURCES	20
SECTION FIVE CUMULATIVE IMPACTS.....	23
5.1 No Action – Cumulative Impacts	23
5.2 Proposed Action – Cumulative Impacts	23
SECTION SIX SUMMARY OF IMPACTS	25
SECTION SEVEN PUBLIC INVOLVEMENT	27
7.1 PUBLIC NOTICE OF AVAILABILITY FOR DRAFT COMMENTARY	27
7.2 PUBLIC COMMENTS	27

SECTION EIGHT | LIST OF PREPARERS 29

SECTION NINE | REFERENCES 30

TABLES

Table 1 Federally Listed Species with Potential to Occur in Boulder County, Colorado..... 11
Table 2 Tribal Consultation Contacts 21
Table 3 Summary of Environmental Impacts 25

APPENDICES

Appendix A: Bohn Park Phase II Project Area
Appendix B: Draft Memorandum of Agreement

ACRONYMS AND ABBREVIATIONS

BMP	Best Management Practice
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CPW	Colorado Parks and Wildlife
DHSEM	Colorado Division of Homeland Security and Emergency Management
EA	Environmental Assessment
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
HUD	U.S. Department of Housing and Urban Development
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NOx	Oxides of Nitrogen
PA	Public Assistance
PAAP	Public Assistance Alternative Procedure
REC	Recognized Environmental Condition
SRIA	Sandy Recovery Improvement Act
SWMP	Stormwater Management Plan
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service

SECTION ONE | INTRODUCTION

1.1 OVERVIEW

This Environmental Assessment (EA) was prepared in accordance with Unified Federal Review as outlined in the Sandy Recovery Improvement Act (SRIA), Section 6: Unified Federal Review, which mandates the establishment of an “...expedited and unified interagency review process to ensure compliance with environmental and historic requirements under Federal law relating to disaster recovery projects, in order to expedite the recovery process, consistent with applicable law.”^{1, 2, 3}

The Federal Emergency Management Agency (FEMA) derives its authority to perform restoration assistance missions from the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act),⁴ and its implementing regulations

This EA has been prepared to analyze the potential environmental consequences associated with the proposed action and no action alternative in accordance with the National Environmental Policy Act of 1969 (NEPA)⁴, the Council on Environmental Quality (CEQ) implementing regulations⁵ and the Emergency Management and Assistance Code of Federal Regulations (CFR)⁶ and FEMA Directive 108-1.

1.2 BACKGROUND

On September 14, 2013, FEMA announced that the President authorized Federal disaster aid to be available to Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Crowley, Denver, El Paso, Fremont, Gilpin, Jefferson, Lake, Larimer, Lincoln, Logan, Morgan, Sedgwick, Washington, and Weld Counties, and ordered Federal aid to supplement recovery efforts in the area affected by severe storms, flooding, landslides, and mudslides during the period of September 11, 2013 to September 30, 2013. The President's action (FEMA-4145-DR-CO) makes Federal funding available to the affected members of the before listed counties.

¹ Library of Congress. H.R.219 – Sandy Recovery Improvement Act of 2013 113th Congress (2013-2014). <https://www.congress.gov/bill/113th-congress/house-bill/219>. Accessed 12/09/2014

² Federal Emergency Management Agency (FEMA). Sandy Recovery Improvement Act of 2013. <https://www.fema.gov/sandy-recovery-improvement-act-2013>. Accessed 12/09/2013

³ Federal Emergency Management Agency (FEMA). Unified Federal Environmental and Historic Preservation Review for Presidentially Declared Disasters. <https://www.fema.gov/unified-federal-environmental-and-historic-preservation-review-presidentially-declared-disasters>. Accessed 12/09/2014

⁴ 42 United States Code [U.S.C.] 55 § 4321 et seq.

⁵ 40 CFR 30 § 1500 et seq.

⁶ FD 108-1 Environmental Planning and Historic Preservation Responsibilities and Program Requirements Issue Date: 08/22/2016 (supersedes 44 CFR Ch. I Part 10)

This EA evaluates the action undertaken by FEMA and other Federal Agencies (referred to hereafter as ‘The Agencies’) to provide financial support to the Town of Lyons and provides the public and decision-makers with the information required to understand and evaluate the potential environmental consequences of these actions and to consider these impacts in decision making. FEMA acknowledges that construction has begun on the preferred (PHASE II) alternative and refrained from making a NEPA determination until consultation with the Office of the State Historic Preservation Officer (SHPO) is completed (consultation letter sent November 30, 2018; interested party/tribal notification letters sent November 16, 2018).

This EA documents NEPA compliance for the following Project:

- Bohn Park Construction Phase II

The Project Area for this EA is located in the Town of Lyons (Appendix A).

Location

The Town of Lyons is a statutory town located in Boulder County, Colorado, United States. The population was 2,033 at the 2010 census and estimated at 2,053 by the 2016 American Community survey from the United States Census Bureau.⁷

⁷ Census Bureau American FactFinder:
https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml?src=bkmk

SECTION TWO | PURPOSE AND NEED

2.1 STATEMENT OF PURPOSE

The purpose of the Bohn Park Phase II Project is to repair and restore recreational amenities and other Town of Lyons facilities within the 16-acre Project Area that were damaged or destroyed during the September 2013 flood. The proposed Project is necessary to return the Park to full use and to reduce the risk of future significant flood damage to these facilities and supporting infrastructure.

Bohn Park is located at the confluence of North and South St. Vrain creeks in Lyons, Colorado. On September 12, 2013 record levels of rainfall resulted in flows of over 26,500 cubic feet per second (CFS) in a reach of the Creek where average flows of 67 CFS were normal during the month of September. Prior to the flood Bohn Park was Lyons' largest and increasingly popular park. Visitation peaked during summer weekends when it was common for 300 to 500 residents and visitors to be present during a single day.

Most of Lyons major athletic facilities were located in Bohn Park including two baseball/ softball fields, batting cage, playground, multi-use soccer field, concession stand, and whitewater features. Picnic areas, shelters, restrooms, the Lyons Dirt Jump Bike Skills Park, Bohn Bark Dog Park, Lyons Community Garden, and a multi-use sport court were also located within the Park. The Town's Parks and Public Works maintenance and storage facility building, and yard were also located near the northeast boundary of the Park within the floodplain of St. Vrain Creek on the east side of 2nd Avenue directly across from the Bohn Park entrance, near the 2nd Avenue Bridge. Most of these amenities and associated utilities were damaged or completely destroyed during the flood.

2.2 DESCRIPTION OF PROPOSED ACTION

The Bohn Park Construction Project consists of two phases of work. This phasing was identified by the Lyons Board of Trustees through the flood recovery process based on prioritization of all ongoing Town flood recovery projects and available cash flow during recovery. The preferred alternate Bohn Park Plan was identified in the Final Planning Report for the Town of Lyons Parks Flood Recovery Planning Process (DHM 2016) and adopted by the Lyons Board of Trustees by resolution on March 21, 2016. Phase I focused on approximately 14 acres of previously disturbed ground of the river corridor and involved riverine and riparian restoration, construction of trails, river access for instream recreational activities and fishing, picnic shelters and restrooms, and parking lots. Phase I construction (with the exception of an irrigation system pump house) was completed in summer 2018.

Phase II of the Project is the subject of this EA and will result in reconstruction of some of the recreational amenities that were present at Bohn Park prior to the flood in upland areas to make them more resilient in the event of future flooding. The proposed Phase II actions will

affect approximately 16 acres of previously undisturbed land. Two baseball/softball fields, a special event and multi-use field/area, an open field/natural area, picnic shelters, and associated trails and amenities, will be relocated and reconstructed in the areas of Bohn Park outside the floodplain. A skate park/plaza, and a custom picnic shelter, will also be constructed.

Implementation of the Proposed Action would benefit the Town of Lyons and surrounding communities by restoring the recreational amenities that existed prior to the 2013 flood and by providing a more resilient regional park.

2.3 EXISTING CONDITIONS AND TRENDS

Completion of the Phase I Bohn Park Project in 2018 has resulted in stabilization of the St. Vrain Creek channel and restoration of the river corridor, including trail, river access, and picnic facilities. Reestablishment of riparian vegetation along the creek banks has been completed.

Work on Phase II of the Project began in February 2018. Grading to remove sediment and debris deposited in the Phase II Project Area during the flood was completed during January 2014 and the debris was disposed of in appropriate landfill locations or staged in the Bohn Park Phase II area along with material from other flood-recovery projects. Grading to prepare the planned baseball and multipurpose field sites for development was initiated in February 2018. Stockpiles of boulders, excavated debris, and other materials were established along the western boundary of the area during that period. Machinery, construction materials, and yard supplies are also being stored in this location.

Phase II construction work was suspended following a March 22, 2018 site inspection by FEMA and DHSEM. Bare ground is present within much of the Phase II Project Area, except where weeds and other volunteer vegetation have become established.

SECTION THREE | ALTERNATIVES

3.1 INTRODUCTION

The Town of Lyons initiated a detailed planning process in August 2015 to evaluate a range of alternatives for restoration of parks, trails, and other recreational amenities that were destroyed during the 2013 flood. This process involved an inventory of post-flood conditions, an ecological assessment, and an initial planning process during which three alternative concepts were developed based on public and stakeholder input. The Final Planning Report of the Lyons Parks Flood Recovery Planning Process (DHM 2016) was adopted by the Town Board of Trustees on March 21, 2016. A full history of the planning process, meeting notes, public comment, and proposed plans, including the final adopted plan, can be accessed at www.lyonsparksmp.com.

Two conceptual alternate plans for Bohn Park were developed incorporating public and stakeholder input during the initial planning process. Both plans integrated ecological restoration within the floodplain, and restoration of the Creek to pre-flood conditions with pre-flood amenities, including instream recreational facilities, the river walk trail, and overlooks, including the Bohn Park 4th Avenue pedestrian bridge. The two conceptual alternate plans considered different configurations and sizing of baseball fields, multi-use sport fields, access road and parking areas, as well as additional recreational elements. Through the public engagement process, a final preferred plan for restoration of Bohn Park that incorporated elements of both of the alternate plans was developed.

A final preferred alternate design was developed for restoration of Bohn Park based on the two conceptual alternate plans derived from the public planning process. Construction plans were developed for the Bohn Park Phase II Project based on the preferred plan. In December 2017 the Town awarded a contract for construction of the Bohn Park Phase II Project and construction was initiated on January 9, 2018. Following a routine site inspection on March 22, 2018 FEMA and the Colorado Division of Homeland Security and Emergency Management (DHSEM) requested that the Town suspend construction on Phase II of the Bohn Park Project and conduct an Environmental Assessment to meet NEPA requirements for the proposed actions in the previously undisturbed areas of the Project. FEMA has directed the Town to evaluate the final preferred plan as the Proposed Action and a no action alternative in the EA.

3.2 ALTERNATIVES CONSIDERED

3.2.1 Alternative 1: No Action

Under the No Action Alternative, FEMA Public Assistance funding would not be provided to the Town of Lyons and the Bohn Park Phase II Project would not be completed.

Recreational amenities that existed prior to the flood would not be restored. Areas selected for upland park development in the parks flood recovery Final Plan would be revegetated to achieve final stabilization to meet requirements for closure of the stormwater construction discharge permit issued by the Colorado Department of Public Health and Environment (CDPHE 2018) for the Project.

3.2.2 Alternative 2: Bohn Park Phase II Project Construction (Proposed Action)

Construction of the Bohn Park Phase II Project would proceed under the Proposed Action and would create park and other recreational facilities identified in the Bohn Park Phase II project limits in the preferred plan/construction plans. The preferred plan for Bohn Park, as presented in the Town of Lyons Parks Recovery Planning Process Final Planning Report, was adopted by the Town of Lyons Board of Trustees on March 21, 2016. Construction plans were developed for the Bohn Park Phase II Project based on the preferred plan. In December 2017, the Town awarded a contract for construction of the Bohn Park Phase II Project and construction was initiated on January 9, 2018. The goal is to continue this construction per these plans and reconstruct some of the recreational amenities that were present at Bohn Park prior to the flood in areas outside the floodplain to make them more resilient in the event of future flooding. Two baseball/softball fields, a special event and multi-use field/area, an open field/natural area, picnic shelters, and associated trails and amenities, will all be reconstructed in the upland area of Bohn Park. A skate park/plaza, custom picnic shelter, and a pumphouse in the Phase I area will also be constructed. Potable water, electric and associated required lighting will also be supplied.

3.3 ALTERNATIVES NOT CONSIDERED

No construction alternatives to the preferred plan for the Bohn Park Phase II Project were considered, because other practical alternatives were evaluated with public and stakeholder input during the Town of Lyons Parks Flood Recovery Planning Process (DHM 2016) and were eliminated from consideration.

SECTION FOUR | AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

4.1 PHYSICAL ENVIRONMENT

4.1.1 Geology and Soils

Affected Environment

The Bohn Park Phase II Project Area encompasses approximately 16 acres situated on a fluvial terrace south of the confluence of the mainstem of St. Vrain Creek with the South Fork of St. Vrain Creek in the Town of Lyons, which is located in Boulder County, Colorado. Elevation ranges from approximately 5,340 feet (ft) to 5,360 ft above mean sea level.

Environmental Consequences

Alternative 1 – No Action

Project construction would not proceed under the No Action Alternative, but soils within the Bohn Park Phase II Project Area would be graded, amended, and seeded to achieve final stabilization as required to close the CDPHE construction stormwater discharge permit that was issued before initial construction activities began.

Alternative 2 – Proposed Action

Additional grading of the Project Area would be required prior to spreading of imported topsoil, seeding, and sodding. Existing landform and elevation of Project Area would not be altered.

4.1.2 Water Resources and Water Quality

Affected Environment

Waters of the U.S.

No Waters of the U.S. will be affected by the proposed project.

Floodplains

EO 11988 requires that Federal agencies consider the effect of their actions on the floodplain, to evaluate alternatives to taking action in the floodplain, and to provide an opportunity for public comment if there is no practicable alternative. The Project Area is located south of St. Vrain Creek, and portions of the Project Area in the northeastern and northwestern extent do

extend slightly into the 100-year floodplain. The northern extent of the Project Area also extends into the 500-year floodplain (see Appendix A).

Wetlands

EO 11990 requires that Federal agencies minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. The order requires Federal agencies to consider project alternatives to sites with wetlands and limit potential damage if an activity affecting a wetland cannot be avoided. This Proposed Action would not involve construction in wetlands, marshes, wet meadows, mud flats, or natural ponds.

Water Quality

Wastewater treatment services are currently provided for Bohn Park at the Lyons Wastewater Treatment Plant. Stormwater runoff from the Project construction area is being managed in accordance with requirements of a CDPHE Stormwater Discharge Associated with Construction Activities Permit and Stormwater Management Plan (SWMP).

Environmental Consequences

Alternative 1 – No Action

Activities required to achieve final stabilization of the Project Area under the No Action Alternative would not affect floodplain or wetland resources as none are present. No impacts to water quality would occur under the No Action Alternative.

Alternative 2 – Proposed Action

Floodplains

The northwest corner of the Project Area extends slightly into the 100-year floodplain. However, the only activities proposed in this area include light grading and seeding. There will be no utilities, landscaping, or recreation facilities (including trails). In the northeast corner, a crusher fine path terminates just inside of the 100-year floodplain. This path connects to parking and other facilities that were constructed during Phase I. It is only used for vehicle traffic during special events and is otherwise used by pedestrians. The extent of work within the 100-year floodplain would be limited to a small area at the northwest edge of the Project Area that will be grade and seeded, and a small area of the driveway at the northeast edge of the Project Area as identified in Appendix A. These actions would not affect the extent or function of the floodplain.

The portion of the Project Area that occurs within the 500-year floodplain does not include any critical facilities (e.g. hospitals, nursing homes, police stations, fire stations, and roadways providing sole egress from flood-prone areas). The Proposed Action will not affect floodplains.

Wetlands

No wetlands or other Waters of the U.S. would be affected by construction, or by post-construction use of the Bohn Park Phase II area.

Water Quality

The Proposed Action would not affect water quality in the Project Area or elsewhere in the Town. Wastewater treatment services that are currently provided for Bohn Park at the Lyons Wastewater Treatment Plant would continue. No changes to current treatment operations would be required under the Proposed Action. Following completion of construction activities, the Project Area will meet requirements for final stabilization, and the construction stormwater discharge permit will be closed.

4.1.3 Air Quality

Affected Environment

The Project Area is located in Boulder County which is a National Ambient Air Quality Standards (NAAQS) attainment area for all criteria air pollutants except the 8-Hour Ozone 2008 Standard⁸. The Proposed Action would be exempt from permitting under the CDPHE General Construction Permit and would not require notification to the CDPHE.⁹

Environmental Consequences

Alternative 1 – No Action

No impacts to air quality would occur under the No Action Alternative.

Alternative 2 – Proposed Action

Air quality in the Project Area and surrounding areas of the Town would not be affected by the Proposed Action. Tailpipe emissions, which include oxides of nitrogen (NO_x, a precursor of ground level ozone), from vehicles and earthmoving equipment during construction will be controlled by the manufacturer's factory-installed pollution controls. Particulate emissions will

⁸ https://www3.epa.gov/airquality/greenbook/anayo_co.html

⁹ 5 CCR 1001-5- Part B

be generated during construction under the Proposed Action and will be controlled by implementing Best Management Practices (BMPs) including watering of unpaved surfaces, control of vehicle speeds below 30 miles per hour (mph), and suspension of earthwork activities when wind speeds exceed 30 mph. All areas disturbed by construction of the Project would be revegetated within one year of initiation of construction.

4.2 BIOLOGICAL ENVIRONMENT

4.2.1 Terrestrial and Aquatic Environment

Affected Environment

Riparian vegetation, including cottonwood and box elder trees, willows, and other shrubs, occurs along the western, northern, and eastern borders of the Project Area. The balance of the area had been seeded or sodded with non-native grasses that formed the predominate vegetative cover prior to the 2013 flood. Sediment, cobbles, and debris were deposited by the flood across much of the northern quadrants of the Project Area. Limited habitat is present for resident wildlife species characteristic of the foothills of the Front Range of Colorado due to alteration of the land and the character of vegetative cover prior to and following the flood.

Environmental Consequences

Alternative 1 – No Action

Revegetation of the Project Area to achieve final stabilization under the No Action Alternative would restore terrestrial habitat to pre-flood condition and would result in only minor beneficial effects to biological resources.

Alternative 2 – Proposed Action

Revegetation of the Project Area will improve existing habitat conditions for terrestrial wildlife species; however, the extent and magnitude of such effects would be only minor and limited due to frequent human activity.

4.2.2 Threatened and Endangered Species

Affected Environment

No critical habitat for federally listed species has been designated in the St. Vrain Creek watershed. Twelve federally listed threatened and endangered species are identified by the US Fish and Wildlife Service (USFWS 2018) as potentially occurring in Boulder County. Habitat for four of these species does not occur in Boulder County; however, water-related activities or use in the North Platte, South Platte and Laramie River Basins may affect downstream habitats for

these species in Nebraska. The Proposed Action will not affect flows in St. Vrain Creek, and potable water for the Town is purchased from the City of Longmont. The Town is pursuing a supply of non-potable water for irrigation at Bohn Park from the St. Vrain Left Hand Water Conservancy District, which is a member of the South Platte Water Related Activities Program (SPWRAP). SPWRAP conducts mitigation efforts in the South Platte River basin to protect listed species. The Proposed Action, therefore, will not affect downstream species, and these species are not considered in evaluation of the Proposed Action.

Table 1. Federally Listed Species with Potential to Occur in Boulder County, Colorado.

Species	Status*	Evaluation of Potential Presence of Suitable Habitat in the Project Area
BIRDS		
Mexican Spotted Owl, <i>Strix occidentalis lucida</i>	T	Suitable habitat for the owl consists of old growth forests and rock outcrops in steep canyons. Colorado Parks and Wildlife (CPW) does not include any of the Project Area in its map of “potential suitable habitat” for the owl (2017). Any owls in the Lyons area would be more likely to occur farther upstream where the canyons are steeper, and the vegetation is more characteristic of a forest ecosystem. The only designated critical habitat for the owl in Colorado occurs in Douglas County, over 50 miles to the south. Potentially suitable habitat is not present within the Project Area.
FISH		
Greenback cutthroat trout, <i>Oncorhynchus clarki stomias</i>	T	The trout is found in cold, clear, oxygenated streams of moderate gradient. Overhanging branches undercut banks and eddies behind rubble provides essential feeding and resting habitat. Potentially suitable habitat in St. Vrain Creek was largely destroyed by the flood. Furthermore, recent genetic analysis has shown that the only true population of the trout currently survives in Bear Creek west of Colorado Springs (Metcalf et al. 2012). Potentially suitable habitat is not present within the Project Area.
MAMMALS		
Canada lynx, <i>Lynx canadensis</i>	T	Northern coniferous forests are the preferred habitat of the lynx. The range of lynx in Colorado has been mapped by CPW and does not extend east of the mountains of western Boulder County (CPW 2017). Potentially suitable habitat is not present within the Project Area.
North American wolverine, <i>Gulo gulo luscus</i>	PT	The wolverine occurs in a wide variety alpine, boreal, and arctic habitats. They select areas that maintain deep and persistent snow late into the warm season, and as a result occur in Colorado at high

		altitude. Potentially suitable habitat is not present within the Project Area.
Preble's meadow jumping mouse, <i>Zapus hudsonius preblei</i>	T	The entire Project Area is considered to be within the "occupied range," for the mouse, as mapped by CPW (2017). Habitats within the Project Area were heavily disturbed during development of park facilities before the flood. Post-flood consultation with the USFWS (October 13, 2015) reached the conclusion that much of the suitable habitat conditions were damaged or destroyed during the flood, and the mouse is presumed to have been eliminated from Lyons during the flood.
PLANTS		
Colorado butterfly plant, <i>Gaura neomexicana</i> var. <i>coloradensis</i>	T	The Colorado butterfly plant occurs in sub-irrigated, alluvial soils with mesic moisture regimes in early- to mid-successional plant communities. Although the plant has been historically documented in Boulder County, it is now believed that those occurrences have been extirpated (Colorado Natural Heritage Program 1997+). Much of the potentially suitable habitat for the plant along St. Vrain Creek was scoured away by the flooding. Potentially suitable habitat is not present within the Project Area.
Ute ladies'-tresses orchid, <i>Spiranthes diluvialis</i>	T	The Ute ladies'-tresses orchid is known to occur in seasonally moist soils and wet meadows between 4,500 and 6,500 ft. Boulder County has the most known populations of the orchid in Colorado, with most of the reports occurring in the foothills (Colorado Natural Heritage Program 1997+). However, the plant is sensitive to the flooding that occurs on larger water bodies such as St. Vrain Creek. Potentially suitable habitat is not present within the Project Area.

T = Threatened; PT = Proposed Threatened

Although not listed under the Endangered Species Act (ESA), Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act. An active Golden Eagle (*Aquila chrysaetos*) nest was located above Lavern M. Johnson Park, approximately 0.6 miles to the northwest of Bohn Park during 2015-2018. In December 2015 the Town of Lyons obtained an eagle incidental take permit¹⁰ from the USFWS, as authorized under regulations at 50 CFR 22.26, to provide permit coverage for flood recovery activities conducted in the Town. Monitoring of this nest during 2018 indicated that it was inactive in May and during the summer of 2018; however, this pair of eagles may return to nest during the final construction of the Proposed Action.

Environmental Consequences

¹⁰ Permit Number MB82833B-0

Alternative 1 – No Action

Activities conducted to achieve final stabilization of the Project Area under the No Action Alternative would have no effect on federally listed species. Revegetation of the Project Area would restore grassland habitat for mammals, including cotton-tailed rabbits which are taken as prey by eagles and other raptors, and would have only minor to negligible beneficial effects on these birds of prey.

Alternative 2 – Proposed Action

t

There will be 'no effect' to federally-listed Threatened or Endangered species or designated critical habitats as a result of the Proposed Action.

The Project Area consists of a broad array of habitat and disturbance conditions and is not suitable for the Preble's meadow jumping mouse, Colorado butterfly plant, or Ute ladies'-tresses orchid. The Proposed Action will not affect species that are candidates for listing under the ESA.

Construction activities could result in avoidance of the Project Area by some wildlife species; however, this avoidance would be temporary and would not result in adverse impacts to individuals or populations of threatened, endangered, or other sensitive wildlife, including Golden Eagles that may nest and forage near the Project Area.

4.2.3 Migratory Birds

Affected Environment

The Project Area provides habitat for a variety of bird species protected under the Migratory Bird Treaty Act (MBTA). Habitat for nesting passerines (perching birds) occurs principally on the north margin of the Project Area where a thin strip of tree and shrub cover is present. Habitat value for nesting and foraging birds in the Project Area is limited due to existing built infrastructure and frequent human disturbance.

Environmental Consequences

Alternative 1 – No Action

Revegetation of the Project Area to achieve final stabilization will improve existing habitat conditions for migratory birds; however, the extent and magnitude of such effects would be only minor.

Alternative 2 – Proposed Action

Project construction is likely to result in no more than negligible effects to migratory birds. Revegetation of the Project Area will improve existing habitat conditions for migratory birds; however, the extent and magnitude of such effects would be only minor and limited due to frequent human activity during recreation in the Park.

4.3 HAZARDOUS MATERIALS

Affected Environment

The Project Area was in agricultural use from the 1860s through the early 2000s. After 2001, improvements were made to support use of the area as a park, including grading and sodding of the southeast corner of the site to create a soccer field, construction of a restroom facility immediately north of the soccer field, creation of gravel surfaced pedestrian trails, development of a BMX bike park west of the restroom facility, and a community garden plot to the west of the bike park, and use of the open areas for special events, special event parking, and material storage as needed. Based on historical land use, there is no evidence to suggest that hazardous materials were present prior to the flood.

Flood damage was limited to the northern end of the Project Area. A driveway from Second Avenue to parking at the north end of the Project Area was destroyed by the flood. Deposits of silt, sand, gravel, and cobbles were deepest and most extensive in the northwest corner of the Project Area.

Grading to remove sediment and debris deposited during the flood was completed in January 2014. The excavated materials were either disposed of in appropriate landfill locations or stockpiled in the northeast quadrant of the Bohn Park Phase II area. Grading to prepare the planned baseball and multipurpose field sites for development was initiated in February 2018. Stockpiles of boulders, excavated debris, and other materials were established along the western boundary of the area during that period. When work was halted in March 2018, the site was stabilized and secured, but no debris or other materials were removed.

Environmental Consequences

Alternative 1 – No Action

No hazardous materials are present within the Project Area, and no impacts related to contamination of air, water, or soils would occur under the No Action alternative.

Alternative 2 – Proposed Action

Completion of the Bohn Park Phase II Project would require additional grading and land leveling. There are no elements of the proposed Project that would introduce new sources of potential adverse effects on public health and safety. There are no identified recognized environmental conditions (RECs) within the Project Area, and exposure of construction workers or public citizens to hazardous substances or petroleum products would not occur under the Proposed Action.

4.4 SOCIOECONOMICS

4.4.1 Zoning, Land Use, Town Revenue

Affected Environment

The Project Area was in agricultural use beginning in the 1860s until the early 2000s when it was developed into a Town park under the Lyons 2000 Parks, Open Space, and Trails Master Plan (Lyons 2000). The Town of Lyons owns the entire Project Area. Prior to the 2013 flood, the Town received revenue from special events at Bohn Park, sporting activities, facility rentals, and parking associated with these activities.

Environmental Consequences

Alternative 1 – No Action

Zoning would not be changed under the No Action alternative. The Project Area would require further grading and establishment of groundcover to achieve stabilization but would not be developed for recreational uses at this time. An open grass field would be established during stabilization and would receive significantly less use by the public than the proposed park. The Town would not incur full operations and maintenance costs for the Park which are estimated at \$197,800 annually and would not receive revenues generated through park user fees which, for the full Bohn Park Phase I and II build out, are forecast at \$140,500 annually (DHM 2016). Additionally, indirect impacts to retail businesses in the Town would occur, including reduced revenues from patrons as a result of decreased visitation to Bohn Park. The Town of Lyons Parks fund receives 1% of the Town's overall sales tax proceeds to help offset operations and maintenance costs.

Under the No Action alternative, funding for the Project would not be provided under Section 428 of the Public Assistance Alternative Procedure (PAAP) Pilot Program and the Town would not be able to complete the Bohn Park Phase II Project. The Town has incurred \$730,000 in construction costs for the Project prior to suspension of work. Additional estimated costs of approximately \$55,000 would be incurred to achieve final stabilization of the Project Area and

close the CDPHE construction stormwater discharge permit. These costs, which in total exceed two-thirds of the Town's annual budget, would not be recoverable under the No Action alternative resulting in a major adverse financial impact to the Town.

An additional adverse financial impact to the Town of greater magnitude would occur under the No Action alternative. If the Bohn Park Phase II Project is not completed the Bohn Park Phase I Project would also be considered incomplete and the Town would be at risk of not receiving reimbursement for either of these projects (totaling approximately \$7.5 million) and five additional major flood recovery projects that are underway or planned under the former PAAP program. Approximately \$20 million of funding for flood recovery projects in the Town of Lyons would be at risk under the No Action alternative.

Alternative 2 – Proposed Action

The Proposed Action would result in restoration of the upland portion of Bohn Park in accordance with a final design that was developed with public and stakeholder input. The Proposed Action would conform to zoning and land use plans (i.e., 2010 Town of Lyons Comprehensive Plan, the 2016 Lyons Primary Planning Area Plan, the 2014 Lyons Recovery Action Plan and the 2016 Parks Flood Recovery Planning Process Final Planning Report). The Proposed Action would improve and enhance the local community and economy by restoring park and recreational facilities to meet demonstrated pre-flood, and anticipated future, recreational demands at Bohn Park. The Town would be required to fund operations and maintenance for the Bohn Park Phase II Project Area facilities and would collect revenues from special events and other park use fees. Retail businesses would benefit from increased patronage following restoration of park facilities and increased visitation. The Town of Lyons Parks fund receives 1% of the Town's overall sales tax proceeds to help offset operations and maintenance costs.

The Town would be eligible to recover costs incurred to date and future costs to complete the Proposed Action totaling approximately \$2,951,013. Additionally, PAAP funding for the five additional flood recovery projects planned and underway in the Town would not be placed in jeopardy.

4.4.2 Visual Resources

Affected Environment

At present, the entire Project Area is in a highly disturbed state as a result of construction that was initiated and then suspended. Accordingly, visual contrast in form, line, and texture with the surrounding landscape exists, and the scenic value of the area is low in comparison to pre-flood conditions.

Environmental Consequences

Alternative 1 – No Action

The Project Area would be stabilized and revegetated, and the visual quality of the area would be improved over current conditions. Landscaping amenities planned under the Proposed Action would not be installed, and visual contrast in form, line, and texture between the redeveloped river corridor (Bohn Park Phase I) area and the adjacent stabilized upland (Bohn Park Phase II) area would exist.

Alternative 2 – Proposed Action

Construction of the Proposed Action will restore the landscape and scenic values in the Project Area to pre-flood conditions.

4.4.3 Noise

Affected Environment

Construction of the Proposed Action would occur in an existing park adjacent to a residential neighborhood known as Lyons Valley Park. Sensitive receptors (residences with outdoor activity areas and areas of frequent human use, such as schools) exist immediately east of the proposed Project Area where a residential area and school are located.

Environmental Consequences

Alternative 1 – No Action

A short term increase in daytime ambient noise levels would occur during earth moving and revegetation to achieve stabilization of the Project Area. These impacts would occur over a two-month period.

Alternative 2 – Proposed Action

Earthmoving during construction of the Proposed Action would result in increased noise and vibrations from the machinery during the 6-8-month period necessary to complete the Proposed Action. These impacts would be mitigated through application of Best Management Practices (BMPs) for noise including:

- Ensuring that all construction equipment has the manufacturer's recommended noise abatement devices, such as mufflers, engine enclosures, and engine vibration isolators, and that this equipment is intact and operational.
- Inspecting all construction equipment at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding).
- Turning off idling equipment.
- Implementing a construction noise monitoring program to limit the impacts.
- Planning noisier operations during times least sensitive to receptors.
- Avoiding scheduling construction during nighttime hours (10:00 p.m. to 7:00 a.m.) and on weekends.
- Keeping noise levels relatively uniform and avoiding noise spikes during construction.
- Maintaining good public relations with the community to minimize objections to the unavoidable construction impacts.
- Providing frequent activity updates of all construction activities to the public.

Increased noise and vibrations from earthwork and construction activities could result in avoidance of the Project Area by some wildlife species; however, this avoidance would be temporary and not result in adverse impacts to individuals or populations of threatened, endangered, or other sensitive wildlife (including eagles and other migratory birds). Once earth moving is concluded, noise impacts will be limited in magnitude and duration. After construction of the proposed Project is complete, recreational use of the Bohn Park Phase II area will not result in noise above levels those prevalent within Bohn Park and the adjacent residential area prior to the flood.

4.4.4 Public Services and Utilities

Affected Environment

Public Services

The Town of Lyons provides fire and rescue services throughout the Town, including Bohn Park. The Boulder County Sherriff's Office provides law enforcement services under contract with the Town. The Lyons Middle/Senior High School is located immediately south and east of the Bohn Park Phase II Project Area. The Town of Lyons provides trash and recycling receptacles at the Park which are emptied by staff into roll-off dumpsters located on-site. They are emptied by a waste management service contracted by the Town.

Utilities

Potable water, electricity, and sanitary sewer utility lines that existed pre-flood were reconstructed from 2nd Avenue to the restroom and other site amenities in the Phase I Project Area. These existing lines will be extended for amenities in the Phase II Project Area. Potable water and electricity for the custom shelter will be provided from the restroom in the Phase I Project Area, and electrical conduit will be extended to the northern-most ballfield.

There will also be power pedestals installed along the trail of the special event/multi-use field.

Environmental Consequences

Alternative 1 – No Action

Public services and utilities would not be affected under the No Action Alternative.

Alternative 2 – Proposed Action

No change to existing public services would be required under the Proposed Action. Electric and potable water lines would be constructed in the Project Area to extend service from the existing Bohn Park restroom to the Project Area facilities (Appendix A).

4.4.5 Transportation

Affected Environment

The area that would be affected by the Proposed Action includes the Bohn Park Phase II Project Area and the existing access road that connects it to Second Avenue. Bohn Park is situated along the St. Vrain Corridor Trail which runs along St. Vrain Creek from Highway 7 on the west to the eastern Town limits. No changes to the existing transportation system or traffic patterns would occur under the Proposed Action.

Environmental Consequences

Alternative 1 – No Action

No changes to existing transportation patterns would occur under the No Action alternative.

Alternative 2 – Proposed Action

No adverse short- or long-term impacts to the transportation volume, capacity, and time of transit are expected under the Proposed Action.

4.4.6 Environmental Justice

Affected Environment

Executive Order (EO) 12898 requires that federal actions address environmental justice in minority populations and low-income populations, and measures must be taken to avoid

disproportionately high adverse impacts on minority or low-income communities. The Town of Lyons is not a minority or low-income community, and no such community will be impacted by the Proposed Action.

Environmental Consequences

Alternative 1 – No Action

The No Action Alternative will not adversely impact low income or minority populations.

Alternative 2 – Proposed Action

The Proposed Action will restore and enhance recreational amenities that were present in the Project Area prior to the flood, resulting in only positive impacts to the community. The Proposed Action will not adversely impact low income or minority populations.

4.4.7 Health and Safety

Affected Environment

The Proposed Action would occur within the existing park. When construction was halted in March 2018, the site was fenced off, but it is not completely secure. There are stockpiles of soil and cobble, and there are roughly graded and uneven ground surfaces. Dust is also a concern as the area has not been revegetated.

Alternative 1 – No Action

Under the No Action Alternative, the area would be stabilized to fulfill the conditions for closure of the stormwater construction discharge permit.

Alternative 2 – Proposed Action

Environmental Consequences

The Proposed Action would completely restore the area to a park setting and eliminate the concerns regarding the inactive construction area. The area would be stabilized to fulfill the conditions for closure of the stormwater construction discharge permit.

4.5 HISTORIC AND CULTURAL RESOURCES

Affected Environment

A search of the files of the State Historic Preservation Officer, Office of Archaeology and Historic Preservation, History Colorado (SHPO) conducted on October 11, 2018 by Metcalf Archaeological Consultants, Inc. revealed that two surveys have been conducted in the Project Area legal section with nine resources recorded, but none are located in the Project Area itself. A diverse assortment of property types is represented by the nine previously recorded sites in the Project Area legal section covering the themes of prehistoric archaeology, early settlement, agriculture, irrigation, and transportation. One of these sites is the Bradford homestead that is adjacent to the Project Area and likely eligible for inclusion in the Lyons Stone Buildings multiple property listing.

An intensive cultural resources inventory of the Project Area resulted in the documentation of one segment of the previously unrecorded Reese Stiles Ditch (**5BL.13015.1**). No other cultural resources were found within the Project Area. This segment of the Reese Stiles Ditch (**5BL.13015.1**) was originally built through agricultural fields that are no longer present. A portion of this segment was piped in 2005 during the construction of a soccer field, and the other portion may have been enlarged. This segment has been determined to lack sufficient integrity to support the eligibility of the overall resource of which it is a part, and for which there is no official determination, but it was recommended to be eligible for its association with the development of early irrigation and agriculture in this area.

On-site inspection of the project area indicated deposition of high energy alluvial material which is not conducive to preserving intact cultural material, deposits, or features. Therefore, it is unlikely that the remaining Phase II project activities will encounter or impact any intact deposits with the potential to yield intact cultural materials or features.

Environmental Consequences

Alternative 1 – No Action

No archaeological or historic resources will be affected by the No Action Alternative.

Alternative 2 – Proposed Action

Consultation with the SHPO was conducted on November 30, 2018. FEMA acknowledged that ground disturbing activities were initiated prior to consultation, and in coordination with SHPO, agreed that a finding of ‘adverse effect’ would be appropriate due to the potential that resources may have been affected. Treatment measures, including installation of interpretive signs within Bohn Park and improved communication of the Section 106 consultation process, are documented in a Memorandum of Agreement (Appendix B).

In addition, if it appears that an undertaking has affected a previously unidentified property or affected a known historic property in an unanticipated manner, the Town of Lyons shall immediately stop all activity in the vicinity of the discovery, shall immediately notify History Colorado office, and shall take all reasonable measures to avoid or minimize harm to that property. No further action would occur within the vicinity of that new discovery until subsequent consultation with History Colorado, participating Tribes, and other consulting parties are complete.

Tribal and other interested party consultation was initiated on November 16, 2018 and completed on December 23, 2018. FEMA coordinated appropriate Tribal consultation with the Southern Ute; Ute Mountain Ute; Eastern Shoshone; Northern Arapahoe; Crow; Northern Cheyenne; Ogallala Sioux; Paiute Tribe of Utah; Rosebud Sioux; and Ute Indian Tribe (Uintah and Ouray Reservation) Tribal Nations; and public outreach with the Colorado Council of Professional Archaeologists; the Colorado Archaeological Society; the Colorado State Historical Society; the Office of the Colorado State Archaeologist; the Dougherty Museum; the Boulder Library; the Boulder History Museum; the Lyons Redstone Museum; the University of Colorado Museum of Natural History; the Longmont Museum; and the Loveland Museum. No comments were received.

SECTION FIVE | CUMULATIVE IMPACTS

The CEQ regulations¹¹ implementing the procedural provisions of NEPA of 1969¹² defines cumulative effects as:

“the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or local) or person undertakes such other action.”¹³

Accordingly, if a project alternative does not result in direct or indirect effects it would not contribute additively to past, present or reasonably foreseeable actions; thus, it would not result in cumulative impacts.

5.1 No Action – Cumulative Impacts

No direct or indirect effects, or cumulative impacts would occur under the No Action Alternative.

5.2 Proposed Action – Cumulative Impacts

Implementation of the Proposed Action would result in no adverse impacts requiring mitigation. The Proposed Action would not impact transportation facilities, safety and occupational health, minority and low-income populations, air quality, water quality or water resources including wild and scenic rivers and rivers on the Nationwide Rivers Inventory, wetlands, floodplains, threatened and endangered species, eagles, and other migratory birds, historic and other cultural resources, or hazardous materials, and no cumulative impacts to these resources will occur.

Noise during the final phase of Project Construction will contribute periodically to background transportation noise during daytime hours; however, these effects will occur only periodically over the 6-8 months that will be required for completion of Project construction. Mitigation measures identified in Section 4.4.3 will be implemented to ensure that the cumulative effect of project construction on sensitive noise receptors near the Project Area will be effectively mitigated, and not significant.

The Proposed Action will contribute cumulatively to renewed economic activity in the Town of Lyons and, in combination with other flood recovery projects, will result in a

¹¹ 40 Code of Federal Regulations [CFR] Section 1500-1508

¹² 42 United States Code [USC] Section 4321

¹³ 40 Code of Federal Regulations [CFR] Section 1508.7

significant positive socioeconomic impact in the Town. The Proposed Action, in combination with post-flood restoration of parks, trails, and other recreational facilities in the Lavern M. Johnson Park, Bohn Park Phase I, Lyons Valley River Park, and other stream and flood recovery efforts, will contribute to conformance with the Town of Lyons Comprehensive Plan, Parks Master Plans, Lyons Recovery Action Plan, and Parks Flood Recovery Planning Process Final Planning Report. By doing so these improvements will result in significant enhancement of recreational opportunities for residents of the Town and surrounding Boulder County and Metro Denver communities.

SECTION SIX | SUMMARY OF IMPACTS

Table 3. Summary of Environmental Impacts

Affected Environment	No Action Impacts	Proposed Action Impacts	Mitigation
Geology and Soils	<ul style="list-style-type: none"> • Soils within the Bohn Park Phase II Project Area would be graded, amended and seeded to achieve final stabilization as required to close the CDPHE construction stormwater discharge permit 	<ul style="list-style-type: none"> • Existing landform and elevation of Project Area would not be altered. Additional grading of the Project Area would be required to completed construction of the Project. 	<ul style="list-style-type: none"> • BMPs per the SWMP during project construction to meet requirements of the CDPHE Construction Stormwater Discharge Permit.
Floodplains	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • None
Wetlands	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • None
Water Quality	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • SWMP BMPs
Air Quality	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • BMPs for control of fugitive dust during construction
Terrestrial and Aquatic Environment	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • None
Threatened and Endangered Species	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • None
Bald and Golden Eagles	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • Monitoring in accordance with BGEPA Incidental Take Permit
Migratory Birds	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • None
Hazardous Materials	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • None
Zoning and Land Use	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • None
Visual Resources	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • No impact 	<ul style="list-style-type: none"> • None
Noise	<ul style="list-style-type: none"> • Short term increase in daytime ambient noise levels would occur during earth moving and revegetation 	<ul style="list-style-type: none"> • Short-term increase in noise and vibrations from the machinery during daytime construction activities 	<ul style="list-style-type: none"> • BMPs to minimize construction noise impacts on nearby sensitive receptors in adjacent residential area and Middle/Senior High School

Section 6 | Summary of Impacts

Affected Environment	No Action Impacts	Proposed Action Impacts	Mitigation
Public Service and Utilities	<ul style="list-style-type: none"> No impact 	<ul style="list-style-type: none"> No impact 	<ul style="list-style-type: none"> None
Transportation	<ul style="list-style-type: none"> No impact 	<ul style="list-style-type: none"> No impact 	<ul style="list-style-type: none"> None
Environmental Justice	<ul style="list-style-type: none"> No impact 	<ul style="list-style-type: none"> No impact 	<ul style="list-style-type: none"> None
Health and Safety	<ul style="list-style-type: none"> No impact 	<ul style="list-style-type: none"> No impact 	<ul style="list-style-type: none"> None
Historic and Cultural Resources	<ul style="list-style-type: none"> No impact 	<ul style="list-style-type: none"> Potential Adverse Effect to Historic Properties 	<ul style="list-style-type: none"> As stipulated in the Memorandum of Agreement attached as Appendix B
Tribal and Religious Sites	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> TBD

SECTION SEVEN | PUBLIC INVOLVEMENT

7.1 ***PUBLIC NOTICE OF AVAILABILITY FOR DRAFT COMMENTARY***

**Public Notice of Availability
For Public Review of an Environmental Assessment for the
Bohn Park Construction Phase II
FEMA Project Number PW:20E-2**

Notification is hereby given to the public that the Town of Lyons, Colorado has requested funding from the Federal Emergency Management Agency (FEMA) for a proposed park reconstruction project in Lyons, Colorado. This notification is provided pursuant to the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA), Executive Order (EO) 11988 (Floodplain Management) and EO 11990 (Protection of Wetlands), and Federal agency implementation procedures described in 44 C.F.R. Part 9 and FEMA Directive 108-1. Funding from FEMA's Public Assistance (PA) Program would be utilized. In accordance with NEPA, an Environmental Assessment (EA) has been prepared to evaluate the potential impact of Phase II of the proposed project on the human and natural environment.

The purpose of the Bohn Park Phase II Project is to repair and restore recreational amenities and other Town of Lyons facilities within the 16-acre Project Area that were damaged or destroyed during the September 2013 flood. The proposed Project is necessary to return the Park to full use and to reduce the risk of future significant flood damage to these facilities and supporting infrastructure.

A public comment period for the proposed project described in this notice will remain open for 15 days from date of publication. During this period, the draft EA will be available for public review and comment during regular business hours at the Lyons Town Hall, 432 5th Avenue, Lyons, Colorado 80540. Interested parties may submit comments or request additional project information by contacting: Amelia Willits, Project Manager (303) 823-6622 or AWillits@townoflyons.com. Information may also be requested from Richard Myers, Deputy Regional Environmental Officer, FEMA Region VIII, by email at richard.myers2@fema.dhs.gov or by mail at the Denver Federal Center, P.O. Box 25267, Denver, Colorado, 80225. If no substantive comments are received, the draft EA will become final, and the project may proceed.

7.2 ***PUBLIC COMMENTS***

This document will be released for a fifteen (15) day public comment period. Substantive comments will be recorded here.

SECTION EIGHT | LIST OF PREPARERS

This EA was prepared by:

Smith Environmental and Engineering Dacono, CO

- Tim Baumann, CWB – Senior Environmental Scientist/Project Manager
- Rebecca Hannon – Environmental Scientist III

Town of Lyons

- Amelia Willits, CFM – Project Manager
- Dave Cosgrove – Director of Parks and Public Works
- Tracy Sanders – Flood Recovery Lead

SECTION NINE | REFERENCES

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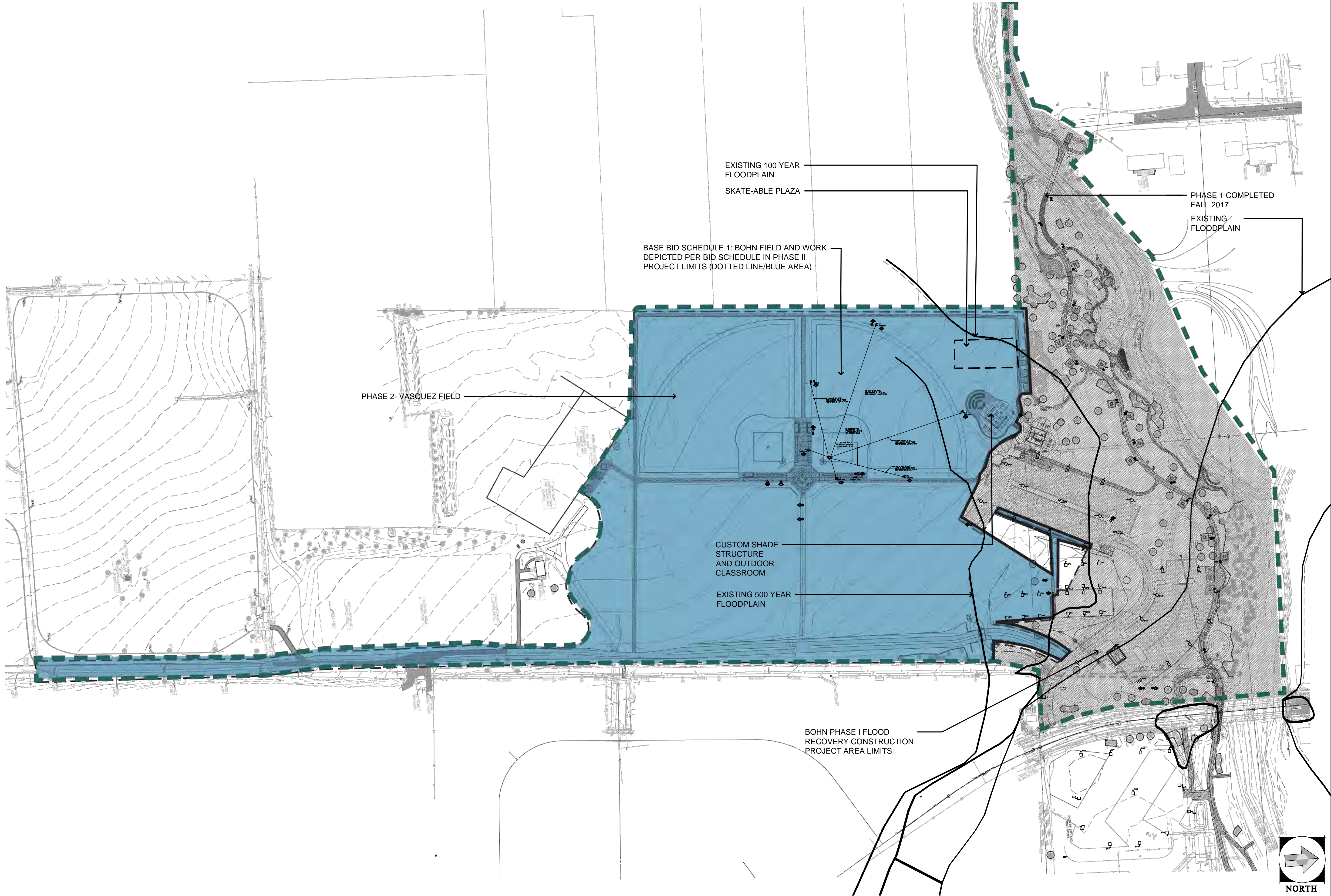
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BOHN PARK- PHASE 2

2017 FLOOD RECOVERY PROJECT

Lyons, Colorado

PROJECT NUMBER: 16044.00

DATE: 09/06/2018

DESIGNED: MW

DRAWN: GG

CHECKED: MW

REVISIONS:

JOB DESCRIPTION: FINAL BID SET

SHEET TITLE: Bohn Park Phase 2 Bid Schedule Diagram

SHEET NUMBER: G1.5

SHEET X OF XX

**MEMORANDUM OF AGREEMENT
AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE COLORADO STATE HISTORIC PRESERVATION OFFICER,
THE STATE OF COLORADO DIVISION OF HOMELAND SECURITY AND
EMERGENCY MANAGEMENT, AND THE TOWN OF LYONS,
REGARDING TREATMENT OF ADVERSE EFFECTS OF THE BOHN PARK FLOOD
RECOVERY PROJECT, PHASE II, BOULDER COUNTY, COLORADO**

WHEREAS, the Federal Emergency Management Agency (“FEMA”) of the Department of Homeland Security proposes to administer FEMA Public Assistance funding pursuant to Section 428 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended, through the State of Colorado Division of Homeland Security (hereinafter referred to as Recipient or “State”) and to the Town of Lyons (hereinafter referred to as “Sub-recipient” or “Town”) for the Phase II of the reconstruction of facilities at Bohn Park which were damaged as a result of flooding along the St. Vrain Creek in 2013 (hereafter referred to as the “Project”) to protect public infrastructure and related communities; and

WHEREAS, the Town, through the State, has requested FEMA funding to aid reconstruction of facilities at Bohn Park, and

WHEREAS, FEMA, as the lead Federal agency, has determined that the Project is an Undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA) (Section 106), 54 U.S.C. § 306108, and its implementing regulations, 36 CFR Part 800; and

WHEREAS, FEMA has defined the Undertaking’s Area of Potential Effects (“APE”) as the limits of disturbance from the proposed Undertaking across 16 acres, including the construction limits and areas that may be disturbed by grading and staging; and

WHEREAS, FEMA, in consultation with the SHPO, has determined that the Project may have had an inadvertent adverse effect to unidentified historic properties as implementation proceeded prior to the conclusion of Section 106 consultation; and

WHEREAS, FEMA has consulted with the SHPO, the State, and the Town to resolve the Project’s potential adverse effects on historic properties; and

WHEREAS, FEMA has invited the State and the Town to become signatories to this Memorandum of Agreement (MOA); and

WHEREAS, in accordance with 36 CFR Part 800.13(b)(3), FEMA has notified the Advisory Council on Historic Preservation (ACHP) on January 19, 2019, regarding its intent to prepare a MOA to resolve the Adverse Effect and satisfy its Section 106 responsibilities pursuant to the 2014 Colorado Programmatic Agreement and 36 CFR Part 800.6 (a)(1), and the ACHP has declined to participate (letter dated ///////////////), pursuant to 36 CFR Part 800.6(a)(1)(iii); and

WHEREAS, FEMA has coordinated appropriate public outreach with the Colorado Council of Professional Archaeologists; the Colorado Archaeological Society; the Colorado State Historical Society; the Office of the Colorado State Archaeologist; the Dougherty Museum; the Boulder Library; the Boulder History Museum; the Lyons Redstone Museum; the

University of Colorado Museum of Natural History; the Longmont Museum; and the Loveland Museum; and

WHEREAS, FEMA has coordinated appropriate Tribal consultation with the Southern Ute; Ute Mountain Ute; Eastern Shoshone; Northern Arapahoe; Crow; Northern Cheyenne; Ogallala Sioux; Paiute Tribe of Utah; Rosebud Sioux; and Ute Indian Tribe (Uintah and Ouray Reservation) Tribal Nations; and

WHEREAS, the MOA has incorporated comments received from the Tribes and public where received into the final project design of the Undertaking; and

WHEREAS, “Signatories” hereafter collectively refers to FEMA, the State, the Colorado SHPO, and the Town; and

NOW, THEREFORE, in accordance with 36 CFR Part 800.6(b)(1)(iv), this MOA is being executed to implement the agreed upon resolution of Adverse Effects. FEMA, SHPO, the State, and the Town agree that the Undertaking shall be implemented in accordance with the following stipulations in order to mitigate the adverse effect of the Undertaking on the historic properties.

STIPULATIONS

To the extent of its legal authority and in coordination with the SHPO, the State, and Town, FEMA will require that the following measures are implemented in order to mitigate the adverse effect of the Undertaking on historic properties, and in keeping with the timelines described in Part VI – Duration of Enforcement.

I. PROFESSIONAL QUALIFICATIONS

- A.** All tasks will be completed by personnel meeting the professional qualifications outlined in the Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation as stated in 36 CFR Part 61.
- B.** All background research, fieldwork, analysis, and reporting tasks will be completed according to specifications consistent with the Secretary of Interior’s Standards and Guidelines for Archeological Documentation and Historical Documentation; Standards and Guidelines provided by the Review and Compliance Section; The Colorado Cultural Resource Survey Manual, Office of Archaeology and Historic Preservation (2017, revised); and the By-Laws (2018, revised) and Code of Ethics/Standards of Research Performance (1997, revised) of the Colorado Council of Professional Archaeologists.

II. MITIGATION OF EFFECT TO HISTORIC PROPERTIES

- A.** The Town shall contract with a qualified archaeological consulting firm whose personnel meet the professional qualifications outlined in Part I to complete the following mitigation measures:
 - 1. Conduct thorough background research. Background research shall, at a minimum, include records held at the Colorado SHPO. The literature review

may also include the National Register of Historic Places (NRHP) online database, General Land Office (GLO) plat maps, local historical societies, and other sources and data repositories, as necessary and where appropriate. Background research already conducted by the Town may fulfill this Stipulation.

2. Conclude consultation under Section 106. Consultation may include a geo-archaeological assessment of the APE to evaluate the potential for buried cultural material and intact Holocene deposits. Assessments and reports already conducted by the Town may fulfill this Stipulation.
- B.** The Town shall, at minimum, create one interpretive sign at Bohn Park. The intent of this sign is to further public education. This sign shall focus on historic and prehistoric use of Bohn Park as well as the St. Vrain creek. Sign content shall be at a 5th grade reading level and FEMA shall forward the draft sign design and proposed sign location to the SHPO for review and comment.
- C.** FEMA shall develop and implement a policy education/training program for State, FEMA, Town, and other staff working with the Public Assistance Grant Programs.
1. Trainings will be conducted by FEMA subject matter experts and aimed at clarifying FEMA's policy for dealing with the identification and evaluation of historic properties under Section 106 of the National Historic Preservation Act (NHPA).
 2. Trainings will be presented as in-person lecture/presentation format, and will be made available for later review and reference by staff through recording and/or distribution of training materials.
 3. FEMA shall forward outline and draft content of the trainings to SHPO for review and comment.

III. UNANTICIPATED ARCHAEOLOGICAL DISCOVERIES

Based on the high level of disturbance within the APE, it is not anticipated that any cultural materials identified during construction will be in primary context and considered significant discoveries requiring longer-term work stoppage for consultation. However, in the event that such a discovery should occur, FEMA will consult per 36 CFR Part 800.6 to develop a mitigation plan.

If human remains are discovered under any circumstance, FEMA will ensure that the provisions of Colorado Revised Statute 24-80-1301-1305 are followed. Ground disturbing work in the immediate vicinity of the remains shall cease immediately and the signatories shall consult to develop a written plan of action to manage the discovery in accordance with the *Process for Consultation, Transfer, and Reburial of Culturally Unidentifiable Native American Human Remains and Associated Funerary Objects Originating from Inadvertent Discoveries on Colorado State and Private Lands*. After approval of the plan by FEMA, the State, the Town, the Office of the State Archaeologist, Tribes, and the Colorado Commission of Indian Affairs, implementation

will proceed. Continuation of work following a discovery will be contingent upon approval by the above parties.

IV. DISPUTE RESOLUTION

Should any Signatory to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FEMA shall consult with such party to resolve the objection. If FEMA determines that such objection cannot be resolved, FEMA will:

- A.** Forward all documentation relevant to the dispute, including FEMA's proposed resolution, to the ACHP. The ACHP shall provide FEMA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FEMA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and the Signatories, and

provide them with a copy of this written response. FEMA will then proceed according to its final decision.

- B.** If the ACHP does not provide its advice regarding the dispute within the thirty- (30-) day time period, FEMA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FEMA shall prepare a written response that takes into account any timely comments regarding the dispute from the Signatories to the MOA, and provide them and the ACHP with a copy of such written response.
- C.** It will be the responsibility of FEMA to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute.

V. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all Signatories. The amendment will be effective on the date a copy signed by all of the Signatories is submitted to the ACHP.

VI. DURATION AND TERMINATION

- A.** If the terms of this MOA have not been implemented within five (5) years of the execution date, then this MOA shall be considered null and void. In such an event, FEMA shall notify the Signatories to this MOA and, if it chooses to continue with the Project, then it shall reinitiate review of and consultation on the Project in accordance with 36 CFR Part 800.3 through 800.7.
- B.** In the event that FEMA does not carry out the terms of this MOA, the Signatories shall consult to seek amendment to the MOA and proceed in accordance with 36 CFR Part 800.6(c)(8).
- C.** Any signatory to the MOA may terminate this MOA by providing thirty (30) days' notice to the other parties, provided that the parties shall consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, FEMA shall proceed in accordance with 36 CFR Part 800.6(c)(8), execute a new agreement in accordance with Part 800.6(c)(1) or request comments of the ACHP under Part 800.7(a).

Execution of this MOA by FEMA and Signatories, and implementation of its terms, evidence that FEMA has taken into account the potential adverse effects of the Project on historic properties and has afforded the ACHP an opportunity to comment.

SIGNATORY PAGE

**EXECUTED: MEMORANDUM OF AGREEMENT
AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE COLORADO STATE HISTORIC PRESERVATION OFFICER,
THE STATE OF COLORADO DIVISION OF HOMELAND SECURITY AND
EMERGENCY MANAGEMENT, AND THE TOWN OF LYONS,
REGARDING TREATMENT OF ADVERSE EFFECTS OF THE BOHN PARK FLOOD
RECOVERY PROJECT, PHASE II, BOULDER COUNTY, COLORADO**

SIGNATORY

FEDERAL EMERGENCY MANAGEMENT AGENCY

By: _____

Date: _____

Thomas Bush
Public Assistance Branch Chief, Recovery Division, FEMA Region VIII

By: _____

Date: _____

Steven E. Hardegen
Regional Environmental Officer, FEMA Region VIII

SIGNATORY PAGE

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AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
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REGARDING TREATMENT OF ADVERSE EFFECTS OF THE BOHN PARK FLOOD
RECOVERY PROJECT, PHASE II, BOULDER COUNTY, COLORADO**

SIGNATORY

HISTORY COLORADO

By: _____

Date: _____

Steven Turner, AIA
State Historic Preservation Officer

SIGNATORY PAGE

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RECOVERY PROJECT, PHASE II, BOULDER COUNTY, COLORADO**

SIGNATORY

STATE OF COLORADO DIVISION OF HOMELAND SECURITY AND EMERGENCY MANAGEMENT

By: _____

Date: _____

Michael Willis
Director, Office of Emergency Management
Colorado Division of Homeland Security and Emergency Management

SIGNATORY PAGE

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REGARDING TREATMENT OF ADVERSE EFFECTS OF THE BOHN PARK FLOOD
RECOVERY PROJECT, PHASE II, BOULDER COUNTY, COLORADO**

SIGNATORY

TOWN OF LYONS

By: _____

Date: _____

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