MEMORANDUM of AGREEMENT
Among the
Colorado Department of Transportation (CDOT),
Federal Highway Administration (FHWA),
U.S. Fish and Wildlife Service (FWS),
Colorado Department of Natural Resources (DNR),
Colorado DNR Division of Wildlife (CDOW), and
The Nature Conservancy (TNC)

I. BACKGROUND AND PURPOSE - RECITALS
The parties to this agreement, Colorado Department of Transportation (CDOT), the Colorado Department of Natural Resources-Division of Wildlife (CDOW), the Federal Highway Administration (FHWA), the U.S. Fish and Wildlife Service (FWS), and The Nature Conservancy (TNC), share the common goals of environmental conservation, proactive alleviation of the need to list species as threatened or endangered under the federal Endangered Species Act (ESA) (16 U.S.C. 1536), and regulatory streamlining that focuses resources on results. In addition, Colorado’s increasing transportation needs, the Transportation Equity Act for the 21st Century (TEA-21, Pub. Law 105-178), and internal initiatives are prompting CDOT, FHWA and FWS to seek more efficient ways to comply with environmental laws such as the ESA.

Through this Memorandum of Agreement (MOA), CDOT, FHWA, FWS, and CDOW seek to take the next steps in a process to effect regional conservation of declining species on Colorado’s Eastern Plains by providing proactive advance conservation of priority habitats for multiple species and that will allow CDOT and FHWA to address compliance under the ESA for listed species, and for declining species that may become listed. This MOA addresses CDOT’s 20-year plan for improvements on the existing roadway network on the Eastern Plains.

FWS, FHWA, and CDOT recognize that the project-by-project clearance process takes a great deal of time and resources, which might be better invested toward proactive species conservation. Furthermore, addressing species’ needs on a project-by-project basis can yield scattered and fragmented habitat conservation or improvement, which contributes little to the viability of individual species and the habitats and ecosystems on which these species depend. By contributing to multi-species recovery in an integrated and comprehensive fashion, CDOT, FHWA, FWS, and CDOW hope to aid the recovery of listed species, alleviate some of the need for additional listings under the ESA—the stated goal of Candidate Conservation Agreements (CCAs) (50 CFR 17), and improve predictability in the project development process.

Colorado’s Eastern Plains, a portion of the Central Shortgrass Prairie ecoregion, covers approximately one third of the State of Colorado, from approximately I-25 to the Kansas border.1 This area totals over 27 million acres or 42,717 square miles, including an estimated 89,446 acres of CDOT right-of-way (ROW) in four of CDOT’s six Regions. TNC and the Colorado Natural Heritage Program (CNHP) have identified over 100 declining animal and plant species within this ecoregion. CNHP, the parties, and independent experts screened this list of declining species via a three-parameter approach: 1) whether the species was considered likely to be listed under the ESA in the next 20 years, 2) whether the species occurs within a zone of impact from CDOT highways, and 3) whether the species could benefit from a conservation/mitigation banking approach. The species listed in Appendix A met these parameters and are the primary focus of this MOA. Other species may be included after conservation areas are identified.

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In lieu of project-by-project inventory, analysis, and review, with the assistance of CNHP, the parties have developed an estimate of the collective impacts to the habitats of declining species in the Eastern Plains from proposed transportation projects over the next 20 years. The Transportation Commission of Colorado will choose exactly which projects will be funded and implemented; however, CDOT’s 20-year plan anticipates safety, reconstruction, capacity, and other transportation improvements for 22% of the highway network in Colorado’s central shortgrass prairie (over and above overlay projects, which are expected to have minimal impacts). This MOA and subsequent regulatory compliance documents will cover the above-described transportation improvement projects, in addition to CDOT maintenance work, resurfacing, and on and off-system bridge repairs throughout the Eastern Plains.

A panel headed by TNC and CDOW technical experts will identify priority habitat conservation sites that can serve as large scale conservation/mitigation areas for the species identified in Appendix A, in a comprehensive rather than piecemeal fashion. CDOT will evaluate the information and present it to FHWA and FWS for approval. CDOT will then purchase real property interest(s) in selected sites from willing sellers, with the intent that Federal-aid projects will reimburse the state for mitigation credits as they are used. Subsequent agreements will be executed detailing the administration, management, and reporting/monitoring for the acquired property interests, in accordance with applicable state and federal laws.

A. Missions and Goals of Participating Agencies and Organizations:

**CDOT’s mission** is to provide the best multi modal transportation system for Colorado that most effectively moves people, goods, and information, while at the same time adhering to CDOT’s values, which include working in partnership with all, using resources wisely, and making decisions that are compatible with Colorado’s quality of life, environmental, and economic goals. For many of its projects, due to federal participation, CDOT is obligated to meet federal environmental requirements such as the ESA, Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344), and the National Environmental Policy Act (NEPA) (42 U.S.C. 4321) to evaluate and consider significant environmental impacts, and to avoid, minimize, and mitigate impacts to the aquatic environment and to threatened and endangered species.

**FHWA’s mission** is to carry out the highway transportation programs of the Department of Transportation in compliance with all applicable laws and regulations. In carrying out its program, FHWA seeks the protection and sound management of ecosystems, wildlife, and habitat. Applicable federal environmental laws, including the ESA, CWA, and NEPA, obligate FHWA to evaluate, consider, and mitigate significant environmental impacts of its projects. FHWA’s 1990 environmental policy states, “DOT agencies must become environmental leaders, clearly demonstrating sensitivity to the natural environment…in everything we do.” FHWA’s 1994 environmental policy statement reaffirmed the principles embraced by the FHWA: “full involvement of our partners, complete integration of environmental concerns, and active protection and enhancement of our environment.” TEA-21 and particularly its streamlining provisions in Section 1309 reinforce these principles. Furthermore, under section 7(a)(1) of the ESA, all federal agencies must work toward the conservation and recovery of threatened and endangered species in the carrying out of programs and projects.

**FWS’s mission** is to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. This includes addressing compliance with the ESA, as well as other related laws and regulations such as the Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and the Fish and Wildlife Coordination Act.

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2 The ESA requires avoidance and minimization of adverse impacts, which continues to occur on all projects, through minimization of the project footprint and implementation of best management practices (BMPs).
CDOW’s mission is to perpetuate the wildlife resources of the state and provide the public with the opportunity to enjoy them. CDOW aims to conserve and recover declining species and thus prevent the need for Federal listing.

TNC’s mission is to preserve the plants, animals, and natural communities that represent the diversity of life on earth by protecting the lands and waters they need to survive. TNC is a nonprofit organization that cooperates with other governmental and nongovernmental agencies and organizations having an interest in environmental and natural resource management, in order to identify, protect, and maintain imperiled species. As a well-established organization with a mission of identifying and preserving biologically rich areas through conservation easements, ownership and/or management agreements, TNC provides commitment to, resources for, and predictability of oversight. By participating in this MOA, TNC is not making any policy statements about the ESA, but only offering its professional expertise and services to facilitate implementation.

B. History and Intent
Given their mutual interest in proactive habitat conservation for multiple declining species and ecosystems in a comprehensive rather than piecemeal fashion, CDOT contacted TNC in late 1999 to explore the possibility of a proactive joint conservation effort on Colorado’s Eastern Plains. In 1998, TNC had finalized its study on Ecoregion-Based Conservation in the Central Shortgrass Prairie, centered on Colorado’s Eastern Plains, which identified imperiled species and top priority habitats for protection as viable biological communities and/or due to impending threats.

Section 7 of the ESA allows for the development of programmatic consultations addressing a federal agency’s multiple actions on a program, regional, or other basis—as a vehicle to address section 7 requirements (50 CFR 402). Section 7(a)(1) requires federal agencies to use their authorities to further the conservation of listed species. Section 7(a)(2) requires federal agencies to consult with the FWS and National Marine Fisheries Service to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. This section also establishes the requirement to conduct conferences on proposed species and allows applicants to initiate early consultation. Section 7 requires FWS to prepare biological opinions and issue incidental take statements on formal consultations. Such consultations typically include “re-opener” statements, which are discussed further in Section V of this document with relation to the Shortgrass Prairie Initiative. Section 7 approvals are necessary for all federally-funded projects that may impact threatened or endangered species or their habitats.

To this end, CDOT engaged CNHP to assist in estimating potential collective impacts to declining species from Federal-aid projects on the Eastern Plains over the next 20 years, as described above, using a geographic information system (GIS). CNHP also led a consultation process with shortgrass prairie

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3 Section 7 of the ESA of 1973, as amended (16 U.S.C. 1536), outlines procedures for interagency cooperation to conserve federally listed species and designated critical habitats. Section 7(a)(1) requires federal agencies to use their authorities to further the conservation of listed species. Section 7(a)(2) requires federal agencies to consult with the FWS and National Marine Fisheries Service to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. This section also establishes the requirement to conduct conferences on proposed species and allows applicants to initiate early consultation. Section 7 requires FWS to prepare biological opinions and issue incidental take statements on formal consultations. Such consultations typically include “re-opener” statements, which are discussed further in Section V of this document with relation to the Shortgrass Prairie Initiative. Section 7 approvals are necessary for all federally-funded projects that may impact threatened or endangered species or their habitats.

4 Benjamin Tuggle, Chief, Division of Habitat Conservation, FWS Headquarters, speech before the AASHTO national meeting, February 1, 2000.
field experts in all taxonomic groups. These recognized field experts discussed the list, suggested refinements, and identified an overestimated “impact zone” for CDOT construction projects beyond resurfacings (usually the entire CDOT ROW).

The next step will be a joint effort by the parties to identify habitat and particular parcels to contribute to the conservation and recovery of the species listed in Appendix A and their habitats. CDOT and FHWA intend to fund the acquisition of appropriate property interests on tracts containing priority habitat as a proactive conservation/mitigation measure, to help satisfy CDOT and FHWA obligations under the ESA for the identified listed species and declining species, should the latter become federally listed as threatened or endangered.

II. RESPONSIBILITIES

A. CDOT has the responsibility to:
   1. Work with FHWA to comply with NEPA, ESA, CWA and all other applicable environmental regulations.
   2. Utilize the opportunities provided by the ESA to develop a programmatic agreement or multi-species conservation strategy to proactively address CDOT/FHWA projects over the next 20 years that may affect declining species occurring on Colorado’s Eastern Plains.

B. FHWA has the responsibility to:
   1. As lead federal agency, to comply with NEPA, ESA, CWA and all other environmental regulations.
   2. Participate in funding Federal-aid highway projects and associated conservation/mitigation, if included in CDOT’s Statewide Transportation Improvement Program.
   3. Re-initiate ESA consultation with FWS if necessary.

C. FWS has the responsibility to:
   1. Make ESA decisions based on the best available existing scientific and commercial data.
   2. Utilize regulatory flexibility to achieve interagency streamlining goals and to support effective, proactive conservation of declining species.

D. CDOW has the responsibility to:
   1. Own and manage the conservation areas in accordance with the purpose for which it was acquired and oversee the attendant management agreements. As a state resource agency, CDOW ensures predictability of oversight that compliments its interest in, and commitment to, the recovery of imperiled species.
   2. Take the lead in identification of conservation areas that will most efficiently meet CDOT, FHWA, and FWS conservation goals, in compensation for impacts identified in the CDOT/CNHP Impact Assessment Report, and as discussed in the appropriate regulatory compliance document(s).

E. TNC has the responsibility to:
   1. Assist CDOW with the identification of conservation areas that will most efficiently meet CDOT, FHWA, and FWS conservation goals, in compensation for impacts identified in the CDOT/CNHP Impact Assessment Report, and as discussed in the appropriate regulatory compliance document(s).
2. Work with the other parties to identify, purchase, and manage the conservation parcels funded by CDOT and FHWA, which also contribute to execution of TNC’s eco-regional conservation goals on Colorado’s Eastern Plains. TNC offers its services to oversee the attendant management agreements on such parcels. Any lands purchased with public monies and transferred to TNC, as a trustee, shall be held for public benefit and managed in accordance with the purpose for which they were acquired under the ESA.

Each of the above responsibilities is conditioned upon the availability of sufficient funds for the real property interest transactions, obtaining necessary reviews and approvals, and the execution of further implementing agreements to effect those transactions.

III. TASKS and PRODUCTS

A. CDOT

1. Has developed a list, with assistance from CNHP, TNC, FWS, CDOW, and recognized field experts, of declining species that a) CDOT could impact in projects on the Eastern Plains over the next 20 years, b) could be federally listed under the ESA in the next 20 years, and c) could benefit from and potentially satisfy ESA section 7 via a conservation/mitigation banking program.

2. Has collected, with assistance from CDOW, CNHP, and TNC, and consultation with FWS, the best available scientific and commercial data on the habitat and range of and potential impacts to the species listed in Appendix A and a number of other species that could be included once mitigation sites are identified. CDOT, TNC, and CNHP verified and/or refined that information in consultation with recognized field experts in each of several taxonomic groups, to supplement the best available data. This combined information was used to perform GIS analyses and create range estimates and future impact estimates.

3. Has evaluated, using best available data and expertise, impacts to habitats (and thus the target species) on a comprehensive rather than on an individual or site basis.

4. Will develop drafts of appropriate ESA compliance documents including biological information on all species covered by this MOA, their range and status, estimated potential direct, indirect, and cumulative effects from CDOT projects over the next 20 years, and suggested proactive conservation measures to be implemented to minimize future impacts. Such measures may include funds for purchase and oversight of real property interests for conservation purposes, as well as Best Management Practices (BMPs) to minimize effects from transportation development on species subject to this MOA. Such compliance documents will be submitted to the FWS by FHWA/CDOT.

B. FHWA

1. Will participate in the development of ESA compliance documents for overlay, safety, reconstruction, capacity, and other transportation improvement and maintenance projects.

2. Will participate in funding mitigation credits or the habitat conservation bank, subject to requisite approvals in accordance with forthcoming regulatory compliance documents.

C. FWS

1. Has worked with TNC, CDOT, and CDOW to compose a species list.

2. Will prepare and/or assist in the preparation of ESA compliance documents to meet the purpose of the MOA.

3. Will work with the parties to this MOA to find acceptable conservation sites.
D. CDOW
1. Will consult with and/or provide expert opinion to the other parties upon request.
2. Upon request by CDOT, may accept ownership and management of real property interests for conservation, in accordance with this MOA and future ESA compliance documents, and as authorized in accordance with DNR/CDOW authorities. Ownership or management responsibilities are subject to approval by the Colorado Wildlife Commission.

E. TNC
1. Will assist the Conservation Site Identification Panel described below.
2. Upon request by CDOT, will assist CDOT ROW or take the lead in transactions with landowners.
3. Upon request by CDOT, will assist in the preparation of appropriate documents to implement this MOA and support mitigation/conservation site documentation.
4. Upon request by CDOT, may accept ownership and management of real property interests for conservation, in accordance with this MOA and future ESA compliance documents, and as authorized by TNC authorities.

The above tasks/products are subject to individual project approvals by TNC’s Board of Directors and compliance with TNC’s policies and procedures.

F. Conservation Site Identification Panel
1. This volunteer panel will consist of TNC, CDOT, CNHP, and CDOW biologists. Representatives from the Colorado Cattlemen’s Association, the Farm Bureau, the State Department of Agriculture, or similar organizations may be consulted. The panel will identify opportunities and make recommendations to CDOT. CDOT will then work with FHWA and FWS on species conservation needs and regulatory compliance, with final decisions to be made by FWS.
2. Will identify target species that could be conserved at different sites.
3. Will develop site-specific management plans and agreements for the preferred habitat and real property interests, on behalf of CDOT.
4. Will make recommendations on which entity could best manage the site(s). Recommendations will be guided by the impact analysis developed by CNHP/CDOT and associated conservation goals to compensate for those impacts. Both impacts and individual site conservation goals will be formalized in the final biological opinion or other compliance documents rendered by FWS.

Each of the tasks above is conditioned upon compliance with all applicable laws, regulations, and policies; the availability of sufficient funds for the real property interest transactions; and the execution of further agreements to effect those transactions.

IV. PROACTIVE ATTENTION TO ESA SECTION 7 REINITIATION ISSUES
CDOT, FHWA, and FWS have structured the scope of the analysis and the conservation area to anticipate and avoid the need for reinitiation of ESA section 7 consultation to the maximum extent possible for the impacts of federal actions/transportation improvement projects (including reconstruction, safety or capacity improvements, bridge improvements, or resurfacing) on the existing roadway network over the next 20 years. As provided in 50 CFR 402.16, reinitiation of formal consultation is required if:

1) The amount or extent of incidental take is exceeded;
2) New information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in the BO;

3) The action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in the BO; or

4) A new species listing (unanticipated by this MOA) or critical habitat designation occurs that may be affected by the action.

FWS, FHWA, and CDOT are seeking to avoid reinitiation of formal consultation to the maximum extent possible in the following ways. With regard to 1) above, 50 CFR 402.16(a), the possibility of exceeding the amount or extent of incidental take has been minimized by conducting the analysis planning for section 7 compliance on the entire State and Federal Highway systems in the Eastern Plains. Buffer distances were proposed and approved by statewide experts in each taxonomic group, leaving only the construction of new alignment that would add to the extent of incidental take. In the case of construction of new alignment, which is not covered by this MOA, FHWA will initiate site-specific consultation with FWS as necessary.

With regard to 2), 50 CFR 402.16(b), the parties to this MOA have sought to overestimate the manner and extent in which agency action could affect threatened, endangered, or candidate species and critical habitat, to compensate now, to the extent possible, for information that is currently unknown about subject species and habitats. The impact assessment treats all highway ROW as habitat, regardless of quality or presence of individual species in any particular place, and irrespective of current maintenance practices (e.g. mowing the entire ROW is standard practice). Furthermore, avoidance and minimization of impacts, as required by the ESA, will be accomplished via minimization of the project footprint and through BMPs minimizing direct and indirect impacts. If subsequent information reveals that CDOT management practices can be improved to benefit or minimize harm to threatened, endangered or candidate species, CDOT, FHWA, and FWS will work together to institute more beneficial practices and to incorporate the new information.

With regard to 3) above, 50 CFR Section 402.16(c), because this MOA covers only ongoing activities on existing roads and no new road construction, it is unlikely that the agency action will be modified to such a degree that any of the covered species will be affected in a manner or to an extent not anticipated in the CNHP/CDOT impact assessment and this MOA and the associated compliance documents. The parties are aware that planned transportation improvements will change as the Transportation Commission of Colorado considers needs and priorities over the next 20 years; however, by including the whole highway network and associated bridges, each species’ range across the Eastern Plains, and areas of potential impact for each species in the impact assessment, the parties agree that the “action” subject to section 7 will likely not be modified except by the addition of new alignment. Addition of new alignment is likely to require its own section 7 consultation or reinitiation of the section 7 consultation for such a project.

Lastly, with regard to 4) above, 50 CFR 402.16(d), the parties are aware that species may be listed or critical habitat may be designated that this MOA does not anticipate and include, and that initiation of section 7 consultation could be required at the time of such listing. This MOA only addresses the primary species listed in Appendix A and such species as may be protected on certain conservation lands once particular parcels are identified. FHWA will initiate consultation with FWS if newly listed species unanticipated by this MOA are likely to be impacted by future FHWA actions. New alignment would also likely require such consultation, as the impact analysis focuses on impacts to the existing roadway network. CDOT and FHWA are taking the conservative approach of treating all vegetation and habitats associated with the included species as potential habitat for those species, regardless of condition or presence of those species. Therefore, species presence will be overestimated and compliance with future designation of critical habitat will be streamlined. This MOA is based on the best available information about the species and habitats in question, to which the parties have added the best available knowledge of recognized state experts in shortgrass prairie species and ecosystems, covering all taxonomic groups.
With this MOA, the parties also intend to avoid future uncertainty and ensure achievement of the goals of this MOA.

V. MUTUAL AGREEMENTS
   A. Resources otherwise devoted to the regulatory consultation and documentation process would be better spent by combining and streamlining that process for a large group of potential CDOT/FHWA project types over the next 20 years and purchasing conservation lands to offset or mitigate for anticipated impacts to habitats of declining species in a more proactive, effective, comprehensive, and ecosystem-oriented fashion.
   B. The parties support the concepts identified in this MOA and will actively implement it to the degree authorized under applicable laws, regulations, and policies.
   C. The parties herein will document progress and decisions on this MOA, for the benefit of those who may be involved in the future and for the MOA’s continued implementation.

VI. OTHER TERMS OF THE MOA
   A. Non-funding or Obligating Document. This MOA is neither a fiscal nor a fund-obligating document. Any endeavor involving reimbursement or contribution of funds between the parties to this MOA will be handled in accordance with applicable laws, regulations, and procedures. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This MOA does not establish authority for noncompetitive award of any contract or other agreement. Any contract or agreement for services must fully comply with all applicable requirements for competition.
   B. Effective Date. This MOA is effective as of the last date of the signatures shown below and expires 5 years from such date.
   C. Modification. To be effective, all parties must agree in writing to any modifications to this MOA.
   D. Termination. Parties may terminate their participation in this MOA with a 30-day notice to other parties.
   E. Participation in Similar Activities. This MOA in no way restricts CDOT, FHWA, FWS, CDOW, or TNC from participating in similar activities with other public or private agencies, organizations, and individuals.
   F. Availability of Funds. Implementation of this MOA by the federal agencies is subject to the requirements of the Anti-Deficiency Act (31 U.S.C. 1341) and the availability of appropriated funds. Nothing in this MOA will be construed by the parties to require the obligation, appropriation, or expenditure of any money from the U.S. Treasury.
   G. Retention of All Authorities. Nothing in this MOA is intended to limit or diminish the legal obligations, responsibilities, and management authority of the parties.
H. **Principal Contacts.** The principal contacts for this MOA are:

<table>
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<th>Name</th>
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Russell George, Director
Division of Wildlife, Colorado Department of Natural Resources

Mark Burget, State Director
The Nature Conservancy of Colorado
APPENDIX A – Included Species

Primary Species List:
Populations and habitat for these species are specifically targeted for off-site mitigation (i.e., land protection). If the Site Recommendation Panel is not able to find mitigation sites for certain of the following species, than that species will be relegated to the secondary species list, for consideration when such opportunities arise. The final regulatory compliance documents will only cover species that can be mitigated through land acquisition and/or BMPs.

MAMMALS:
- black-tailed prairie dog (*Cynomys ludovicianus*) – Federal Candidate, State Special Concern
- swift fox (*Vulpes velox*) — on and off Federal Candidate list; State Special Concern

BIRDS:
- Bald Eagle — Federally listed - Threatened, State listed - Threatened
- Lesser Prairie Chicken (*Tympanuchus pallidicinctus*)— Federal Candidate, State listed-Threatened
- Western Snowy Plover (*Charadrius alexandrinus nivosus*)—State Special Concern
- Mountain Plover (*Charadrius montanus*) — Federally proposed – Threatened; State Special Concern
- long-billed curlew (*Numenius americanus*) — State Special Concern
- McCown’s longspur (*Calcarius mccownii*)
- Cassin’s sparrow (*Aimophila cassini*)
- lark bunting (*Calamospiza melanocorys*) — State bird
- loggerhead shrike (*Lanius ludovicianus*) — USFWS Nongame Bird Species
- burrowing owl (*Athene cunicular*) — State listed - Threatened
- piping plover (*Charadrius melodus*) — Federally listed - Threatened
- interior least tern (*Sterna antillarum*) — Federally listed - Endangered

REPTILES and AMPHIBIANS (HERPS):
- northern cricket frog (*Acris crepitans*) — State Special Concern
- northern leopard frog (*Rana pipiens*) — State Special Concern
- Texas horned lizard (*Phrynosoma cornutum*) — State Special Concern
- massasauga (*Sistrurus catenatus*) — State Special Concern
- western box turtle (*Terrapene ornata*)

PLANTS:
- Arkansas River feverfew (*Bolophyta tetraneuris*)
- Pueblo goldenweed (*Oonopsis puebloensis*)
- golden blazing star (*Nuttallia chrysanth*)
- round-leaf four-o’clock (*Oxybaphus rotundifolius*)
- Colorado butterfly plant (*Gaura neomexicana* ssp. *coloradensis*) — Federally listed - Threatened
- Arkansas Valley evening primrose (*Oenothera harringtonii*)
**Secondary Species List:**
Populations and habitat for these species will be considered in selecting among potential mitigation sites.

**BIRD**
- ferruginous hawk (*Buteo regalis*) — State Special Concern

**BUTTERFLIES**
- arogos skipper (*Atrytone arogos*)
- hops feeding azure (*Celastrina humulus*)
- Ottoe skipper (*Hesperia ottoe*)
- regal fritillary (*Speyeria idalia*)

**MAMMALS**
- Botta’s pocket gopher *rubidus* subspecies (*Thomomys bottae rubidus*)
- northern pocket gopher *macrotis* subspecies (*Thomomys talpoides macrotis*)

**On-Site Mitigation Species List:**
These species are targeted for use of Best Management Practices and other on-site mitigation techniques.

**FISH**
- Arkansas darter (*Etheostoma cragini*) — Federal Candidate; State listed - Threatened
- brassy minnow (*Hybognathus hankinsoni*) — State listed - Threatened
- common shiner (*Notropis cornutus*) — State listed - Threatened
- flathead chub (*Hybopsis gracilis*) — State Special Concern
- plains minnow (*Hybognathus placitus*) — State listed - Endangered
- plains topminnow (*Fundulus sciadicus*) — State Special Concern
- southern redbelly dace (*Phoxinus erythorgaster*) — State listed - Endangered
- suckermouth minnow (*Phenacobius mirabilis*) — State listed - Endangered

**MOLLUSKS**
- cylindrical papershell (*Anodontoides ferussacianus*)
- giant floater (*Anodonta grandis*)