

# City of Las Cruces®

PEOPLE HELPING PEOPLE

## Council Action and Executive Summary

Item # 10 Ordinance/Resolution# 11-095 Council District:     

For Meeting of October 18, 2010  
(Adoption Date)

**TITLE:** A RESOLUTION AUTHORIZING STAFF TO PROCEED WITH THE DESIGN AND IMPLEMENTATION OF PLAN 4 OF THE LAS CRUCES DAM RESTORATION STUDY, SECTION 1135 PROJECT IN CONJUNCTION WITH THE ARMY CORPS OF ENGINEERS.

**PURPOSE(S) OF ACTION:** *Concurrence by Council to proceed with the Proposed Plan 4 from the Army Corps of Engineers for the Las Cruces Dam, Section 1135 Project.*

<b>Drafter and Staff Contact:</b> Louis Grijalva <i>[Signature]</i>		<b>Department:</b> Public Works		<b>Phone:</b> 528-3479	
<b>Department</b> Public Works Michael Johnson	<b>Signature</b> <i>[Signature]</i>	<b>Phone</b> 528-3333	<b>Department</b> Budget	<b>Signature</b> <i>[Signature]</i>	<b>Phone</b> 541-2107
<b>Other</b>			<b>Assistant City Manager</b>	<b>Signature</b> <i>[Signature]</i>	<b>Phone</b> 541-2271
<b>Legal</b>	<b>Signature</b> <i>[Signature]</i>	<b>Phone</b> 541-2128	<b>City Manager</b>	<b>Signature</b> <i>[Signature]</i>	<b>Phone</b> 541-2076

### **BACKGROUND / KEY ISSUES / CONTRIBUTING FACTORS:**

Since 2005, under the authority of the Water Resources Development Act of 1996 (as amended), Section 1135; and with the support of Congressional Delegates Senator Pete Domenici, Senator Jeff Bingaman and Representative Steven Pearce; the City of Las Cruces' Public Works Department and the Army Corps of Engineers (ACOE) have been working in coordination to modify and improve the Las Cruces Dam and to improve the quality of environment of the native wildlife and vegetation of the immediate surrounding area. The ACOE Project Phases and Timeline are as follows: Preliminary Restoration Plan (2005); Feasibility Phase (2006–2011); and the Design and Implementation Phase (2011–2013).

The Section 1135 Preliminary Restoration Plan of 2005 consisted of conducting a series of studies and field visits to identify contributing factors the Las Cruces Dam has made to the degradation of the ecosystem in the project area. The project area is located directly behind the Las Cruces Dam (east of I-25) and is situated on approximately 700 acres of flood pool, maintenance roads and right-of-way for the outfall channel of the dam. The dam was initially constructed in the early 1970's by the ACOE to reduce flood damages from flows originating in the Las Cruces and Alameda Arroyos and is owned and operated by the City of Las Cruces. The dam was designed to pass all flows from the ~600 acre dry bed reservoir area, however, sediment buildup in the drainage ditch and areas downstream of

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stormwater discharges from the surrounding residential areas has been and continues to be a maintenance challenge.

In addition to the maintenance and drainage challenges presented by natural causes such as sediment buildup and wind/water erosion; the natural Chihuahuan Desert landscape, riparian area along the arroyos, and the native plant and wildlife ecoregions have been adversely altered within the project area due to various human induced disturbances affecting approximately 85 – 90 percent of the Chihuahuan Desert biotic community.

The ACOE Preliminary Restoration Plan therefore designated the Las Cruces Dam Ecosystem Restoration Project as vital to limit further degradation and adverse impact of the disturbances caused to the historic arroyo riparian ecosystem of the Las Cruces and Alameda Arroyos.

During the Feasibility Phase of the Project (2006-2011), the ACOE has thoroughly researched and studied the project area and has formulated several objectives to address the following items:

- Increase the quality and quantity of the Chihuahuan riparian and wetland habitat.
- Increase the amount and diversity of native vegetation.
- Decrease the wind and water erosion from disturbed sites.
- Increase or restore habitat connectivity.
- Increase recreation opportunities; including environmental, cultural and historic education.

After considering the aforementioned objectives, the proposed measures to meet the stated objectives consist of: the restoration of the arroyo riparian habitat, which would serve to improve the majority of the study area; the creation of Rio Grande bosque cottonwood and wet meadow habitats (playas and wetlands) where appropriate; improvement of existing seasonal wetlands and the creation of an upper basin wetland using reclaimed water; and altering the current arroyo flow path to both conserve and improve current playa and arroyo habitat (including restoration of native riparian areas). In addition to the restoration of the natural areas, the ACOE also considered the added benefit of using the restored area as a natural recreation and education opportunity for the greater community of Las Cruces by designating new trails, non-intrusive wildlife viewing blinds, access to existing park areas from the project area and informative/educational kiosks.

On September 13, 2010, the ACOE presented to the City Council ten proposed plans with an emphasis on three recommended options to move forward into the Design and Implementation Phase (2011-2013). After a thorough presentation by the ACOE, the majority of the Council concurred to proceed with Plan 4 which includes all of the proposed measures stated above. This action also coincides with the City of Las Cruces' 2010 Strategic Plan: Service Delivery: Strategic Objective 3: Proactively Plan Land Use, Infrastructure, Connectivity and Transportation, Unite Land Use with Transportation and Housing Planning.

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The approximate total project cost is \$4,500,000. Of which, the Federal Government will bear 75% of project costs with a City of Las Cruces' cost match of 25%. These costs are to include all phases of the project: i.e., Feasibility Studies, Project Design & Implementation, and maintenance of the project area. When the cost-share agreement is received from the ACOE, the City's 25% match will come out of the Flood Control Fund and all work-in-kind can be credited to the 25% match.

**SUPPORT INFORMATION:**

1. Vicinity Map, Exhibit "A"

**SOURCE OF FUNDING:**

<b>Is this action already budgeted?</b>  N/A	Yes	<input type="checkbox"/>	See fund summary below
	No	<input type="checkbox"/>	If No, then check one below:
	<i>Budget Adjustment Attached</i>	<input type="checkbox"/>	Expense reallocated from: _____
		<input type="checkbox"/>	Proposed funding is from a new revenue source (i.e. grant; see details below)
		<input type="checkbox"/>	Proposed funding is from fund balance in the _____ Fund.
<b>Does this action create any revenue?</b>  N/A	Yes	<input type="checkbox"/>	Funds will be deposited into this fund: _____ in the amount of \$ _____.
	No	<input type="checkbox"/>	There is no new revenue generated by this action.

**FUND EXPENDITURE SUMMARY:**

Fund Name(s)	Account Number(s)	Expenditure Proposed	Available Budgeted Funds in Current FY	Remaining Funds	Purpose for Remaining Funds
N/A					

**OPTIONS / ALTERNATIVES:**

1. Vote "Yes"; this will authorize staff to proceed with the design and implementation of Plan 4 of the Las Cruces Dam Restoration Study, Section 1135 Project in conjunction with the Army Corps of Engineers.
2. Vote "No"; this will forbid staff to proceed with the design and implementation of Plan 4 of the Las Cruces Dam Restoration Study, Section 1135 Project in conjunction with the Army Corps of Engineers.

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3. Vote to "Amend"; this could allow council to select an alternate plan presented by the ACOE.
4. Vote to "Table"; this could allow council to revisit the proposal at a future date, but could jeopardize allocated ACOE funding.

**RESOLUTION NO. 11-095****A RESOLUTION AUTHORIZING STAFF TO PROCEED WITH THE DESIGN AND IMPLEMENTATION OF PLAN 4 OF THE LAS CRUCES DAM RESTORATION STUDY, SECTION 1135 PROJECT IN CONJUNCTION WITH THE ARMY CORPS OF ENGINEERS.**

The City Council is informed that:

**WHEREAS**, Since 2005, under the authority of the Water Resources Development Act of 1996 (as amended), Section 1135; and with the support of Congressional Delegates Senator Pete Domenici, Senator Jeff Bingaman and Representative Steven Pearce; the City of Las Cruces' Public Works Department and the Army Corps of Engineers (ACOE) have been working in coordination to modify and improve the Las Cruces Dam and to improve the quality of environment of the native wildlife and vegetation of the immediate surrounding area; and

**WHEREAS**, The ACOE Project Phases and Timeline are as follows: Preliminary Restoration Plan (2005); Feasibility Phase (2006–2011); and the Design and Implementation Phase (2011–2013); and

**WHEREAS**, The Section 1135 Preliminary Restoration Plan of 2005 consisted of conducting a series of studies and field visits to identify contributing factors the Las Cruces Dam has made to the degradation of the ecosystem in the project area; and

**WHEREAS**, The project area is located directly behind the Las Cruces Dam (east of I-25) and is situated on approximately 700 acres of flood pool, maintenance roads and right-of-way for the outfall channel of the dam; and

**WHEREAS**, The ACOE Preliminary Restoration Plan designated the Las Cruces Dam Ecosystem Restoration Project as vital to limit further degradation and adverse impact of the disturbances caused to the historic arroyo riparian ecosystem of the Las Cruces and Alameda Arroyos; and

**WHEREAS,** The ACOE has thoroughly researched and studied the project area and has formulated several objectives to address the following items:

- Increase the quality and quantity of the Chihuahuan riparian and wetland habitat.
- Increase the amount and diversity of native vegetation.
- Decrease the wind and water erosion from disturbed sites.
- Increase or restore habitat connectivity.
- Increase recreation opportunities; including environmental, cultural and historic education; and

**WHEREAS,** On September 13, 2010, the ACOE presented to City Council ten proposed plans with an emphasis on three recommended options to move forward with the project; and

**WHEREAS,** After a thorough presentation by the ACOE, the majority of the Council concurred to proceed with Plan 4; and

**WHEREAS,** This action also coincides with the City of Las Cruces' 2010 Strategic Plan: Service Delivery: Strategic Objective 3: Proactively Plan Land Use, Infrastructure, Connectivity and Transportation, Unite Land Use with Transportation and Housing Planning; and

**WHEREAS,** The approximate total project cost is \$4,500,000. Of which, the Federal Government will bear 75% of project costs with a City of Las Cruces' cost match of 25%.

**WHEREAS,** When the cost-share agreement is received from the ACOE, the City's 25% match will come out of the Flood Control Fund and all work-in-kind can be credited to the 25% match.

**NOW, THEREFORE,** Be it resolved by the governing body of the City of Las Cruces:

**(I)**

**THAT** since 2005, under the authority of the Water Resources Development Act of 1996 (as amended), Section 1135; and with the support of Congressional Delegates Senator Pete Domenici, Senator Jeff Bingaman and Representative Steven Pearce; the City of Las Cruces' Public Works Department and the Army Corps of Engineers (ACOE) have been working in coordination to modify and improve the Las Cruces Dam and to improve the quality of environment of the native wildlife and vegetation of the immediate surrounding area.

**(II)**

**THAT** the ACOE Preliminary Restoration Plan has designated the Las Cruces Dam Ecosystem Restoration Project as vital to limit further degradation and adverse impact of the disturbances caused to the historic arroyo riparian ecosystem of the Las Cruces and Alameda Arroyos.

**(III)**

**THAT** on September 13, 2010, the ACOE presented to City Council ten proposed plans with an emphasis on three recommended options to move forward into the Design and Implementation Phase (2011-2013).

**(IV)**

**THAT** after a thorough presentation by the ACOE, the majority of the Council concurred to proceed with Plan 4.

**(V)**

**THAT** the approximate total project cost is \$4,500,000. Of which, the Federal Government will bear 75% of project costs with a City of Las Cruces' cost match of 25%.

**(VI)**

**THAT** when the cost-share agreement is received from the ACOE, the City's 25% match will come out of the Flood Control Fund and all work-in-kind can be credited to the 25% match.

**(VII)**

**THAT** City staff is hereby authorized to do all deeds necessary in the accomplishment of the herein above.

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DONE AND APPROVED this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

(SEAL)

APPROVED:

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Clerk

Moved by: \_\_\_\_\_

Seconded by: \_\_\_\_\_

VOTE:

Mayor Miyagishima: \_\_\_\_\_

Councillor Silva: \_\_\_\_\_

Councillor Connor: \_\_\_\_\_

Councillor Pedroza: \_\_\_\_\_

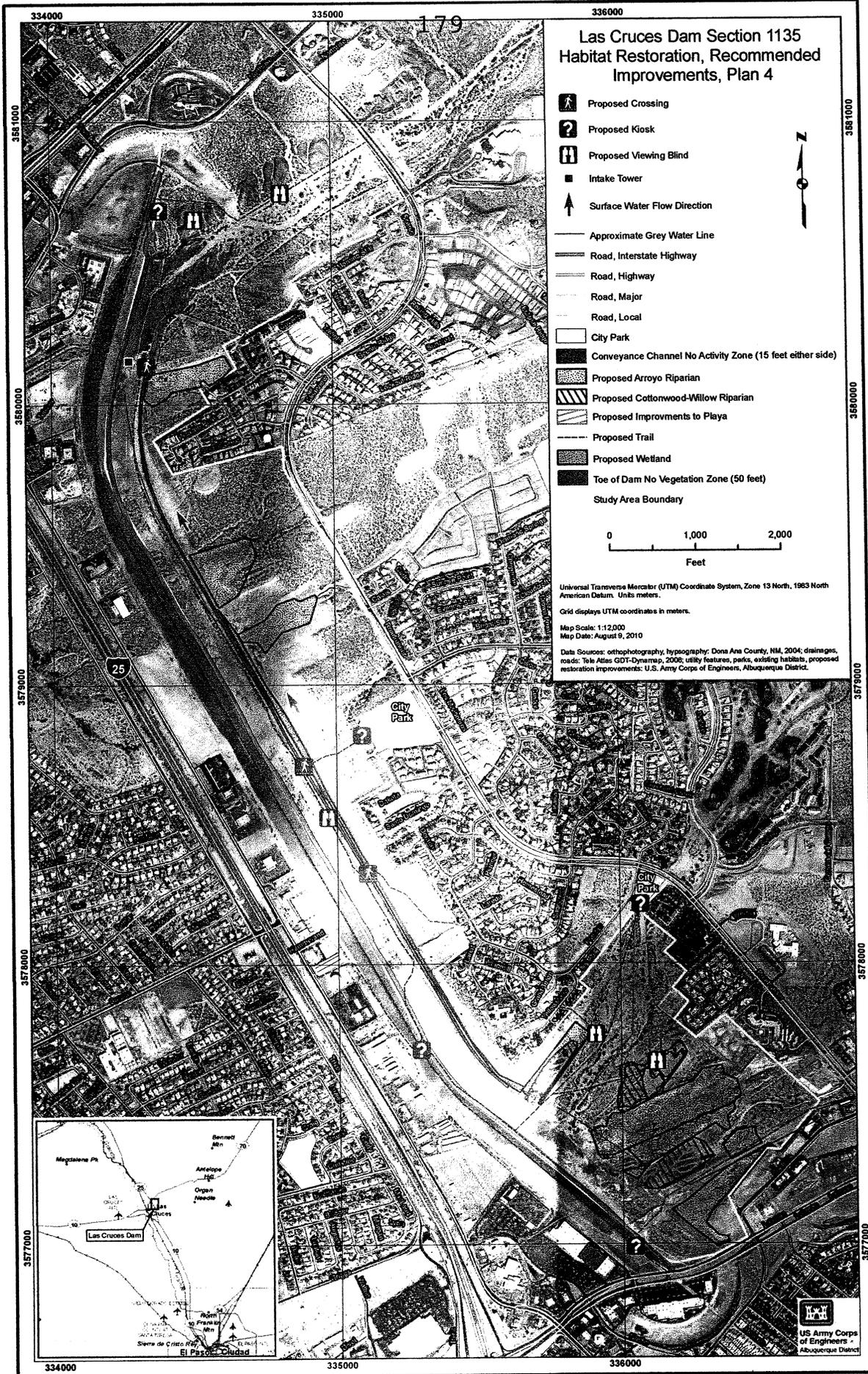
Councillor Small: \_\_\_\_\_

Councillor Sorg: \_\_\_\_\_

Councillor Thomas: \_\_\_\_\_

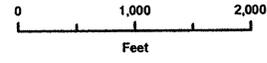
APPROVED AS TO FORM:

  
\_\_\_\_\_  
City Attorney



Las Cruces Dam Section 1135  
Habitat Restoration, Recommended  
Improvements, Plan 4

- Proposed Crossing
  - Proposed Kiosk
  - Proposed Viewing Blind
  - Intake Tower
  - Surface Water Flow Direction
  - Approximate Grey Water Line
  - Road, Interstate Highway
  - Road, Highway
  - Road, Major
  - Road, Local
  - City Park
  - Conveyance Channel No Activity Zone (15 feet either side)
  - Proposed Arroyo Riparian
  - Proposed Cottonwood-Willow Riparian
  - Proposed Improvements to Plays
  - Proposed Trail
  - Proposed Wetland
  - Toe of Dam No Vegetation Zone (50 feet)
- Study Area Boundary



Universal Transverse Mercator (UTM) Coordinate System, Zone 13 North, 1983 North American Datum. Units meters.

Grid displays UTM co-ordinates in meters.

Map Scale: 1:12,000  
Map Date: August 9, 2010

Data Sources: orthophotography, hydrography: Dona Ana County, NM, 2004; drainages, roads: Tele Atlas GDT-Dynamos, 2008; utility features, parks, existing habitats, proposed restoration improvements: U.S. Army Corps of Engineers, Albuquerque District.

