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PUBLIC LAW 102-402—OCT. 9, 1992

106 STAT. 1961

Public Law 102-402  
102d Congress

## An Act

To direct the Secretary of the Army to transfer jurisdiction over the Rocky Mountain Arsenal, Colorado, to the Secretary of the Interior.

Oct. 9, 1992  
[H.R. 1435]*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*Rocky Mountain  
Arsenal  
National  
Wildlife Refuge  
Act of 1992.  
Real property.  
16 USC 668dd  
note.**SECTION 1. SHORT TITLE AND DEFINITIONS.**(a) **SHORT TITLE.**—This Act may be cited as the “Rocky Mountain Arsenal National Wildlife Refuge Act of 1992”.(b) **DEFINITIONS.**—For purposes of this Act:

(1) The term “Arsenal” means the Rocky Mountain Arsenal in the State of Colorado.

(2) The term “refuge” means the Rocky Mountain Arsenal National Wildlife Refuge established pursuant to section 4(a).

(3) The term “hazardous substance” has the meaning given such term by section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601(14)).

(4) The term “pollutant or contaminant” has the meaning given such term by section 101(33) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601(14)).

(5) The term “response action” has the meaning given the term “response” by section 101(25) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601(25)).

(6) The term “person” has the meaning given that term by section 101(21) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601(21)).

**SEC. 2. TRANSFER OF MANAGEMENT RESPONSIBILITIES AND JURISDICTION OVER THE ROCKY MOUNTAIN ARSENAL.**(a) **TRANSFER OF MANAGEMENT RESPONSIBILITIES.**—(1) Not later than October 1, 1992, the Secretary of the Army and the Secretary of the Interior shall enter into a memorandum of understanding under which—

(A) the Secretary of the Army shall transfer to the Secretary of the Interior, without reimbursement, all responsibility to manage for wildlife and public use purposes the real property comprising the Rocky Mountain Arsenal in the State of Colorado, except the property and facilities required to be retained under subsection (c) or designated for disposal under section 5; and

(B) the Secretary of the Interior shall manage that real property as if it were a unit of the National Wildlife Refuge System established for the purposes provided in section 4.

(2) The management of the property by the Secretary of the Interior shall be subject to (A) any response action at the Arsenal

carried out by or under the authority of the Secretary of the Army under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.) and other applicable provisions of law, and (B) any action required under any other statute to remediate petroleum products or their derivatives (including motor oil and aviation fuel) carried out by or under the authority of the Secretary of the Army. In the case of any conflict between management of the property by the Secretary of the Interior and any such response action or other action, the response action or other action shall take priority.

(b) **TRANSFER OF JURISDICTION.**—(1) Upon receipt of the certification described in paragraph (2), the Secretary of the Army shall transfer to the Secretary of the Interior jurisdiction over the real property comprising the Arsenal, except the property and facilities required to be retained under subsection (c) or designated for disposal under section 5. The transfer shall be made without cost to the Secretary of the Interior and shall include such improvements on the property as the Secretary of the Interior may request in writing for refuge management purposes.

(2) The transfer of real property under paragraph (1) may occur only after the Administrator of the Environmental Protection Agency certifies to the Secretary of the Army that response action required at the Arsenal and any action required under any other statute to remediate petroleum products or their derivatives (including motor oil and aviation fuel) at the Arsenal have been completed, except operation and maintenance associated with those actions.

(3) The exact acreage and legal description of the real property subject to transfer under paragraph (1) shall be determined by a survey mutually satisfactory to the Secretary of the Army and the Secretary of the Interior. The Secretary of the Army shall bear any costs related to the survey.

(c) **PROPERTY AND FACILITIES EXCLUDED FROM TRANSFERS.**—

(1) **PROPERTY USED FOR ENVIRONMENTAL CLEANUP PURPOSES.**—The Secretary of the Army shall retain jurisdiction, authority, and control over all real property at the Arsenal to be used for water treatment; the treatment, storage, or disposal of hazardous substances, pollutants, or contaminants; or other purposes related to response action at the Arsenal and any action required under any other statute to remediate petroleum products or their derivatives (including motor oil and aviation fuel) at the Arsenal. The Secretary of the Army shall consult with the Secretary of the Interior regarding the identification and management of all real property retained under this paragraph and ensure that activities carried out on that property are—

(A) consistent with the purposes for which the refuge is to be established under section 4(c), to the extent practicable; and

(B) consistent with the provisions of sections 2(a)(2) and 4(e).

(2) **PROPERTY USED FOR LEASE OF PUBLIC FACILITIES.**—(A) The Secretary of the Army shall retain jurisdiction, authority, and control over the following real property at the Arsenal:

(i) Approximately 12.08 acres containing the South Adams County Water Treatment Plant and described in Department of the Army lease No. DACA 45-1-87-6121.

(ii) Approximately 63.04 acres containing a United States Postal Service facility and described in Department of the Army lease No. DACA 45-4-71-6185.

(B) Nothing in this Act shall affect the validity or continued operation of leases of the Department of the Army in existence on the date of the enactment of this Act and involving the property described in subparagraph (A).

**SEC. 3. CONTINUATION OF RESPONSIBILITY AND LIABILITY OF THE SECRETARY OF THE ARMY FOR ENVIRONMENTAL CLEANUP.**

(a) **RESPONSIBILITY.**—Notwithstanding the memorandum of understanding required under section 2(a), the Secretary of the Army shall, with respect to the real property at the Arsenal that is subject to the memorandum, continue to carry out (1) response action at that property under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.) and other applicable provisions of law, and (2) any action required under any other statute to remediate petroleum products or their derivatives (including motor oil and aviation fuel). The management by the Secretary of the Interior of such real property shall be subject to any such response action or other action at the property being carried out by or under the authority of the Secretary of the Army under such provisions of law.

(b) **LIABILITY.**—(1) Nothing in this Act shall relieve, and no action may be taken under this Act to relieve, the Secretary of the Army or any other person from any obligation or other liability at the Arsenal under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.) and other applicable provisions of law.

(2) After the transfer of jurisdiction under section 2(b), the Secretary of the Army shall retain any obligation or other liability at the Arsenal under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.) and other applicable provisions of law and shall be accorded all easements and access as may be reasonably required to carry out such obligation or other liability.

(c) **DEGREE OF CLEANUP.**—Nothing in this Act shall be construed to restrict or lessen the degree of cleanup at the Arsenal required to be carried out under applicable provisions of law.

(d) **PAYMENT OF RESPONSE ACTION COSTS.**—Any Federal department or agency that had or has operations at the Arsenal resulting in the release or threatened release of hazardous substances, pollutants, or contaminants shall pay the cost of related response actions or related actions under other statutes to remediate petroleum products or their derivatives, including motor oil and aviation fuel.

(e) **CONSULTATION.**—In carrying out response actions at the Arsenal, the Secretary of the Army shall consult with the Secretary of the Interior to ensure that such actions are carried out in a manner—

(1) to the extent practicable, consistent with the purposes set forth in section 4(c) for which the refuge will be established after the certification required under section 2(b)(2); and

(2) consistent with the provisions of sections 2(a)(2) and 4(e).

(f) **EXISTING LAW.**—The Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), the Migratory Bird Treaty Act

(16 U.S.C. 703 et seq.), and the Bald Eagle Protection Act (16 U.S.C. 668 et seq.) shall apply to all actions at the Arsenal.

(g) **RESPONSE ACTIONS.**—(1) The future establishment of the refuge shall not restrict or lessen in any way any response action or degree of cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or other applicable provisions of law, or any response action required under any other statute to remediate petroleum products or their derivatives (including motor oil and aviation fuel), required to be carried out by or under the authority of the Secretary of the Army at the Arsenal and surrounding areas, including (but not limited to)—

(A) the substance or performance of the remedial investigation and feasibility study or endangerment assessments;

(B) the contents and conclusions of the remedial investigation and feasibility study or the endangerment assessment reports; or

(C) the selection and implementation of response action and any action required under any other statute to remediate petroleum products or their derivatives (including motor oil and aviation fuel) for the Arsenal and surrounding areas.

(2) All response action and action required under any other statute to remediate petroleum products or their derivatives (including motor oil and aviation fuel) carried out at the Arsenal shall attain a degree of cleanup of hazardous substances, pollutants, and contaminants that, at a minimum, is sufficient to fully meet the purposes set forth in section 4(c) for which the refuge will be established and to permit access to all real property comprising the refuge by refuge personnel, wildlife researchers, and visitors.

#### **SEC. 4. ESTABLISHMENT OF THE ROCKY MOUNTAIN ARSENAL NATIONAL WILDLIFE REFUGE.**

(a) **ESTABLISHMENT.**—Not later than 30 days after the transfer of jurisdiction under section 2(b), the Secretary of the Interior shall establish a national wildlife refuge that shall be known as the Rocky Mountain Arsenal National Wildlife Refuge and consist of the real property required to be transferred under such section. The Secretary of the Interior shall publish a notice of the establishment of the refuge in the Federal Register.

(b) **ADMINISTRATION.**—

(1) **IN GENERAL.**—The Secretary of the Interior shall manage the refuge in accordance with the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd et seq.) and other applicable law.

(2) **CONSULTATION.**—In developing plans for the management of fish and wildlife at and public use of the refuge, the Secretary of the Interior shall—

(A) consult with the Colorado Department of Natural Resources and local governments adjacent to the refuge; and

(B) provide an opportunity for public comment on such plans.

(3) The Secretary of the Interior and the Administrator of the Federal Aviation Administration shall confer from time to time as necessary to coordinate the management of the refuge with the operations of the Denver International Airport.

(c) **PURPOSES OF THE REFUGE.**—The refuge is established for the following purposes:

(1) To conserve and enhance populations of fish, wildlife, and plants within the refuge, including populations of waterfowl, raptors, passerines, and marsh and water birds.

(2) To conserve species listed as threatened or endangered under the Endangered Species Act and species that are candidates for such listing.

(3) To provide maximum fish and wildlife oriented public uses at levels compatible with the conservation and enhancement of wildlife and wildlife habitat.

(4) To provide opportunities for compatible scientific research.

(5) To provide opportunities for compatible environmental and land use education.

(6) To conserve and enhance the land and water of the refuge in a manner that will conserve and enhance the natural diversity of fish, wildlife, plants, and their habitats.

(7) To protect and enhance the quality of aquatic habitat within the refuge.

(8) To fulfill international treaty obligations of the United States with respect to fish and wildlife and their habitats.

**(d) LIMITATIONS.—**

(1) **PROHIBITION AGAINST ANNEXATION.**—Notwithstanding section 4(a)(2) of the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd(a)(2)), the Secretary of the Interior shall not allow the annexation of lands within the refuge by any unit of general local government.

(2) **PROHIBITION AGAINST THROUGH ROADS.**—Public roads may not be constructed through the refuge.

**SEC. 5. DISPOSAL OF CERTAIN REAL PROPERTY AT THE ARSENAL FOR COMMERCIAL, HIGHWAY, OR OTHER PUBLIC USE.**

**(a) PROPERTY DESIGNATED FOR DISPOSAL UNDER THIS SECTION.**—The following areas of real property at the Arsenal are designated for disposal under this section for commercial, highway, or other public use purposes:

(1) An area of real property consisting of approximately 815 acres located at the Arsenal, the approximate legal description of which is section 9, T3S-R67W, the W2W2 of section 4 and the W4E2W2 of section 4, T3S-R67W, and the SW4SW4 of section 33, the W4E2W2 of section 33, and the W2NW4 of section 33, T2S-R67W; except that the area designated shall not include the approximately 63.04 acres containing a United States Postal Service facility and described in Department of the Army lease No. DACA 45-4-71-6185 and the water wells located in buildings 385, 386, and 387 at the Arsenal and associated facilities and easements necessary to operate and maintain the water wells, which shall be treated in the manner provided in section 2.

(2) To permit the widening of existing roads, an area of real property of not more than 100 feet inside the boundary of the Arsenal on—

(A) the Northwest side of the Arsenal adjacent to Colorado Highway #2;

(B) the Northern side of the Arsenal adjacent to 96th Avenue; and

(C) the Southern side of the Arsenal adjacent to 56th Avenue.

(b) **TRANSFER FOR HIGHWAY PURPOSES.**—The Secretary of the Army shall convey those parcels of real property described in subsection (a)(2) to the State or the appropriate unit of general local government at no cost to allow for the improvement of public roads in existence on the date of the enactment of this Act or for the provision of alternative means of transportation.

(c) **TRANSFER FOR SALE.**—(1) The Secretary of the Army shall transfer to the Administrator of the General Services Administration those parcels of the area of real property described in subsection (a)(1). The transferred property shall be sold in advertised sales as surplus property under the provisions of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 471 et seq.), except that the provisions of such Act relating to reduced- or no-cost transfers to other governmental entities shall not apply to this property.

(2) Any amounts realized by the United States upon the sale of property as described in paragraph (1) shall be transferred to the Director of the United States Fish and Wildlife Service to be used, to the extent provided for in appropriation Acts, to supplement the funds otherwise available for construction of a visitor and education center at the refuge.

(d) **LIMITATIONS.**—

(1) **PERPETUAL RESTRICTIONS.**—(A) The disposal of real property under this section shall be subject to perpetual restrictions that are attached to any deed to such property and that prohibit—

(i) the use of the property for residential or industrial purposes;

(ii) the use of ground water located under, or surface water located on, the property as a source of potable water;

(iii) hunting and fishing on the property, excluding hunting and fishing for nonconsumptive use subject to appropriate restrictions; and

(iv) agricultural use of the property, including all farming activities such as the raising of livestock, crops, or vegetables, but excluding agricultural practices used in response action or used for erosion control.

(B) Nothing in subparagraph (A) shall be construed to restrict or lessen the degree of cleanup required to be carried out under applicable provisions of law at the property designated for disposal under this section.

(2) DISPOSAL IN ACCORDANCE WITH CERCLA.—The disposal of real property under this section shall be carried out in compliance with section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9620(h)) and other applicable provisions of law.

Approved October 9, 1992.

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**LEGISLATIVE HISTORY—H.R. 1435:**

HOUSE REPORTS: No. 102-463, Pt. 1 (Comm. on Armed Services) and Pt. 2 (Comm. on Merchant Marine and Fisheries).

CONGRESSIONAL RECORD, Vol. 138 (1992):

July 7, considered and passed House.

Sept. 18, considered and passed Senate, amended.

Sept. 25, House concurred in Senate amendments.

WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 28 (1992):

Oct. 9, Presidential statement.

## APPENDIX B. DEVELOPMENT PLAN PHASING

The Refuge's development plan will be realized in three broad phases. The following lists the projects that will make up each of these phases.

### ***Phase I: Pre-Development/Site Preparation, 1996-2000***

- Restore prairie, first phase.
- Demolish unnecessary buildings and cleanup site, first phase.
- Demolish unnecessary roads and bridges, first phase.
- Construct remote information stations.
- Construct outdoor classroom.
- Create temporary mobile classroom for environmental education.
- Construct the prairie plant nursery.
- Construct the Wetlands environmental education area
- Construct the Rattlesnake Hill environmental education area.
- Construct the southern tram route.
- Construct the perimeter barrier.
- Construct the first phase of the perimeter greenbelt trail, including the Havana Ponds Overlook.
- Install the first phase of the interpretive, regulatory and road signage.

### ***Phase II: Major Development, 2000-End of cleanup***

- Construct Bald Eagle Shallows
- Restore the prairie, phase 2
- Demolish additional unnecessary buildings and clean site.
- Demolish additional unnecessary roads and bridges.
- Construct Visitor Learning Center (Visitor Center & Environmental Education Center).
- Construct the Lakes interpretive and environmental education area.
- Construct Administrative Offices.
- Retrofit research facilities.

- Retrofit the maintenance facility.
- Construct visitor learning center interpretive and environmental education area.
- Construct Officer's Row trail and environmental education area.
- Construct Lake overlook trail.
- Construct Quad connector trail.
- Construct Quad trail and environmental education area.
- Construct Wetlands connector trail.
- Construct Building 111 connector trail enhancements.
- Construct Eagle Watch trail and environmental education area.
- Construct entry road at Gateway.
- Construct Quad loop road.
- Construct first phase of the internal perimeter road.
- Construct the first phase of the Visitor Learning Center parking lot.
- Construct visitor parking at the Eagle Watch.
- Construct the major events area.
- Complete utility distribution.
- Complete the second phase of the perimeter greenbelt trail.
- Complete the second phase of the interpretive, regulatory and road signage.

### ***Phase III: Future Development, From end of cleanup***

- Complete the final phase of prairie restoration.
- Restore First Creek.
- Complete the northern tram route.
- Complete the final phase of the internal perimeter road.
- Construct the second phase of the Visitor Learning Center parking lot.
- Complete the final phase of the perimeter greenbelt trail.
- Complete the final phase of the interpretive, regulatory and road signage.

**APPENDIX C. ENVIRONMENTAL EDUCATION AND INTERPRETATION STORYLINE**

**Theme A: History**

*The history of the Refuge—the historical interaction between land, people, and technology—offers many lessons for taking responsibility for this and other places.*

**Subtheme: People are dependent on the environment.** This site has served people throughout time. Its history demonstrates how people are connected to the land and how they have changed the landscape

<p><b>Prehistory/Native American Message:</b> The plains Indians had a closeness to the land, yet they made changes to the landscape although minimal in nature (i.e. fire management/remains).</p>	<p><b>Settlement Message:</b> The settlers changed the land by introducing agricultural practices. They broke the soil, introduced water, and planted trees and shrubs. The times were hard for the settlers and they had many harsh experiences with nature and the elements. Their impact on the land was high but local in effect (farming, grazing, water) °The settlers had to move off the land when the Army took over. Many were not happy but were willing to do their part for the war effort.</p>	<p><b>Industrial Message:</b></p> <ul style="list-style-type: none"> <li>• Arsenal established to support national interests in war time (WWII, Korean Conflict, rocket fuel which led to weapons productions at N. &amp; S. plants, prisoner of war camp)</li> <li>• Arsenal facilities leased to private industry for pesticide production.</li> <li>• By-product of the Arsenal and Chemical Co. activities created long-term pollution.</li> <li>• Impact was high and regional in effect (wildlife deaths, contaminated water, earthquakes)</li> <li>• Nerve/mustard gas was a deterrent that never had to be used.</li> </ul>
<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• The big picture of this segment of history will be told in a Visitor Learning Center setting.</li> <li>• Archaeological dig utilized by school kids as part of an Environmental education Experience.</li> <li>• Tram Route(northern) will show what part of the prairie may have looked like at one time.</li> <li>• Special events like Prairie Days can relive this era.</li> <li>• Vantage points can give visitors the experience of the vastness of land at one time.</li> </ul>	<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• The big picture will be told in the Visitor Learning Center. setting.</li> <li>• Tour (southern) will show and explain the agricultural effects that this era had on the land (water, disturbed areas)</li> <li>• Events such as Prairie Day can relive “back on the farm”.</li> </ul>	<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• Overview of era told in Visitor Learning Center setting.</li> <li>• Come out with a sense of fear with understanding of effects of nerve gas and other chemical weapons.</li> <li>• See where production and disposal took place along the tram route (Southern, Northern) and vantage points.</li> <li>• School programs will be linked to student’s study of WWII-consequences</li> </ul>
<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Maintain historical sites and artifacts</li> </ul>	<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Reclamation &amp; revegetation</li> <li>• Seed &amp; plant nursery</li> <li>• Habitat mitigation</li> <li>• Maintain habitat quality and quantity even if non-sustaining methods and non-indigenous species/materials are used.</li> </ul>	<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Judicious use of pesticides and inorganic fertilizers.</li> <li>• Water detention, detritus and pollutant filtration.</li> <li>• Waste water wetland treatment demonstration area.</li> <li>• Biomonitoring - sentinel species.</li> <li>• Program Manager for the Rocky Mountain Arsenal’s project technical assistance.</li> </ul>
<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center/exhibit halls</li> <li>• Northern Tour route</li> <li>• Henderson Hill</li> <li>• Archaeological Dig (ENVIRONMENTAL EDUCATION)</li> </ul>	<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center</li> <li>• Southern/northern tour Route</li> <li>• Historic Farm Site</li> <li>• Events Area (lakes area)</li> <li>• Prairie Area (as it used to be)</li> <li>• Quad</li> </ul>	<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center</li> <li>• Rattlesnake Hill</li> <li>• Boundary Treatment</li> <li>• The Lakes (small part)</li> <li>• Northern tour route</li> <li>• Outreach sites</li> </ul>
<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibit panels at Visitor Learning Center</li> <li>• Video</li> <li>• History tour</li> <li>• Interp. panel at Henderson Hill</li> <li>• Interp. Brochure</li> <li>• Event/Reenactment (Prairie Days)</li> </ul>	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Interp. sign-time line</li> <li>• Video</li> <li>• Diorama exhibits</li> <li>• Exterior farm exhibit that people could walk through</li> <li>• Other exhibits</li> <li>• Brochure</li> </ul>	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Video</li> <li>• Models/photo dioramas at Rattlesnake Hill and Visitor Learning Center</li> <li>• Brochures</li> <li>• History tours</li> </ul>

APPENDIX C, CONT.

**Theme B: Wildlife**

*Wildlife improves everyone's quality of life.*

**Subtheme:** Wildlife and open space is the main draw that brings people to the Refuge. Once here, people can enjoy their experience that wildlife and open space offer and learn how they can benefit wildlife in an urban environment.

<p><b>Wildlife viewing is enjoyable</b>  <b>Message:</b></p> <ul style="list-style-type: none"> <li>• Participating in a variety of wildlife-oriented activities is fun and relaxing and provides some respite from living in an urban area.</li> <li>• Many people value the fact that they know wildlife still exists and thrives so close to home (intrinsic value of knowing its there).</li> </ul>	<p><b>The value of RMA as open space</b>  <b>Message:</b></p> <ul style="list-style-type: none"> <li>• The refuge offers people the opportunity to see a great diversity of wildlife in a relatively large urban space area.</li> <li>• People need open space/wild areas where they can get out and experience nature.</li> </ul>	<p><b>Create wildlife habitat at home</b>  <b>Message:</b></p> <ul style="list-style-type: none"> <li>• People can learn how to create wildlife habitat at home and thus benefit wildlife.</li> <li>• People need to understand the problems of planting ornamental exotics such as purple loosestrife in their backyards.</li> </ul>
<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• People will receive orientation of where to go to see wildlife at Visitor Learning Center.</li> <li>• Tram tours will provide good opportunities to see and learn about wildlife and their habitat requirements.</li> <li>• Special presentations (bird tours, wildlife walks) offer more specialized experiences.</li> <li>• Recreational opportunities (bike, fish, self-guided hikes, nature photography, art) allows people to experience wildlife on their own, opportunities for learning.</li> <li>• As a watchable program site</li> </ul>	<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• People will be oriented to the Refuge and where they can go to at the Visitor Learning Center through orientation desk, inside/outside exhibits.</li> <li>• Visitors will see how big the Refuge is in comparison to other open space areas in the metro area.</li> <li>• Guided tram tours (northern/southern) allow for people to see a lot of open space.</li> <li>• Self guided opportunities will allow people to enjoy the open space at their own pace.</li> <li>• Special presentations-wildflower walks</li> <li>• The perimeter trail will allow for people to participate in a variety of recreational pursuits (biking, walking, jogging, in-line skating) on the Refuge edge and still be able to have numerous opportunities to view wildlife.</li> <li>-Perimeter overlooks allow people to view into a large area of open space at the edge of the Refuge from their own vehicles.</li> <li>-Special presentations/events offer more specialized experiences.</li> </ul>	<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• Outdoor exhibits at Visitor Learning Center complex will demonstrate native prairie/xeriscaping techniques.</li> <li>• Special classes will be offered in landscaping for wildlife which would take place in the Environmental Education classrooms and out in the field.</li> <li>• Guided tram tours (northern prairie) offer experience of seeing restored prairie.</li> <li>• Guided tours through the nursery for seeing native plants being propagated from seed.</li> <li>• Environmental education classes will collect seeds to grow in school and replant at the Refuge.</li> </ul>
<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Lake Mary pond study</li> <li>• Biomonitoring</li> </ul>	<p><b>Correlated Management/Research/Facilities/Activities:</b></p>	<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Reclamation &amp; revegetation.</li> <li>• Seed &amp; plant nursery</li> <li>• Habitat mitigation</li> <li>• Manage vegetation to reduce the need for irrigation, except at the initial stages of revegetation.</li> </ul>
<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center</li> <li>• Tour Routes-all</li> <li>• Trails, observation overlooks including perimeter trail</li> <li>• Eagle Watch viewing area</li> <li>• Lakes, Wetlands, Havana Pond</li> <li>• Parking Overlooks</li> </ul>	<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center</li> <li>• Tour Routes-all</li> <li>• Trails, observation overlooks, including perimeter trail</li> <li>• Eagle Watch viewing area</li> <li>• Parking overlooks</li> <li>• Lakes, Wetlands, Havana Pond</li> <li>• Outreach sites-schools</li> </ul>	<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center Exhibit area</li> <li>• Visitor Learning Center classrooms</li> <li>• Tour Route-Northern</li> <li>• Nursery</li> <li>• Rattlesnake Hill</li> <li>• Active site restoration areas</li> </ul>

**APPENDIX C, CONT.**

<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibits-live and stuffed</li> <li>• Events and special tours</li> <li>• Signage (tactile)</li> <li>• Viewing scopes</li> <li>• Wildlife viewing structures (nature sound opportunities, parabolic disc)</li> <li>• Remote video camera</li> <li>• Models (feet, beaks)</li> <li>• Publications</li> <li>• Nature gift shop</li> <li>• Floating dock</li> <li>• Sculpture</li> <li>• Outdoor exhibits (prairie dogs, nightlife)</li> <li>• Video</li> </ul>	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibits</li> <li>• Events and special tours</li> <li>• Publications</li> <li>• Signage</li> <li>• Viewing scopes</li> <li>• Wildlife viewing structures, etc.</li> <li>• Refuge education kit</li> </ul>	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibits</li> <li>• Classrooms</li> <li>• Events and special tours</li> <li>• Publications</li> <li>• Seed packets</li> <li>• Signage</li> </ul>
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**Theme C: Ecosystem Connections**  
*Nature consists of dynamic and interrelated systems.*

**Subtheme:** Although it is an urban open-space island in some respects, the Refuge is part of a bigger ecosystem which requires special management practices to maintain the vitality and diversity of the wildlife species present.

<p><b>Pre-Settlement Shortgrass prairie Message:</b></p> <p>• Historically, short-grass prairie were the dominant plant community here. The conditions which create prairie include extreme heat, dry conditions, mixed with extreme cold temps., wind and soils. The prairie ecosystem supports diverse wildlife (raptors and prairie dogs). The decline of one species will have an impact on other populations. Grazing (by native ungulates and rodents) and fire (natural and anthropogenic) are important components of maintaining this ecosystem. Water is life in the arid west. Where was water found and how did it affect wildlife distribution? The benefits of indigenous species are not just to support wildlife.</p>	<p><b>How settlement changed Prairie ecosystem Message:</b></p> <p>The settlement era changed the prairie ecosystem resulting in changes for wildlife. The diversity of wildlife is directly related to the water resources found here as a result of building irrigation ditches and lakes. The upland tree habitat is another example related to water resources. The quality of the grassland community has changed which has changed the quality of the habitat. Prairie Grassland is the most threatened type of habitat in N. America. The restoration efforts are expensive and time consuming. Many of the species here now have relatively poor root systems and would not hold up well in another dust bowl situation.</p>	<p><b>Wildlife Management objectives Message:</b></p> <p>The Refuge need to be managed for both wildlife and people. An open space island requires some special management practices in order to maintain genetic diversity and variation. With the exception of deer (antelope and bison if reintroduced), most other wildlife are able to move off the Refuge. Fluctuating wildlife populations are the norm, but habitat preservation is vital to preserving species. The Refuge is a migratory stopover for many bird species and will become even more important as more habitat is lost through development on the front range.</p>
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**APPENDIX C, CONT.**

<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• The big picture is gained through the Visitor Learning Center complex from exhibits (indoor and outdoor), videos, classes in environmental education center.</li> <li>• Native prairie exhibits offer the chance to see short-grass prairie</li> <li>• Visitors/environmental education classes will be able to view revegetated areas along the tram route (northern)</li> <li>• Visitors can see native seedlings being propagated at the Nursery</li> <li>• Participation in special events like <i>Prairie Days and Bald Eagle Days</i></li> <li>• Special outreach presentations by staff personnel</li> <li>• Guided tours of the northern portion of refuge with views of the prairie, prairie dog towns, and prairie wildlife</li> <li>• Visitors will be able to tour through a prairie dog burrow exhibit</li> <li>• Environmental education programs compare conditions in grassland communities with those in other plant communities and promote value of grasslands</li> <li>• Prescribed burns can be used to demonstrate role of fire in resettlement times</li> <li>• Visitor will see how plants and wildlife have adapted to living in arid environment from tour route</li> </ul>	<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• The big picture is gained through the Visitor Learning Center. Complex from exhibits, classes, videos</li> <li>• Guided tram tours will point out grassland areas that have been restored and areas that have not which will enable the visitor to better understand how the ecosystem changed</li> <li>• Guided tram tour of both the northern/southern zone and vantage points/dioramas demonstrate the effect of bringing water onto the site and the diversity of wildlife species as a result of bringing in water</li> <li>• Trails will take visitors through various habitats/areas demonstrating landscape changes</li> <li>• Perimeter detention ponds demonstrate effect of urban runoff onto the Refuge</li> <li>• Special outreach programs will be conducted by staff</li> <li>• Visitors will see native seedling being propagated at the Nursery</li> <li>• Visitors/environmental education classes will be able to participate in revegetation work</li> <li>• Environmental education programs compare wildlife diversity among differing habitats.</li> <li>• Visitors will see the effects of fire suppression on the plant communities</li> </ul>	<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• The big picture is gained through the Visitor Learning Center complex from exhibits, classes, videos, orientation desk, etc.</li> <li>• Environmental Education classes will be able to join wildlife managers in research such as deer counts, creel census, etc.</li> <li>• Visitors/Environmental Education classes will be able to see wildlife managers performing biomonitoring duties</li> <li>• Visitors/Environmental Education classes will be able to watch wildlife management activities going on in research lab</li> <li>• Guided tours show/tell how wildlife is influenced by man's presence, the encroachment of development, and the importance of water/upland trees are to migrating birds, and how the Refuge is an open-space island</li> <li>• Visitors will be able to view eagles roosting from Eagle watch and understand the importance of first Creek as a riparian corridor</li> <li>• Visitors will experience what life is like in a prairie dog burrow</li> <li>• Trails will offer vantage points into mitigated wetlands, water detention ponds etc.</li> <li>• Outreach programs will be conducted by staff personnel</li> <li>• Prescribes burn areas will demonstrate importance of fire to maintaining the ecosystem.</li> </ul>
<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Reclamation &amp; revegetation.</li> <li>• Seed &amp; plant nursery</li> <li>• Grazing and the use of fire as management tools.</li> </ul>	<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Reclamation &amp; revegetation.</li> <li>• Seed &amp; plant nursery</li> <li>• Habitat mitigation</li> <li>• Maintain habitat quality and quantity even if non-sustaining methods and non-indigenous species/materials are used.</li> <li>• Management of Endangered, Threatened &amp; Candidate species.</li> <li>• Monitoring population trends.</li> <li>• Wildlife population control - culling, introductions / translocations.</li> <li>• Manage vegetation to reduce the need for irrigation, except at the initial stages of revegetation.</li> </ul>	<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Form partnerships with adjacent landowners to manage habitat &amp; wildlife beyond the refuge boundaries.</li> <li>• Aim to participate in planning for physically connecting the refuge with adjacent open space - Stapleton, Barr Lake, Sand Creek, S. Platte.</li> <li>• Encourage groups such as trails and greenways organizations to forge connections to the refuge boundaries. Become active in realizing the Emerald Strands plan (a regional trails plan) and help influence its quality as wildlife habitat throughout that plan area.</li> </ul>
<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center, outdoors, classrooms</li> <li>• Guided tours (northern)</li> <li>• <i>Eagle Watch</i></li> <li>• Prairie dog exhibit area</li> <li>• Nursery</li> <li>• Rattlesnake Hill</li> <li>• Quad</li> <li>• Outreach sites</li> <li>• Events areas</li> </ul>	<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center, outdoors, classrooms</li> <li>• Guided tours (southern emphasis)</li> <li>• <i>Lakes, Wetlands</i></li> <li>• Trails</li> <li>• Perimeter viewing areas</li> <li>• Havana Pond</li> <li>• Detention Ponds</li> <li>• Outreach sites</li> <li>• Events areas</li> </ul>	<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center exhibits, classrooms, research lab</li> <li>• Research lab (Bldg. 111)</li> <li>• Nursery</li> <li>• Northern/Southern tram routes</li> <li>• Lakes/wetlands/quad</li> <li>• <i>Eagle Watch</i></li> <li>• Trails-interp. facility</li> <li>• Havana Pond</li> <li>• Perimeter Overlooks</li> <li>• Detention Ponds</li> <li>• Outreach Sites (special emphasis)</li> <li>• Events areas</li> <li>• Restoration areas including any prescribed burn areas</li> </ul>

APPENDIX C, CONT.

<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibits-indoor/outdoor</li> <li>• Prairie dog burrow exhibit</li> <li>• Prairie root exhibit</li> <li>• Interp. facilities</li> <li>• Eagle Watch</li> <li>• Guided Tours</li> <li>• Special Events</li> <li>• Scopes</li> <li>• Models</li> <li>• Tactile signage</li> </ul>	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibits-indoor/outdoor</li> <li>• Prairie dog burrow exhibit</li> <li>• Guided/self-guided hikes with interp. facilities (signs, info)</li> <li>• Special events</li> <li>• Scopes</li> <li>• Models, dioramas</li> <li>• Tactile signage</li> </ul>	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibits</li> <li>• Publications</li> <li>• Guided/self guided hikes with interp facilities (signs, info)</li> <li>• Wildlife viewing structures</li> <li>• Scopes</li> <li>• Models</li> <li>• Tactile signage</li> </ul>
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**Theme D: Consequences and Responsibilities**  
*Understanding and working with natural process is more responsible and efficient in the long run.*

**Overall Subtheme:** People's actions are not just local in effect. People's lifestyle choices can either hurt or help the environment. The costs of cleanup and restoration are borne by the people.

**Consequences Subtheme:** The post-1942 activities that occurred at the Arsenal had both positive and negative consequences for the local people and the nation.

<p><b>Consequences of War Message:</b></p> <ul style="list-style-type: none"> <li>• The total cost of the war/cold war era was tremendous. Across the country, we have many of these facilities. We are now deciding to what degree we can afford to clean them all up.</li> <li>• There was a tremendous human effort that went into the war, and the arsenal played a major role locally in this effort. It brought women in the work force, provided economic benefits, and employed thousands of people</li> <li>• What went on here had a great impact on the communities-employment, displacing people, sense of fear of chemicals</li> <li>• The war unified the country toward the mission of war</li> <li>• There are tremendous costs associated with dismantling this place</li> </ul>	<p><b>Consequences of Chemical Manufacturing Message:</b></p> <ul style="list-style-type: none"> <li>• It caused long-term soil pollution and affected wildlife health</li> <li>• It caused long-term water pollution and contaminated the groundwater in the region (people on bottled water, affected crops) and impacted wildlife</li> <li>• It will never be the same again</li> <li>• Pesticides created a boom in farming</li> <li>• Large scale waterfowl die-offs occurred</li> </ul>	<p><b>Consequence of Cleanup Message:</b></p> <ul style="list-style-type: none"> <li>• The total costs to clean up this site over period of time (Superfund, CERCLA, RCRA)</li> <li>• The pollution cannot be completely cleaned up to everyone's satisfaction due to current technology and the costs involved</li> <li>• It caused a lot of turmoil for the public industry including fear and lack of trust</li> <li>• The consequences of this being a Superfund site including the restrictions on hunting, the 815 acres It is being protected as a wildlife refuge and not developed</li> <li>• The ground water treatment systems have to be maintained indefinitely (lake levels)</li> </ul>
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**Responsibility Subtheme:** We have responsibility to turn the Arsenal into a National Wildlife Refuge for both people and wildlife

<p><b>War Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• The site is being converted from a military site into a National Wildlife Refuge. Production ceased in 1982 when demilitarization and cleanup became the focus</li> <li>• Project Eagle got rid of the nerve gas</li> <li>• The army did take action to begin cleaning it up</li> <li>• There's much recycling of parts (copper, SQL facility, steel)</li> </ul>	<p><b>Chemical/By-products Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• The site became a priority to begin cleaning it up (Superfund, CERCLA)</li> <li>• If we produce chemicals for war/pesticides in the future, we must ensure we understand the consequences and know how to contain/destroy the by-products</li> </ul>	<p><b>Cleanup Responsibilities:</b></p> <ul style="list-style-type: none"> <li>• The Arsenal is on the forefront of a massive and complex cleanup</li> <li>• People have a continual responsibility to get involved in what government and private industry are doing in our communities</li> <li>• It takes the whole community to clean it up</li> <li>• It's being cleaned up with the future Refuge in mind</li> <li>• Biomonitoring will go on for a long time</li> <li>• The land is being restored back to prairie and natural habitat</li> </ul>
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**APPENDIX C, CONT.**

<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• Visitors will experience what the war years were like here in the Visitor Learning Center setting (visual reality exhibit)</li> <li>• Visitors should come out with a sense of fear and the power of the place (i.e. seeing a canister of nerve gas that will kill thousands/millions of people) from both the Visitor Learning Center experience and going out onto the site</li> <li>• The feeling for the vastness of the site and the need for buffers can be had from vantage points</li> <li>• Vantage points can be used to demonstrate how the Arsenal was once located away from the community and now the community surrounds it</li> <li>• Visitor's will be able to see what was here through dioramas and remaining artifacts from vantage points</li> <li>• Visitor's will experience what military life was like from remnant places like Officer's Row, Rod and Gun Club, etc.</li> </ul>	<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• Visitor's will get the big picture of the positive and negative consequences of pesticide and chemical use in the Visitor Learning Center setting</li> <li>• Vantage point overlooking basins using videos or dioramas can show how pesticides/chemicals were disposed of into the basins</li> <li>• Guided tram tours can stop at point along the route where through icons or panels, visitor's get a sense of how the site was polluted</li> </ul>	<p><b>Visitor Experience:</b></p> <p>Visitors will experience the safety aspects of cleanup in the Visitor Learning Center setting (i.e. be able to slip into the front half of a white suite and mask)</p> <ul style="list-style-type: none"> <li>• Visitor's will be able to see ongoing research in the lab</li> <li>• Visitor's will see how the ground water is being treated along the tram route at the groundwater treatment facilities</li> <li>• Interpretive sites along the guided tours will give the visitor vantage points of the cleanup</li> </ul>
<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Maintain historical sites and artifacts</li> </ul>	<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Water detention, detritus and pollutant filtration.</li> <li>• Wastewater wetland treatment demonstration area.</li> <li>• Judicious use of pesticides and inorganic fertilizers.</li> <li>• Maintain historical sites and artifacts</li> </ul>	<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Biomonitoring - sentinel species.</li> <li>• PMRMA project technical assistance.</li> <li>• Reclamation &amp; revegetation.</li> <li>• Seed &amp; plant nursery</li> <li>• Habitat mitigation</li> </ul>
<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center</li> <li>• Rattlesnake Hill</li> <li>• Henderson Hill Overlook</li> <li>• Northern Tram Route</li> <li>• Perimeter Trail</li> </ul>	<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center</li> <li>• Rattlesnake Hill</li> <li>• Northern Tram Route</li> <li>• Southern Tram Route</li> </ul>	<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center</li> <li>• Rattlesnake Hill</li> <li>• Henderson Hill</li> <li>• Perimeter Trail</li> <li>• Tram Route (northern)</li> </ul>
<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibits</li> <li>• Dioramas</li> <li>• Models</li> <li>• Brochures</li> <li>• Videos</li> <li>• Artifacts</li> <li>• Sculptures</li> <li>• Panels (signs)</li> <li>• Guided tours</li> </ul>	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibits</li> <li>• Dioramas</li> <li>• Models</li> <li>• Brochures</li> <li>• Videos</li> <li>• Artifacts</li> <li>• Sculptures</li> <li>• Panels (signs)</li> <li>• Guided tours</li> </ul>	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibits</li> <li>• Groundwater treatment facilities</li> <li>• Dioramas</li> <li>• Models</li> <li>• Brochures</li> <li>• Videos</li> <li>• Artifacts</li> <li>• Sculptures</li> <li>• Panels (signs)</li> <li>• Guided tours</li> </ul>

**Theme E: Stewardship**  
*The USFWS, in serving as the Refuge's stewards must carefully manage the resources of the refuge and its visitors*

**Subtheme:** The USFWS is mandated to manage the Refuge for wildlife and people

<p><b>Mission of the USFWS Message:</b></p> <ul style="list-style-type: none"> <li>• The Refuge is part of a national system of lands managed for wildlife purposes by the USFWS</li> <li>• Environmental Education is a primary focus of public use at the Refuge</li> </ul>	<p><b>Part of the Community Message:</b></p> <ul style="list-style-type: none"> <li>• Outreach programs, volunteer, and "Friends" activities and the development of a regional trail system around the Refuge help to blur the edge between the surrounding neighborhoods and the Refuge Gateway is a demonstration of community projects that work</li> </ul>	<p><b>Take Responsibility Message:</b></p> <ul style="list-style-type: none"> <li>• People have to realize that they need to take responsibility for their own action on the land</li> <li>• People must realize how what they do at home impacts the Refuge (what they dump down their drains)</li> <li>• The Refuge will demonstrate good stewardship practices in how it handles energy and waste disposal systems</li> <li>• The Gateway partnerships will be geared toward science and technology and will demonstrate sound</li> </ul>
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**APPENDIX C, CONT.**

<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>• Visitors will see that there are solutions to the problems, and that people are part of it both at the Visitor Learning Center Setting and out in the Refuge</li> <li>• Visitor's will experience being out with biologists and other USFWS personnel and getting to know the agency</li> <li>• Environmental Education programs will provide hands on experience</li> <li>• People can learn more about the USFWS by becoming a volunteer</li> <li>-Outreach programs will make the USFWS more visible in the public eye</li> </ul>	<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>-The Gateway and learning center will reflect the community spirit</li> <li>-Environmental Education programs will involve the community</li> <li>-People can gain experience by being a volunteer</li> <li>-Outreach programs will be geared to serving the community needs</li> </ul>	<p><b>Visitor Experience:</b></p> <ul style="list-style-type: none"> <li>-Big picture in the Visitor Learning Center setting that there is a solution and it's up to people to make it happen</li> <li>-People will experience the importance of the grassland/prairie dog ecosystem</li> <li>-People will experience how water quality is affected by their actions at home along the perimeter</li> <li>-People will see how development affects both quality and quantity of water</li> <li>-People will see recycling/sound conservation practices going on both in the gateway and out in the Refuge</li> <li>-People can gain experience by being a volunteer</li> </ul>
<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Demonstrate how the FWS maintains international treaties and manages migratory wildlife</li> <li>• Integrate hands-on environmental education with all aspects of Refuge research and management.</li> </ul>	<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Promote the recognition and management of ecological rather than political or legal units, such as watersheds</li> <li>• Form partnerships with adjacent landowners to manage habitat &amp; wildlife beyond the refuge boundaries.</li> <li>• Encourage groups such as trails and greenways organizations to forge connections to the refuge boundaries. Become active in realizing the Emerald Strands plan (a regional trails plan) and help influence its quality as wildlife habitat throughout that plan area.</li> <li>• Aim to participate in planning for physically connecting the refuge with adjacent open space - Stapleton, Barr Lake, Sand Creek, S. Platte.</li> </ul>	<p><b>Correlated Management/Research/Facilities/Activities:</b></p> <ul style="list-style-type: none"> <li>• Water detention, detritus and pollutant filtration.</li> <li>• Wastewater wetland treatment demonstration area.</li> <li>• Judicious use of pesticides and inorganic fertilizers.</li> <li>• Minimize the adverse affects of the human impacts by using appropriate technologies to treat wastewater, cool and heat buildings, provide transportation, recycle materials and utilize grey water.</li> <li>• Aim to integrate concepts such as the embodied energy of building materials into facilities development programs.</li> <li>• Manage vegetation to reduce the need for irrigation, except at the initial stages of revegetation.</li> </ul>
<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center (Western Zone)</li> <li>• Ongoing research/restoration sites on the Refuge</li> <li>• Outreach Sites</li> <li>• Environmental Educationsites-wetlands, lakes, quad, temporary sites</li> <li>• Research lab</li> <li>• Nursery</li> <li>• Maintenance/Administrative facilities</li> <li>• Eagle Watch</li> </ul>	<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center (Western Zone)</li> <li>• Outreach Sites</li> <li>• Environmental Educationsites-wetlands, lakes, quad, etc.</li> <li>• Perimeter Trail-detention ponds</li> <li>• Havana Pond</li> <li>• Bald Eagle Shallows</li> </ul>	<p><b>Place:</b></p> <ul style="list-style-type: none"> <li>• Visitor Learning Center (Western Zone)</li> <li>• Outreach Sites</li> <li>• Environmental Educationsites-wetlands, lakes, quad, etc.</li> <li>• Perimeter trail-detention ponds</li> <li>• Perimeter groundwater treatment sites</li> <li>• Guided tour</li> <li>• Eagle Watch</li> <li>• Havana Pond</li> <li>• Bald Eagle Shallows</li> </ul>
<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Exhibits</li> <li>• USFWS facilities</li> <li>• Publications</li> <li>• Video</li> <li>• Restoration/research sites</li> <li>• Volunteer program</li> <li>• Special events</li> <li>• Teacher education kits</li> </ul>	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Newsletter/publications</li> <li>• Volunteer program</li> <li>• Teacher education kits</li> <li>• Interp. facilities (signs, etc.)</li> <li>• Special events</li> </ul>	<p><b>Media:</b></p> <ul style="list-style-type: none"> <li>• Publications/newsletters</li> <li>• Community projects</li> <li>• Special event (on/off refuge)</li> <li>• Volunteer program</li> <li>• "Friends" program</li> <li>• Teacher education kits</li> <li>• Interp. facilities</li> </ul>

**APPENDIX D: ROCKY MOUNTAIN ARSENAL NATIONAL WILDLIFE REFUGE PLANNING TEAM  
AND PROJECT PARTICIPANTS**

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Laurie Shannon (Assistant Project Manager)  
Pete Gober (Former Refuge Manager)

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## APPENDIX E: RELATED DOCUMENTS

**The Comprehensive Management Plan** provides a summary of the most important aspects of bringing the Refuge into being. More detail may be found in the following reports, all of which may be reviewed at the Refuge (303-289-0232).

**Final Environmental Impact Statement.** 148 pages (plus appendices) describing the alternative refuge plans developed during the planning process and the potential environmental impacts of implementing each plan. Also provides a detailed discussion of the characteristics of the Refuge's environment.

**Public Use Plan.** Describes a framework for public use of the Refuge in educational, interpretive, and recreational programs and activities. Also details the Refuge storyline.

**Final Refuge Program.** Gives a detailed analysis of each major facility that is part of the Refuge plan.

**Project Worksheets.** Profiles the character, techniques, and costs of each major project associated with the Refuge plan.

**Map Atlas.** Contains 20 inventory and analysis maps from the planning process.

**Printing** - Moser Printing Inc., Englewood, Colorado

