#### Memorandum



DATE 22 August 2014

The Honorable Members of the Transportation and Trinity River Project Committee: Vonciel Jones Hill (Chair), Lee Kleinman (Vice Chair), Deputy Mayor Pro Tem Monica Alonzo, Mayor Pro Tem Tennell Atkins, Sandy Greyson, and Sheffie Kadane

SUBJECT Dallas Floodway Update

On Monday, 25 August 2014, you will be briefed on the Dallas Floodway Update. The briefing materials are attached for your review.

Please feel free to contact me if you need additional information.

Jill A. Jordan, P.E. Assistant City Manager

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Attachment

A. C. Gonzalez, City Manager Warren M.S. Ernst, City Attorney Craig D. Kinton, City Auditor Rosa A. Rios, City Secretary Daniel F. Solis, Administrative Judge Ryan S. Evans, First Assistant City Manager Forest E. Turner, Assistant City Manager Joey Zapata, Assistant City Manager Charles M. Cato, (I) Assistant City Manager Theresa O'Donnell, (I) Assistant City Manager Jeanne Chipperfield, Chief Financial Officer Sana Syed, Public Information Officer Elsa Cantu, Assistant to the City Manager – Mayor & Council

### **Dallas Floodway Update**

**Transportation and Trinity River Project Committee** 

#### Col. Charles Klinge

Commander, Fort Worth District

Jill A. Jordan, P.E.

Assistant City Manager City of Dallas

25 August 2014









US Army Corps of Engineers **BUILDING STRONG**®



## Purpose of Today's Briefing

- Update to the Recommended Plan due to passing of Water Resources Reform and Development Act of 2014 ["WRRDA 2014"]
- Overview of the Dallas Floodway Project revised work-inkind/cost share
- Update on Schedule





## **Dallas Floodway Project**

- On 28 April 2014, Transportation and Trinity River Project Committee asked for break down of project cost and workin-kind credit
- As a reminder, Water Resources Development Act of 2007 ["WRDA 2007"] authorized Dallas Floodway Project (Section 5141) prior to completion of study
  - Project cost of \$459 million based on preliminary planning efforts and conceptual designs
  - Included Balanced Vision Plan ["BVP"] and Interior Drainage Plan ["IDP"] Pump Stations (East Levee IDP Only)
  - Included provision for work-in-kind/credit for planning, design and construction activities





## **Dallas Floodway Feasibility Study**

- WRRDA 2014 provided technical corrections to WRDA 2007 to include West Levee IDP
- •Section 902 of the WRDA 1986:
  - Set Maximum cost limits for Authorized Projects
  - 902 limit = authorized cost plus inflation plus 20% of the authorized cost
  - 902 limit changes based on implementation schedule and project components proposed
- Adding the entire West Levee IDP exceeds the Section 902 limit

#### **Total Cost Exceeds the Section 902 Limit**

#### Flood Risk Management

Levee and Bridge \$9,953,000 **Subtotal \$9,953,000** 

#### **East IDP Pump Stations**

 Able
 \$120,183,000

 Baker
 \$50,206,000

 Hampton
 \$82,932,000

 Subtotal
 \$253,321,000

#### **West IDP Pump Stations**

 Charlie
 \$48,990,000

 Delta
 \$4,986,000

 Pavaho
 \$32,473,000

 Trinity Portland
 \$44,589,000

 Subtotal
 \$131,038,000

#### **Ecosystem Restoration**

 River Relocation
 \$5,903,000

 Corinth Wetlands
 \$324,032,000

 Subtotal
 \$329,935,000

**Grand Total** \$724,247,000





## Potential City Credit / Work-in-Kind

Able \$120,183,000

Baker\* \$47,740,000

Pavaho \$32,473,000

Cut-off wall \$10,000,000

Feasibility Credit\*\* \$10,000,000

Total\*\* \$220,396,000

<sup>\*\*</sup>Feasibility credit is an estimate and will change prior to finalizing the Feasibility Report





<sup>\*</sup>Baker Actually costs \$50 million, but \$2.4 million is Land, Easements, Rights of Way, Relocations, Disposal Sites ["LERRDS"], which is not considered credit

### **Cost-Sharing Scenarios**

Because \$724 million exceeds its Section 902 limit, we need to identify a project scenario under that limit or we would need new Project Authorization

| Features         | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 | Scenario 5 |
|------------------|------------|------------|------------|------------|------------|
| FRM              | X          | Х          | Х          | X          | Х          |
| Able             | X          |            |            | Х          | Х          |
| Baker            | X          |            | Х          |            | Х          |
| Charlie          |            | Х          | Х          | X          | Х          |
| Delta            |            | Х          | Х          | Х          | Х          |
| Hampton          | X          | Х          | Х          | Х          | Х          |
| Pavaho           |            | Х          |            |            | Х          |
| Trinity Portland |            | Х          | Х          | X          | Х          |
| ER               | X          | Х          | X          | X          | Х          |
| Exceeds 902      | No         | No         | No         | Yes        | Yes        |



<sup>\*</sup>Scenario 4 or 5 would require additional authorization from Congress



## **Summary of Cost Sharing**

|            | <b>Total Cost</b> | Federal Cost  | Non-Federal Cost |
|------------|-------------------|---------------|------------------|
| Scenario 1 | \$529,123,000     | \$343,930,000 | \$185,193,000    |
| Scenario 2 | \$553,858,000     | \$360,016,000 | \$193,842,000    |
| Scenario 3 | \$571,591,000     | \$371,534,000 | \$200,057,000    |
| Scenario 4 | \$641,568,000     | \$417,028,000 | \$224,540,000    |
| Scenario 5 | \$724,247,000     | \$470,761,000 | \$253,486,000    |



\*All Scenarios are cost share 65% Federal and 35% non-Federal



## **Summary of Cost Sharing**

| Casparia | Sagnaria Non Federal | Potential LEE | LEERDS    | Future     | 50/ O I    | Additional | Remaining City Costs |                    |             |
|----------|----------------------|---------------|-----------|------------|------------|------------|----------------------|--------------------|-------------|
| Scenario | Cost                 | Credit        | Credit    | LERRDS     | 5% Cash    | Cash       | This<br>Scenario*    | Remaining<br>IDP** | Total***    |
|          |                      |               |           |            |            |            |                      |                    |             |
| 1        | 185,193,000          | 115,451,000   | 2,466,000 | 56,912,000 | 10,364,000 | 0          | 67,276,000           | 98,565,000         | 165,841,000 |
|          |                      |               | = = ==    |            |            |            |                      |                    |             |
| 2        | 193,842,000          | 42,473,000    | 0         | 52,522,000 | 11,197,000 | 87,650,000 | 151,369,000          | 0                  | 151,369,000 |
|          |                      |               |           |            |            |            |                      | DX = 1             |             |
| 3        | 200,057,000          | 57,740,000    | 2,466,000 | 52,522,000 | 12,083,000 | 75,246,000 | 139,851,000          | 0                  | 139,851,000 |
|          |                      |               |           |            |            |            |                      |                    |             |
| 4        | 224,540,000          | 109,878,000   | 0         | 52,522,000 | 15,582,000 | 26,253,000 | 94,357,000           | 0                  | 94,357,000  |
|          |                      |               |           |            |            |            |                      |                    |             |
| 5        | 253,486,000          | 180,405,000   | 2,466,000 | 52,522,000 | 18,093,000 | 0          | 70,615,000           | 0                  | 70,615,000  |

<sup>\*&</sup>quot;This Scenario" = "Future LERRDS" + "5% Cash" + "Additional Cash"



<sup>\*\*</sup> Remaining IDP is the remaining cost to build unfinished pump stations not included in that scenario

<sup>\*\*\*</sup>These costs do not include the recreation features of the BVP

#### **New Recommended Plan**

- •Scenario Three (3) is the recommended plan. It includes:
  - Flood Risk Management: Levee Raise, AT&SF Bridge Modification, Baker, Charlie, Delta, Hampton, and Trinity Portland Pump Stations
  - Ecosystem Restoration: River Restoration and Corinth Wetlands
- Rationale for recommended plan:
  - Prioritizes life safety by including unfinished pump stations
  - Optimizes credit while staying within current authorization
  - Maximizes federal participation
- Ramifications of recommended plan:
  - Results in City not requesting credit for Able or Pavaho Pump Stations





#### Scenario Three (3) / Revised Recommended Plan

| Cons                  | truction Cost Sharing wi | th Baker Credit |               |
|-----------------------|--------------------------|-----------------|---------------|
|                       | Federal                  | Non-Federal     | Total         |
| Flood Risk Management |                          |                 |               |
| Construction          | \$157,076,000            |                 | \$157,076,000 |
| LERRD                 |                          | \$12,322,000    | \$12,322,000  |
| 5% Cash               |                          | \$12,083,000    | \$12,083,000  |
| Credit                |                          | \$47,740,000    | \$47,740,000  |
| Additional Cash       |                          | \$12,435,000    | \$12,435,000  |
| Subtotal              | \$157,076,000            | \$84,580,000    | \$241,656,000 |
|                       | 65.0%                    | 35.0%           |               |
| Ecosystem Restoration |                          |                 |               |
| Construction          | \$214,458,000            |                 | \$214,458,000 |
| LERRD                 |                          | \$42,666,000    | \$42,666,000  |
| Credit                |                          | \$10,000,000    | \$10,000,000  |
| Additional Cash       |                          | \$62,811,000    | \$62,811,000  |
| Subtotal              | \$214,458,000            | \$115,477,000   | \$329,935,000 |
|                       | 65.0%                    | 35.0%           | TITE STATE    |
| Totals                | \$371,534,000            | \$200,057,000   | \$571,591,000 |
|                       | 65.0%                    | 35.0%           |               |
| Total Owed by City    |                          | \$200,057,000   |               |
| WIK Credit            |                          | -\$57,740,000   |               |
| LEERDS Credit         |                          | -\$2,466,000    |               |
| Remaining City Cost   |                          | \$139,851,000   |               |



Includes: FRM, Baker, Charlie, Delta, Hampton, Trinity Portland and Ecosystem Restoration

## City of Dallas Remaining Costs

- Recommended Federal Plan is \$572 million costs shared as shown above
- Total current estimate based on this preliminary engineering design is around \$1.4 billion

| Entire BVP and IDP's              | \$1,400,000,000 |
|-----------------------------------|-----------------|
| Federal Share of Scenario 3       | -\$371,534,000  |
| City Work-in-Kind Credit          | -\$57,740,000   |
| City LERRDS Credit                | -\$2,466,000    |
| City Rollover Feasibility Credit  | -\$10,000,000   |
| Able                              | -\$120,183,000  |
| Pahavo                            | -\$32,473,000   |
|                                   |                 |
| Total Remaining for BVP and IDP's | \$805,604,000   |



\*Costs will increase with inflation and if the Trinity Parkway is not constructed



#### **Path Forward**

- Implementation and funding will be:
  - Funded bond program by bond program
    - · Ex. Put one pump station per bond program
    - See appendix for overview of City bond program allocations through 2012 bond program
  - Funded annually through the Stormwater Drainage Management Fund for levee flattening and raising (where necessary)
  - Built donation by donation
  - Coordinated with developments as they occur
  - Done with partners as their funding becomes available





## **Next Steps**

- Responding to Policy and Public Comments, as well as identifying the Recommended Plan considering WRRDA 2014, has caused a two (2) to three (3) month schedule slip
- Corps completes Record of Decision for Dallas Floodway – February/March 2015
- Phase 1 Lake Construction begins March/April 2015





# Questions?





# **Appendix**





# **Scenario Details**





#### Scenario 1

#### **Previous Construction Cost Sharing (Modified) With Credit**

|                       | Federal     | Non-Federal  | Total       |
|-----------------------|-------------|--------------|-------------|
| Flood Risk Management |             |              |             |
| Construction          | 134,728,000 |              | 134,728,000 |
| LERRD                 |             | 16,672,000   | 16,672,000  |
| 5% Cash               |             | 10,364,000   | 10,364,000  |
| Credit                |             | 45,510,000   | 45,510,000  |
| Additional Cash       |             |              | 0           |
| Subtotal              | 134,728,000 | 72,546,000   | 207,274,000 |
|                       | 65.0%       | 35.0%        |             |
| Ecosystem Restoration |             |              |             |
| Construction          | 209,202,000 |              | 209,202,000 |
| LERRD                 |             | 42,706,000   | 42,706,000  |
| Credit                |             | 69,941,000   | 69,941,000  |
| Additional Cash       |             |              | 0           |
| Subtotal              | 209,202,000 | 112,647,000  | 321,849,000 |
|                       | 65.0%       | 35.0%        | ラビド系        |
| Totals                | 343,930,000 | 185,193,000  | 529,123,000 |
|                       |             |              | -           |
| Total Owed by City    |             | 185,193,000  |             |
| WIK Credit            |             | -115,451,000 |             |
| LERRDS Credits        |             | -2,466,000   |             |
| Remaining City Cost   |             | 67,276,000   |             |



Includes FRM, Hampton, Baker, and Able with excess credit of about \$50 million



#### Scenario 2

| New Propo                    | sal Construction Cost Sh | aring with Pavaho Cred | it          |
|------------------------------|--------------------------|------------------------|-------------|
|                              | Federal                  | Non-Federal            | Total       |
| Flood Risk Management        |                          |                        |             |
| Construction                 | 145,558,000              |                        | 145,558,000 |
| LERRD                        |                          | 9,856,000              | 9,856,000   |
| 5% Cash                      |                          | 11,197,000             | 11,197,000  |
| Credit                       |                          | 32,473,000             | 32,473,000  |
| Additional Cash              |                          | 24,839,000             | 24,839,000  |
| Subtotal                     | 145,558,000              | 78,365,000             | 223,923,000 |
|                              | 65.0%                    | 35.0%                  |             |
| <b>Ecosystem Restoration</b> |                          |                        |             |
| Construction                 | 214,458,000              |                        | 214,458,000 |
| LERRD                        |                          | 42,666,000             | 42,666,000  |
| Credit                       |                          | 10,000,000             | 10,000,000  |
| Additional Cash              |                          | 62,811,000             | 62,811,000  |
| Subtotal                     | 214,458,000              | 115,477,000            | 329,935,000 |
|                              | 65.0%                    | 35.0%                  |             |
| Totals                       | 360,016,000              | 193,842,000            | 553,858,000 |
| lotais                       | 65.0%                    | 35.0%                  | 555,656,000 |
|                              | 65.0%                    | 33.0%                  |             |
| Total Owed by City           |                          | 193,842,000            |             |
| WIK Credit                   |                          | -42,473,000            |             |
| LERRDS Credit                |                          | -0                     |             |
| Remaining City Cost          |                          | 151,369,000            |             |



Includes: FRM, Charlie, Delta, Hampton, Pavaho, Trinity Portland and Ecosystem Restoration



#### Scenario Three (3) / Revised Recommended Plan

| Cons                  | struction Cost Sharing wi | th Baker Credit |               |
|-----------------------|---------------------------|-----------------|---------------|
|                       | Federal                   | Non-Federal     | Total         |
| Flood Risk Management |                           |                 |               |
| Construction          | \$157,076,000             |                 | \$157,076,000 |
| LERRD                 |                           | \$12,322,000    | \$12,322,000  |
| 5% Cash               |                           | \$12,083,000    | \$12,083,000  |
| Credit                |                           | \$47,740,000    | \$47,740,000  |
| Additional Cash       |                           | \$12,435,000    | \$12,435,000  |
| Subtotal              | \$157,076,000             | \$84,580,000    | \$241,656,000 |
|                       | 65.0%                     | 35.0%           |               |
| Ecosystem Restoration |                           |                 |               |
| Construction          | \$214,458,000             |                 | \$214,458,000 |
| LERRD                 |                           | \$42,666,000    | \$42,666,000  |
| Credit                |                           | \$10,000,000    | \$10,000,000  |
| Additional Cash       |                           | \$62,811,000    | \$62,811,000  |
| Subtotal              | \$214,458,000             | \$115,477,000   | \$329,935,000 |
|                       | 65.0%                     | 35.0%           | 7 74          |
| Totals                | \$371,534,000             | \$200,057,000   | \$571,591,000 |
|                       | 65.0%                     | 35.0%           |               |
| Total Owed by City    |                           | \$200,057,000   |               |
| WIK Credit            |                           | -\$57,740,000   |               |
| LEERDS Credit         |                           | -\$2,466,000    |               |
| Remaining City Cost   |                           | \$139,851,000   |               |



Includes: FRM, Baker, Charlie, Delta, Hampton, Trinity Portland and Ecosystem Restoration



#### Scenario 4

| Construction | <b>Cost Sharing</b> | with A | Able Credit |
|--------------|---------------------|--------|-------------|
|--------------|---------------------|--------|-------------|

|                       | Federal     | Non-Federal  | Total       |
|-----------------------|-------------|--------------|-------------|
| Flood Risk Management |             |              |             |
| Construction          | 202,570,000 |              | 202,570,000 |
| LERRD                 |             | 9,856,000    | 9,856,000   |
| 5% Cash               |             | 15,582,000   | 15,582,000  |
| Credit                |             | 83,625,000   | 83,625,000  |
| Additional Cash       |             | 0            | C           |
| Subtotal              | 202,570,000 | 109,063,000  | 311,633,000 |
|                       | 65.0%       | 35.0%        |             |
| Ecosystem Restoration |             |              |             |
| Construction          | 214,458,000 |              | 214,458,000 |
| LERRD                 |             | 42,666,000   | 42,666,000  |
| Credit                |             | 46,558,000   | 46,558,000  |
| Additional Cash       |             | 26,253,000   | 26,253,000  |
| Subtotal              | 214,458,000 | 115,477,000  | 329,935,000 |
|                       | 65.0%       | 35.0%        |             |
| Totals                | 417,028,000 | 224,540,000  | 641,568,000 |
|                       | 65.0%       | 35.0%        |             |
| Total Owed by City    |             | 224,540,000  |             |
| WIK Credit            |             | -130,183,000 |             |
| LERRDS Credit         |             | -0           |             |
| Remaining City Cost   |             | 94,357,000   |             |

Includes: FRM, Able, Charlie, Delta, Hampton, Trinity Portland and Ecosystem Restoration



#### **Scenario 5**

| Constru               | ction Cost Sharing with a | II pump stations Credit |              |
|-----------------------|---------------------------|-------------------------|--------------|
|                       | Federal                   | Non-Federal             | Total        |
| Flood Risk Management |                           |                         |              |
| Construction          | 256,303,000               |                         | 256,303,000  |
| LERRD                 |                           | 12,322,000              | 12,322,000   |
| 5% Cash               |                           | 18,093,000              | 18,093,000   |
| Credit                |                           | 107,594,000             | 107,594,000  |
| Additional Cash       |                           | 0                       | 0            |
| Subtotal              | 256,303,000               | 138,009,000             | 394,312,000  |
|                       | 65.0%                     | 35.0%                   | 4 6 7 1 2 == |
| Ecosystem Restoration |                           |                         |              |
| Construction          | 214,458,000               |                         | 214,458,000  |
| LERRD                 |                           | 42,666,000              | 42,666,000   |
| Credit                |                           | 72,811,000              | 72,811,000   |
| Additional Cash       |                           |                         | 0            |
| Subtotal              | 214,458,000               | 115,477,000             | 329,935,000  |
|                       | 65.0%                     | 35.0%                   |              |
| Totals                | 470,761,000               | 253,486,000             | 724,247,000  |
|                       | 65.0%                     | 35.0%                   |              |
| Total Owed by City    |                           | 253,486,000             |              |
| WIK Credit            |                           | -180,405,000            |              |
| LERRDS Credit         |                           | -2,466,000              |              |
| Remaining City Cost   |                           | 70,615,000              |              |

Includes: FRM, Able, Baker, Charlie, Delta, Hampton, Pavaho, Trinity Portland and Ecosystem Restoration





# **Summary of Cost Share**





# **Summary of Cost Sharing**

| 40         | Total Cost    | Federal Cost  | Non Federal<br>Cost | Potential<br>Credit | LERRDS       | 5% Cash      | Additional<br>Cash | City \$ for all<br>Feat. |
|------------|---------------|---------------|---------------------|---------------------|--------------|--------------|--------------------|--------------------------|
| Scenario 1 | \$529,123,000 | \$343,930,000 | \$185,193,000       | \$115,451,000       | \$59,378,000 | \$10,364,000 | \$0                | \$378,703,000            |
| Scenario 2 | \$553,858,000 | \$360,016,000 | \$193,842,000       | \$42,473,000        | \$52,522,000 | \$11,197,000 | \$87,650,000       | \$364,365,000            |
| Scenario 3 | \$571,591,000 | \$371,534,000 | \$200,057,000       | \$57,740,000        | \$54,988,000 | \$12,083,000 | \$75,246,000       | \$352,713,000            |
| Scenario 4 | \$641,568,000 | \$417,028,000 | \$224,540,000       | \$109,878,000       | \$52,522,000 | \$15,582,000 | \$26,253,000       | \$307,219,000            |
| Scenario 5 | \$724,247,000 | \$470,761,000 | \$253,486,000       | \$180,405,000       | \$54,988,000 | \$18,093,000 | \$0                | \$283,477,000            |





# Summary of Bond Program Funding





# City of Dallas Authorized Bond Program Investments in Trinity River Corridor

1989 Bond Program

\$8,500,000

1998 Bond Program

\$246,000,000

2006 Bond Program

\$219,017,612

2012 Bond Program

\$6,418,400

**Total** 

\$479,936,012



