



# URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

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## BOARD OF DIRECTORS MEETING

Date: Thursday, November 19, 2015

Time: 1:00 pm

Catered Lunch – 12:15 pm

How the District Works – 12:45 – 1:00 pm

1. **Call to Order and Pledge of Allegiance – 1:00 pm**
2. **Roll Call – Determination of Quorum**
3. **Introductions**
  - a. Visitors/Guests/Staff
  - b. Awards/Recognitions
4. **Approval of October 15, 2015 Meeting Minutes** (*If there are no corrections "Minutes stand approved", or with corrections "Minutes stand approved as corrected"*)
5. **Public Hearing**
  - a. Presentation of Proposed 2015 – 2019 Five-Year Capital Improvement Plan
6. **Consent Agenda** (*Consent items are considered routine and will be approved by one motion unless a request is made by a Board Member for removal for further discussion or explanation.*)
  - a. Review of Cash Disbursements
  - b. Adoption of 2016 Work Program  
(Resolution No. 56, Series of 2015)
  - c. Adoption of Five-Year Capital Improvement Plan (CIP) 2015 - 2019  
(Resolution No. 57, Series of 2015)
  - d. Authorization of 2016 Maintenance Plan Expenditures  
(Resolution No. 58, Series of 2015)
  - e. Authorization of 2016 Operation Expenditures for the South Platte River  
(Resolution No. 59, Series of 2015)
  - f. Authorization to Enter Into Agreement with the U.S. Geological Survey (USGS) for Rainfall/Runoff Investigation  
(Resolution No. 60, Series of 2015)
  - g. Authorization to Assist Communities with NPDES MS4 Permit Compliance to Develop Engineering Criteria and Software, and to Conduct Stormwater Management Research  
(Resolution No. 61, Series of 2015)
  - h. Authorization for a Planning Study of Sloan's Lake Basin  
(Resolution No. 62, Series of 2015)
  - i. Authorization for a Planning Study of Quincy Drainage, Shop Creek and Meadowood Drainageway  
(Resolution No. 63, Series of 2015)
  - j. Authorization for a Planning Study of Weaver Creek  
(Resolution No. 64, Series of 2015)
  - k. Authorization for a Flood Hazard Area Delineation for the South Platte River  
(Resolution No. 65, Series of 2015)
7. **Vote on Approval of the Consent Agenda** (*Motion and roll call vote required*)

**8. Reports/Discussion**

- a. Executive Director's Report

**9. Other Business**

- a. Call for Volunteers: Nominating Committee for 2016 Officers
- b. Call for Volunteers: 2016 Legislative Committee

**10. Announcements**

- a. Next Regularly Scheduled Meeting: **Thursday, December 17, 2015**

**11. Adjournment**



**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT  
BOARD OF DIRECTORS**

**October 15<sup>th</sup> 2015**

**MINUTES**

**Members Present:**

Herb Atchison, Mayor, City of Westminster  
Joyce Downing, Mayor, City of Northglenn  
Stacie Gilmore, Council Member, City/County of Denver  
Debi Hunter-Holen, Mayor Pro Tem, City of Aurora  
Suzanne Jones, Mayor Pro Tem, City of Boulder  
Paul Kashmann, Council Member, City/County/Denver  
Paul Lopez, Council Member, City/County of Denver  
Ken Lucas, Mayor Pro Tem, City of Centennial  
Mark McGoff, Mayor Pro Tem, City of Arvada  
Bonnie McNulty, Mayor, City of Edgewater  
Bob Murphy, Mayor, City of Lakewood  
Dave Sellards, Engineer  
Nancy Sharpe, Commissioner, Arapahoe County  
Greg Stokes, Mayor Pro Tem, City/County of Broomfield  
Libby Szabo, Commissioner, Jefferson County  
Charles (Chaz) Tedesco, Commissioner, Adams County  
Heidi Williams, Mayor, City of Thornton

**Members Absent:**

Bruce Beckman, Mayor Pro Tem, City of Littleton  
Deb Gardner, Commissioner, Boulder County  
Mark Hunter, Engineer  
Cary Kennedy, Deputy Mayor, City/County of Denver  
Jill Repella, Commissioner, Douglas County

**UDFCD Staff Present:**

Paul Hindman	Executive Director
Ed Krisor	Legal Counsel
Julia Bailey	Project Engineer, Information Services & Flood Warning
Dave Bennetts	Manager, Design, Construction, and Maintenance
Richard Borchardt	Project Manager, Design, Construction, and Maintenance
Barbara Chongtoua	Project Manager, Design, Construction, and Maintenance
Amelia Deleon	Human Resources and Administrative Services Manager
Terri Fead	Project Manager, Floodplain Management
Bryan Kohlenberg	Project Manager, Design, Construction, and Maintenance
Laura Kroeger	Assistant Program Manager, Design, Construction, and Maintenance
Ken MacKenzie	Manager, Master Planning
David Mallory	Program Manager, Floodplain Management
Teresa Patterson	Project Manager, Floodplain Management
Holly Piza	Project Manager, Master Planning
Teri Scafer	Controller
David Skuodas	Project Manager, Design, Construction, and Maintenance
Shea Thomas	Project Manager, Master Planning

**Others Present:**

None.

**How the Districts Works – Consultant Selection**

Mr. Hindman conducted a presentation entitled, “Consultant Selection” for this month’s How the District Works presentation.

**1. Call to Order and Pledge of Allegiance – 1:00 p.m.**

Councilman Lopez called the meeting to order at 1:03 p.m.

**2. Roll Call – Determination of Quorum**

Roll was called and a quorum was declared present.

**3. Introductions**

**a. Visitors/Guests/Staff**

None.

**b. Awards/Recognitions**

The following awards were presented by Mr. David Bennetts:

The Eco Park on Cherry Creek project was awarded the Colorado Association of Stormwater and Floodplain Managers (CASFM) Grand Award, a state-wide award for the best drainage and flood control project. Congratulation to Mr. Richard Borchardt, UDFCD Project Manager, for his leadership on this \$5 million dollar project.

The Johnson-Habitat Park on the South Platte River project also won several awards (CASFM Honor Award, CCASLA Merit Award for Design, and the APWA Large Project Award ). Highlights of the project include:

- Park project in an underserved area
- Over 70 properties were taken out of the floodplain
- Reclamation of contaminated site

Mr. Hindman congratulated Mr. Bennetts, UDFCD Project Manager, for the Johnson-Habitat Park project.

**4. Board Approval of September 17th 2015 Meeting Minutes** (*If there are no corrections “Minutes stand approved”, or with corrections “Minutes stand approved as corrected”*)

Councilman Lopez asked if there were any corrections to the September 17, 2015 minutes. Hearing none, the minutes were approved as submitted.

**5. Public Hearing**

**a. 2016 Budget**

Councilman Lopez opened the public hearing at 1:13 pm.

Three resolutions were introduced in the budget discussion. Resolution No. 46 certifies the levy, Resolution No. 47 adopts the 2016 Budget, and Resolution No. 48 appropriates the funds.

Mr. Hindman stated that the final budget numbers were very close to the draft that was distributed at the last Board meeting. He then went on to identify parts of the budget that show the most significant change in numbers since the draft, followed by a brief overview of the five funds that make up the total budget. The first four derive revenue from property taxes and include the General Fund, Construction, Maintenance, and the South Platte River. The remaining fund, Flood Emergency, is dependent on a transfer from the Maintenance Fund.

Councilman Lopez requested comments or questions from the Board and public. There being none, the public hearing was closed at 1:18 pm.

**6. Consent Agenda** (*Consent items are considered routine and will be approved by one motion unless a request is made by a Board Member for removal for further discussion or explanation.*)

**a. Review of Cash Disbursements**

Cash Disbursement list, dated September and October 2015, had been distributed to the Board for review. There being no further comments or questions, it was the consensus of the Board to include approval of the Cash Disbursements on the Consent Agenda.

**b. Acceptance of Certification of Tax Levy  
(Resolution No. 46, Series of 2015)**

Resolution No. 46, Certification of Tax Levy, was discussed during the Public Hearing portion of the meeting. There being no further comments or questions, it was the consensus of the Board to place Resolution No. 46 on the Consent Agenda.

**c. Adoption of 2016 Budget  
(Resolution No. 47, Series of 2015)**

Resolution No. 47, Adoption of 2016 Budget, was discussed during the Public Hearing portion of the meeting. There being no further comments or questions, it was the consensus of the Board to place Resolution No. 47 on the Consent Agenda.

**d. Appropriation of Funds for 2016  
(Resolution No. 48, Series of 2015)**

Resolution No. 48, Appropriation of Funds for 2016, was discussed during the Public Hearing portion of the meeting. There being no further comments or questions, it was the consensus of the Board to place Resolution No. 48 on the Consent Agenda.

**e. Acceptance of Leyden Creek Planning Study  
(Resolution No. 49, Series of 2015)**

The District partnered with the City of Arvada in a major drainageway planning study of Leyden Creek. Arvada funded the study and UDFCD managed the consultant, ICON Engineering. The watershed area is approximately 11.8 square miles in area; the creek is approximately 10.5 miles in length. Leyden Creek has been previously studied by UDFCD as reported in the following documents:

- Major Drainageway Planning Ralston/Leyden Creek (Wright-McLaughlin, 1977)
- Ralston Van Bibber and Leyden Major Drainageway Plan (Wright Water, 1986)

In September 2013, Leyden Creek experienced greater than 100-year flows. The emergency spillway of Leyden Dam was engaged, several roadway culvert crossings were destroyed and many houses were flooded due to mingling of stormwater and ditch water flows. As a result of the damage, the City of Arvada wanted to restudy the creek prior to implementing major improvements and to determine what needs to be done to prevent the damages in the future.

Improvements recommended in the study include:

- Channel and existing pond grading improvements to increase capacity and remove flood risk to existing habitable structures.
- Reconfiguration of Croke Canal crossing structure to prevent mingling of stormwater flows with ditch water flows.
- New crossing at Blue Mountain Road to prevent trans-basin flow diversions experienced in 2013 flood.
- Increased capacity roadway crossings to prevent overtopping.
- Grade control structures to prevent vertical degradation.

The total cost of improvements recommended in the study is approximately \$17 million, including contingencies. Resolution No. 49 accepts the report and recommends the improvements and practices in the report be used as a guide in future public works projects and in land development activities.

There being no further comments or questions, it was the consensus of the Board to place Resolution No. 49 on the Consent Agenda.

**f. Acceptance of Coal Mine Avenue Planning Study  
(Resolution No. 50, Series of 2015)**

Resolution No. 71 of 2013 authorized an alternatives analysis study for drainage issues in the vicinity of Coal Mine Avenue at Platte Canyon Road. The District partnered with the Southeast Metro Stormwater Authority (SEMSWA) to fund the study, and Arapahoe County was also an involved stakeholder. Matrix Design Group was selected to perform the study.

The study area includes the Coal Mine Avenue corridor from Sheridan Boulevard to Platte Canyon Road. The corridor is on the ridgeline between the watersheds of Dutch Creek (to the north) and South Jefferson County Drainageway (SJCD, to the south).

Three outfall alternatives were considered: a southerly route directs flows into SJCD via a combination of curb and gutter and storm drains; an easterly route that directs flows through the Burning Tree Subdivision; and a northerly route that directs flows to Dutch Creek via a combination of curb and gutter, storm drains and surface swales. The northerly route was selected as the preferred alternative. The total cost of improvements recommended in the study is approximately \$240,000 which does not include the costs for the Coal Mine Avenue roadway widening. Resolution No. 50 accepts the report and recommends the improvements and practices in the report be used as a guide in future public works projects and in land development activities.

There being no further comments or questions, it was the consensus of the Board to place Resolution No. 50 on the Consent Agenda.

**g. Acceptance of Newlin Gulch Planning Study  
(Resolution No. 51, Series of 2015)**

Resolution No. 30 of 2012 authorized a major drainageway planning study for Newlin Gulch downstream of the Reuter-Hess Reservoir. The District partnered with the Town of Parker and Douglas County to fund the study. Muller Engineering Company was selected to perform the study. The watershed area is approximately 15 square miles in area. The study focuses on the four miles of mainstream downstream of the dam.

Newlin Gulch has been previously studied by the District as reported in the following documents:

- Flood Hazard Area Delineation, Happy Canyon Creek, Newlin Gulch, Baldwin Gulch, Sulphur Gulch, Tallman Gulch (HNTB, 1977)
- Newlin and Baldwin Gulches and Basin 4600-09 Outfall Systems Planning Study (Kiowa, 1993)

Reuter-Hess Reservoir is a water supply reservoir owned by Parker Water and Sanitation District and located on the mainstream of Newlin Gulch in the central portion of the watershed. The construction of the reservoir was completed in 2012. This study re-evaluated the hydrology in the watershed due to the construction of the dam and also re-delineated the resulting floodplain downstream.

Improvements recommended in the study include:

- Channel improvements to increase the flow capacity and remove flood risk to public property.
- Increased capacity roadway crossings to prevent overtopping, including the frequently inundated entrance to the Parker Recreation Center.
- Drop structures to prevent vertical degradation.
- Bank stabilization to prevent lateral degradation.

The total cost of improvements recommended in the study is approximately \$16 million, including contingencies. Resolution No. 51 accepts the report and recommends the improvements and practices in the report be used as a guide in future public works projects and in land development activities.

There being no further comments or questions, it was the consensus of the Board to place Resolution No. 51 on the Consent Agenda.

**h. Authorization to Participate in Drainage and Flood Control Improvements on Niver Creek at Zuni Street, City of Federal Heights, Adams County  
(Resolution No. 52, Series of 2015)**

This is a joint project with the City of Federal Heights. The City of Federal Heights desires to design, acquire right-of-way, and construct improvements along Niver Creek at Zuni Street in accordance with the "Extension of Niver Creek Major Drainageway Planning Study in Federal Heights Preliminary Design Report", dated December 2000. The project includes improvements to Niver Creek at Zuni Street and upstream in Ruston Park.

The City of Federal Heights already holds the necessary easements and right-of-way where the project will be carried out. The District will be administering the design once a consulting engineering firm is selected. The District and the City of Federal Heights desire to construct the improvements which will be managed by the District. Construction is anticipated in 2016.

The District and the City of Federal Heights have identified \$760,000 in total project costs for the design, right-of-way acquisition, and construction with the District's initial participation being \$30,000 in 2015 funds. It is anticipated that additional funds may be required for this project in the future.

Resolution No. 52 authorizes \$30,000 of District funds from the Special Revenue Fund - Construction to at least be matched by the City of Federal Heights for the design, acquisition of right-of-way, and construction of the drainage elements of the project.

There being no further comments or questions, it was the consensus of the Board to place Resolution No. 52 on the Consent Agenda.

**i. Additional Authorization to Participate in Drainage and Flood Control Improvements on Piney Creek at Caley Drive, City of Centennial and Unincorporated Arapahoe County (Resolution No. 53, Series of 2015)**

This is a joint project with SEWSWA and the Cherry Creek Basin Water Quality Authority (CCBWQA).

CH2M is designing the project under contract with the District. The drainage elements of the project include installation of channel restoration including bank protection and drop structures. Easement and right-of-way acquisition is included in the project costs. The final design is in progress and the District, SEMSWA, and CCBWQA desire to construct the improvements which will be managed by the District. Construction is anticipated in 2017.

The District, SEMSWA, and CCBWQA have identified \$7,016,000 in total project costs with the District's participation being \$3,358,000. The previous authorizations, (Resolution No. 40, Series of 2006; Resolution No. 57, Series of 2007; Resolution No. 69, Series of 2007; Resolution No. 7, Series of 2008; Resolution No. 11, Series 2009; Resolution No. 33, Series 2010; Resolution No. 66, Series 2010; Resolution No. 27, Series of 2011; Resolution No. 46, Series 2013; Resolution 23, Series 2014, and Resolution No. 26, Series 2015) totaled \$3,258,000 to fund design and to partially fund acquisition of right-of-way and construction. It is anticipated that additional funds may be required for this project in the future.

Resolution No. 53 authorizes an additional \$100,000 of District funds from the Special Revenue Fund - Construction to at least be matched by SEMSWA and CCBWQA for the design, acquisition of right-of-way, and construction of the drainage elements of the project.

There being no further comments or questions, it was the consensus of the Board to place Resolution No. 53 on the Consent Agenda.

**j. Authorization to Participate in Drainage and Flood Control Improvements on Happy Canyon Creek North of Lincoln Avenue, Douglas County (Resolution No. 54, Series of 2015)**

This is a joint project with Douglas County. Douglas County desires to design, acquire right-of-way, and construct improvements along Happy Canyon Creek north of Lincoln Avenue in accordance with the "Happy Canyon Creek Major Drainageway Plan", dated March 2014. The project includes improvements to the channel bank and bed. Easement and right-of-way acquisition will be included in the project costs.

The District will be administering the design once a consulting engineering firm is selected. The District and Douglas County desire to construct the improvements which will be managed by the District. Construction is anticipated in 2018.

The District and Douglas County have identified \$406,600 in initial project costs for the design, right-of-way acquisition, and partial funding of construction with the District's participation being \$62,500 in 2015 funds. It is anticipated that additional funds may be required for this project in the future. Resolution No. 54 authorizes \$62,500 of District funds from the Special Revenue Fund - Construction to at least be matched by Douglas County for the design, acquisition of right-of-way, and construction of the drainage elements of the project.

There being no further comments or questions, it was the consensus of the Board to place Resolution No. 54 on the Consent Agenda.

**k. Additional Authorization to Participate in Drainage and Flood Control Improvements on Pond 12 Along Happy Canyon Creek at Monarch Boulevard, City of Castle Pines, Douglas County (Resolution No. 55, Series of 2015)**

This is a joint project with the Castle Pines Metro District. The project includes improvements to Pond 12 along Happy Canyon Creek at Monarch Boulevard. Castle Pines Metro District is administering the design with Muller Engineering Company, Inc. Easement and right-of-way acquisition is included in the project costs. Construction is anticipated in 2016.

The District and the Castle Pines Metro District have identified \$842,500 in total project costs with the District's participation being \$142,500. The previous authorizations (Resolution No. 40, Series of 2015 and Resolution No. 44, Series of 2015) totaled \$80,000 to fund design and to partially fund acquisition of right-of-way and construction. It is anticipated that additional funds may be required for this project in the future.

Resolution No. 55 authorizes an additional \$62,500 of District funds from the Special Revenue Fund - Construction to at least be matched by Castle Pines Metro District for the design, acquisition of right-of-way, and construction of the drainage elements of the project.

Commissioner Tedesco requested that for resolutions that request additional funding, can additional information be included as part of the resolution presentation. Specifically, can the presentation summarize the previously authorized funds, what those funds were expended for and provide status updates on the projects. Mr. Hindman stated that the District will include this additional information in future presentations.

There being no further comments or questions, it was the consensus of the Board to place Resolution No. 55 on the Consent Agenda.

**7. Vote on Approval of the Consent Agenda (Motion and roll call vote required)**

It was the consensus of the Board that Resolutions No. 46, 47, 48, 49, 50, 51, 52, 53, 54, and 55, Series of 2015, and Cash Disbursements dated September and October 2015 be placed on the Consent Agenda. Mayor Atchison moved to adopt the Consent Agenda. Upon a roll call vote the motion was passed unanimously.

**8. Reports/Discussion**

**a. Executive Director's Report**

The Executive Director's report (attached) was included in the meeting handouts. Mr. Hindman reviewed the report with the Board.

**9. Other Business**

**a. Executive Director's Annual Review**

Mr. Hindman reminded the Board that the Executive Committee will be conducting the Executive Director's Annual Review. The format will be as follows:

- MSEC will submit to the Executive Committee the results of the annual survey of local governments, survey of the UDFCD Board, and non-specific regional salary data.
- The Executive Committee will meet an hour prior to the December Board meeting to finalize its recommended changes to the Executive Director's compensation package, if any.
- At the December Board meeting, there will be an Executive Session to inform the entire Board of the Executive Committee's recommended changes to the Executive Director's compensation package.
- The Chair of the Executive Committee will submit to Terri Schaffer, Controller, agreed upon changes, if any, to the Executive Director's compensation package.

Mayor Pro Tem Stokes asked if the process can be changed to include a yearly survey of the Board members concerning the Executive Director's performance and, in addition, asked if the Executive Committee could provide input on the survey questions. Mr. Hindman will modify the process to include those changes.

**b. Draft Capital Improvement Plans (CIP) and Work Plans Discussion**

The CIP is the basis for the District's participation in projects with local governments. The budget for the 2016 CIP was approved today and allocates \$11,270,000 for 2016 design and construction projects. The



District has also created a CIP plan for the South Platte River. This will aid in planning and budgeting funds for large projects on the river. The Board allocated \$2,640,000 for 2016 South Platte River maintenance and construction services, of which \$1,820,000 is intended to be for CIP projects.

The District has worked closely with local governments to incorporate priority projects in the CIP. Letters were sent in July and the District began collecting requests and accommodating as many as the District can. The Board is welcome to take these requests back to the public works staff. Although the formal CIP process takes place now, the District takes request throughout the year.

These draft plans will be sent out to our local government contacts for their review and comment by Monday, October 19, 2015. Once comments are incorporated, these documents will be finalized and presented for Board approval at next month's board meeting.

**10. Announcements**

- a. Next Regularly Scheduled Meeting: Thursday, November 19, 2015

**11. Adjournment**

Councilman Lopez adjourned the meeting at 2:30 pm.

# Executive Director's Report

October 15, 2015

## ADMINISTRATIVE

It has taken a while but we have gotten through the Mountain States Employment Council (MSEC) review of our personnel policy manual. If you remember, earlier this year a Board committee was appointed consisting of Mayor McNulty, Mayor Atchison, Mayor Pro Tem Stokes, and Mr. Sellards, to review proposed changes to the manual. Our first meeting takes place on November 2<sup>nd</sup> to examine the MSEC analysis. After the committee comes to a consensus of what changes should be made, they will bring it to the Board for ratification. This is a lot of work both internally and by the committee. Thanks to everyone involved. The manual hasn't been reviewed in a long time and is long overdue.

## PROGRAM

**Design, Construction, and Maintenance:** David Bennetts, Manager of Design Construction and Maintenance, traveled to Washington DC along with colleagues from the City and County of Denver (Denver) and the Greenway Foundation. The purpose of the trip was to meet with legislators, legislative committees, and with the Corps of Engineer representatives to assist in gaining funding for major drainage improvements in Denver, specifically on the north reach of the South Platte River and tributaries Harvard Gulch and Weir Gulch. The trip was jam packed but a lot of good information was gained as to the process in obtaining funding and building personal relationships. UDFCD will not be the lead in the process but will assist Denver any way we can as they move forward in construction this vital but costly infrastructure.

**Information Services and Flood Warning:** In 2014, we began an effort to redesign the District's website. Updates included changes to site content, navigation, and device accessibility. We made sure to select a website platform that was compatible with tablet and smart phone technology. The new website went live last week and with the exception of a few broken links, we've received lots of positive feedback. The redesign was the effort of a web committee led by Derrick Schauer. Special thanks to the team for taking on this huge endeavor.

## STATE AND FEDERAL GOVERNMENT ADVOCACY

**Federal:** I reported last month that Colorado was not under the new rule making concerning Waters of the U.S. following a Federal Judge's ruling. Last week, there was a federal court stay or freeze of the new Waters of the US Rulemaking nationwide pending further action of the court. The ball rolls on!

## PERSONAL

I'm sure some of you are tired of hearing stories about my grandson but I can't help myself. Last week my daughter, Elisa, attended a conference in Vegas and Claudia and I went along to take care of Link (who will be two years old next month).

Link definitely took advantage of the attention. It's typical to be exhausted after a trip to Vegas but for us, the cause was a two year old with an endless supply of energy. It's great being a granddad.



# THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

## RESOLUTION NO. 56, SERIES OF 2015 (Adoption of 2016 Work Program)

WHEREAS, the 2016 Budget anticipated a work plan emphasizing the planning, design, and construction of solutions to major drainage problems in the District; and

WHEREAS, the 2016 Budget anticipated a work plan emphasizing maintenance and preservation of major drainageways in the District; and

WHEREAS, the 2016 Budget anticipated a work plan recognizing the value of preventive and remedial master planning on developed and undeveloped floodplains; and

WHEREAS, the 2016 Budget anticipated a work plan recognizing the need for floodplain management activities; and

WHEREAS, the 2016 Budget anticipated a work plan recognizing the need for information services and local flood warning enhancements; and

WHEREAS, the 2016 Budget anticipated a work plan emphasizing the planning, design, and construction of solutions to flood control problems along the South Platte River and the maintenance of existing facilities on the River; and

WHEREAS, the 2016 Budget anticipated a work plan which included District assistance to Denver, Lakewood, Aurora and other local governments in complying with and applying for National Pollutant Discharge Elimination System (NPDES) storm sewer system permits and refining stormwater best management practices (BMP) technology for this semi-arid region; and

WHEREAS, the Board has considered the damage potential, local participation, the work already done by local governments, Corps of Engineers, and others, and the feasibility of defining and accomplishing solutions to drainage and flood control problems in 2016.

NOW, THEREFORE, BE IT RESOLVED that the Work Program for 2016 is hereby adopted as follows:

**A. Design, Construction, and Maintenance Program**

Continue the Design, Construction, and Maintenance Program which includes work to be accomplished under the following funds:

**1. Capital Improvement Fund**

- a. Coordinate, manage, and participate in the funding of the design and construction of drainage facilities pursuant to the adopted Five-Year Capital Improvement Plan.
- b. Cooperate with local jurisdictions in the preparation of the Five-Year Capital Improvement Plan.
- c. Continue to assist local jurisdictions in assessing and solving multi-jurisdictional drainage and flood control problems.

**2. South Platte River Fund**

- a. Construct and maintain public drainage facilities along the South Platte River pursuant to the accepted South Platte River Work Plan.
- b. Implementation of flood control, maintenance access, river stabilization improvements, and other measures along the South Platte River in cooperation with public and private local sponsors.
- c. Maintain and continue development of information related to facilities, right-of-way, and geomorphology that is beneficial for the management of the South Platte River and for understanding its behavior.

**3. Maintenance Fund**

- a. Maintain public drainage facilities along the tributaries to the South Platte River pursuant to the accepted Maintenance Work Plan.
- b. Continue floodplain and floodway preservation efforts.
- c. Cooperate with local jurisdictions in the preparation of the Maintenance Work Plan.

**B. Floodplain Management Program**

Implement the District's Floodplain Management Program to include the following:

1. Continue assisting local entities in preparing, adopting, and administering floodplain regulations, and implement District regulations in those local jurisdictions that do not adopt and enforce floodplain regulations.
2. Delineate flood hazard areas.
3. Coordinate Federal Emergency Management Agency (FEMA) efforts within the District.
4. Review drainage and flood control proposals for proposed development affecting major drainageways upon request from local entities.
5. Continue the notification of floodplain occupants of flood hazards.
6. Continue the District's program of determining maintenance eligibility of drainage and flood control facilities constructed by others.
7. Continue the District's program to bring non-flood control reservoirs into compliance with District policy.
8. Continue development of the Cooperating Technical Partner (CTP) Program with FEMA.
9. Assist local governments and developers in the implementation of drainage and flood control master plans.

**C. Information Services and Flood Warning Program**

1. Continue data collection and flood documentation activities.
2. Assist local governments in developing, updating, exercising, and maintaining flood detection networks and flood warning plans.
3. Continue to provide meteorological services to supplement National Weather Service (NWS) watches and warnings, and work with NWS to improve flood warning capabilities.
4. Review and revise as necessary the Standard Operating Procedure for implementation of the District's Flood Disaster and Mitigation Plan.
5. Continue assisting local governments with developing self-help programs.
6. Continue development of District GIS capability.
7. Maintain and enhance District information technology systems and related services.

**D. Master Planning Program**

Assist local governments with coordinating and managing drainage and flood control master planning projects.

**E. Special Projects**

Continue the following special projects:

1. Continue to support a rainfall/runoff data collection program including cooperative efforts with the U.S. Geology Survey (USGS) and others, and provide data analysis as appropriate.
2. Continue efforts to improve methodologies for planning and design of drainage and flood control facilities, stormwater best management practices and delineation of floodplains in the Denver region, and disseminate information developed to public from these efforts.
3. Continue development and updating of the District's Urban Storm Drainage Criteria Manual and continue administration of manual.

4. Provide coordination and assistance to local governments in the Denver metro area in their efforts to prepare NPDES permit applications and to comply with issued municipal NPDES stormwater discharge permits.
5. Continue projects to establish methods and agreements for financing and implementing regional drainage and flood control facilities.
6. Develop, compile, publish, and distribute appropriate information and data to assist local jurisdictions in drainage and flood control efforts including continuation of publication of Flood Hazard News and sponsoring of seminars.
7. Continue educational and information dissemination efforts to public officials, consulting firms, and the general public related to stormwater and flood management issues.

(SEAL)

THE URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson



# THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

## RESOLUTION NO. 57, SERIES OF 2015 (Adoption of Five-Year Capital Improvement Plan [CIP]: 2015 – 2019)

WHEREAS, by Resolution No. 11, Series of 1973, the Board of Directors adopted a capital improvements expenditure policy; and

WHEREAS, by Chapter 32-11-214, C.R.S., it is stated:

- "(1) The District, acting by and through the board, may acquire, improve, equip, relocate, maintain, and operate the facilities, any project, or any part thereof, for the benefit of the district and the inhabitants thereof, after the board has made such preliminary studies and otherwise taken such action as it determines to be necessary or desirable as preliminaries thereto."
- "(2) When a comprehensive program for the acquisition of facilities for the district satisfactory to the board is available, such program shall be tentatively adopted. The program need only describe the proposed facilities in general terms and not in detail."
- "(3) A public hearing on the proposed program shall be scheduled, and notice of the hearing shall be given by publication. After the hearing and any adjournments thereof which may be ordered, the board may either require changes to be made in the program as the board shall consider desirable, or the board may approve the program as prepared."; and

WHEREAS, by Resolution No. 52, Series of 2014, the Board set forth projects that were adopted as a part of the comprehensive program for the years 2014 through 2018; and

WHEREAS, the Board desires to revise the comprehensive five-year capital improvement plan on an annual basis; and

WHEREAS, by Resolution No. 11, Series of 1973, key policies set by the Board to guide the selection of projects were considered in determining the 2015 – 2019 CIP; and

WHEREAS, the Board of Directors, adopted a budget for 2016 (Resolution No. 47, Series of 2015) which includes \$11,270,000 for CIP improvements within the District; and

WHEREAS, a public hearing on the proposed plan was held on November 19, 2015 pursuant to published notice, and testimony was taken and data provided describing the comprehensive program in general terms to the satisfaction of the Board.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The improvements described herein are necessary for the health, comfort, safety, convenience, and welfare of all the people in the State and are of special benefit to the inhabitants of the District and the property therein.
2. The list of projects is adopted as a part of the comprehensive five-year program for the years 2015 through 2019 for the implementation of projects. Such projects are described in general, and not in detail, and individual projects and authorizations therefore shall be approved by the Board on a project-by-project basis.
3. Individual projects on the CIP may be added, removed, or moved from one year to another in the CIP based on requests from the local governments and shifting priorities.
4. The following guidelines will be followed as the CIP is administered; or projects on the CIP are added, deleted, or moved from one year to another in the CIP:
  - a. Proposed improvements requested by local government.
  - b. Proposed projects must be master planned.
  - c. Local governments must provide at least a 50 percent match to District funds.
  - d. Local governments must agree to maintain the facilities.

- e. The District shall allocate funds such that revenues from counties will be spent for improvements within those counties over a five-year time period.

(SEAL)

THE URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson



THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 58, SERIES OF 2015  
(Authorization of 2016 Maintenance Plan Expenditures)

WHEREAS, the Colorado General Assembly in 1979 and in 1983 amended Section 32-11-217 thereby authorizing the District to levy up to four tenths (0.4) mill for a systematic and uniform program of preventive maintenance of drainage and flood control facilities within the District; and

WHEREAS, the Board adopted a policy statement related to the maintenance of capital improvements in 1978 (Resolution No. 41, Series of 1978); and

WHEREAS, it is the policy of the Board to allocate maintenance service expenditures to each county on the basis of revenues received annually from each county; and

WHEREAS, the Board of Directors, pursuant to such authorization adopted a budget for 2016 (Resolution No. 47, Series of 2015) which includes \$9,750,000 for the maintenance of drainage and flood control facilities within the District; and

WHEREAS, the Board of Directors desires to proceed with 2016 drainageway maintenance and related services.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Board hereby authorizes the District to assist local governments within the District in the maintenance of major drainageway facilities. The following priorities shall be considered in determining the 2016 Maintenance Plan:
  - a. First priority - District owned facilities.
  - b. Second priority - Facilities owned by other public entities, but partly financed with District funds.
  - c. Third priority - Facilities owned by other public entities and constructed by others without District assistance.
  - d. Fourth priority - Unimproved urban drainageways.
  - e. Fifth priority - Unimproved rural drainageways.
2. The Board authorizes the Executive Director to contract for those services necessary to implement the 2016 Maintenance Work Plan.
3. The total 2016 expenditures for maintenance services shall not exceed \$9,750,000 and the expenditures per county shall be in accordance with Board policy set forth in Resolution No. 41, Series of 1978.

(SEAL)

THE URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT

Date: \_\_\_\_\_

ATTEST:

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Secretary  
Maint Exp11 2015

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Chairperson



THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 59, SERIES OF 2015

(Authorization of 2016 Operation Expenditures for the South Platte River)

WHEREAS, the Board established policy regarding operation of the South Platte River Program (Resolution No. 58, Series of 1986); and

WHEREAS, the Board of Directors adopted a budget for 2016 (Resolution No. 47, Series of 2015), which includes \$2,640,000 for construction and maintenance activities for the South Platte River; and

WHEREAS, the Board of Directors desires to proceed with 2016 South Platte River construction, maintenance, and other related services.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Board hereby authorizes the District to assist local governments within the District along the South Platte River in construction and maintenance activities, river stability, and maintenance access facilities along the South Platte River.
2. The Board of Directors authorizes the Executive Director to contract for those services necessary to implement the 2016 construction and maintenance activities.
3. The total expenditures for the South Platte River shall not exceed \$2,640,000 in 2016 without further approval of the Board.

(SEAL)

THE URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson



THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 60, SERIES OF 2015

(Authorization to Enter into Agreement with the U.S. Geological Survey (USGS)  
for Rainfall/Runoff Investigation)

WHEREAS, the District is authorized to conduct studies related to urban drainage, and to establish, operate, and maintain facilities related to urban drainage within the District; and

WHEREAS, the District adopted a budget for calendar year 2016 (Resolution No. 47, Series of 2015) that included sufficient funds in the Maintenance Fund for the continued support of a rainfall/runoff data collection and analysis program in cooperation with the USGS and others; and

WHEREAS, the District adopted a Work Program for 2016 (Resolution 56, Series 2015) that includes maintenance funding to support a rainfall/runoff data collection and analysis program in cooperation with the USGS and others; and

WHEREAS, the District has been engaged in cooperative agreements with the USGS, an agency of the federal government, since October 1970 with regard to rainfall, runoff, stream flow data collection and investigations; and

WHEREAS, the District and USGS have worked together to establish gauges on a number of major streams within the District in order to measure peak flow rates; and

WHEREAS, this data collection is necessary to calibrate the regional hydrologic model that is the basis for the design of all drainage and flood control infrastructure within the District; and

WHEREAS, the USGS has funds available to match District funds to support the continued operation and maintenance of these gauges, and has offered to renew a cooperative agreement related to such data collection; and

WHEREAS, the cost of entering into a cooperative agreement with the USGS in 2016 with regard to rainfall, runoff, and stream flow data collection and investigations is estimated at \$120,000 and sufficient funds are included in the 2016 Work Program for these efforts.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Executive Director is authorized to enter into a cooperative agreement with the USGS with regard to rainfall/runoff data collection and investigation. The expenditures of District maintenance funds in 2016 for this work shall not exceed \$120,000 without further approval of the Board.

(SEAL)

THE URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson



# THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

## RESOLUTION NO. 61, SERIES OF 2015

(Authorization to Assist Communities with NPDES MS4 Permit Compliance to Develop Engineering Criteria and Software, and to Conduct Stormwater Management Research)

WHEREAS, the Board has since 1991, authorized District support of governments within the District in their efforts to comply with National Pollutant Discharge Elimination System (NPDES) Municipal Separate Stormwater Sewer System (MS4) permit requirements and related activities; and

WHEREAS, the District adopted a budget for calendar year 2016 (Resolution No. 47, Series of 2015), that included \$515,000 in the General Fund to continue assisting governments within the District with their MS4 permit programs, to develop engineering criteria, software, and to conduct stormwater management research; and

WHEREAS, the Board has adopted the 2016 Work Program (Resolution 56, Series of 2015) which includes continuation to assist governments within the District with their MS4 permit programs, to develop engineering criteria, software, and to conduct stormwater management research; and

WHEREAS, the Board desires in 2016 to continue assisting governments within the District with their current and evolving MS4 permit programs by improving the understanding of the performance of various stormwater best management practices (BMPs), for which field performance data in this region is very limited; and

WHEREAS, the District has since 1974 maintained and distributed the Urban Storm Drainage Criteria Manual, originally published in 1969 by the Denver Regional Council of Governments (DRCOG), and has also made available public domain “freeware” engineering design software to support these criteria; and

WHEREAS, the District’s criteria and engineering design software are used by engineers and stormwater professionals worldwide to help them follow District criteria when developing hydrology and designing flood channels, culverts, detention basins, retention ponds, street inlets, storm sewers, and stormwater quality treatment facilities; and

WHEREAS, many governments within the District boundary require the use of District criteria and engineering design software within their jurisdictions; and

WHEREAS, the District is committed to advancing the state of the practice of drainage, flood control, and stormwater quality engineering through research projects in collaboration with state and federal agencies, Colorado universities and colleges, and other research partners, which in turn leads to improved District criteria and engineering design software to support these criteria; and

WHEREAS, the 2016 cost of support services needed to meet NPDES Phase 1 permit commitments, to assist NPDES Phase 2 communities in their evolving permit compliance requirements, to provide required wet-weather monitoring of receiving waters as agreed to between the State and the permitted municipalities, and to continue the installation and testing of BMP facilities for the purpose of improving their design technology is estimated at \$160,000, the estimated cost for criteria development is estimated at \$125,000, the cost of software development is estimated at \$100,000 and the estimated cost for stormwater management research is estimated at \$130,000; and

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Executive Director is authorized to continue to contract for necessary consulting, monitoring, education/outreach, and other services in 2016 necessary for the District to assist NPDES regulated municipalities within the District in their efforts to comply with NPDES MS4 permits. In addition, the Executive Director is authorized to extend this assistance through the

design, construction, continued field testing and the development of design guidance of stormwater BMPs for use in this region.

2. The Executive Director is authorized to execute the necessary agreements with qualified partners and consultants to assist the District in developing criteria, software, and in conducting stormwater management research.
3. The expenditure for this work in 2016 shall not exceed \$515,000 without further authorization from the Board.

(SEAL)

THE URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson



THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 62, SERIES OF 2015  
(Authorization for a Planning Study of Sloan’s Lake Basin)

WHEREAS, the District in a policy statement previously adopted (Resolution No. 14, Series of 1970 and Resolution No. 11, Series of 1973) expressed an intent to assist public bodies which have heretofore enacted floodplain zoning measures; and

WHEREAS, the City and County of Denver, City of Lakewood, City of Wheat Ridge, City of Edgewater, and Jefferson County have enacted floodplain regulations; and

WHEREAS, the Board has previously established a Work Program for 2016 (Resolution No. 56, Series of 2015) which includes master planning; and

WHEREAS, the Board previously cooperated with the City and County of Denver, City of Lakewood, City of Edgewater, and City of Wheat Ridge to prepare the “Major Drainageway Planning Phase B Sloan’s Lake Basin” report (URS, 1977) and the “Flood Hazard Area Delineation Sloan’s Lake Basin” (URS, 1977);

WHEREAS, the City and County of Denver and the City of Lakewood have expressed a desire to participate in a study leading to a Major Drainageway Plan and Flood Hazard Area Delineation (FHAD) for major drainageways within the Sloan’s Lake basin; and

WHEREAS, the Board wishes to cooperate with the City and County of Denver, City of Lakewood, City of Wheat Ridge, City of Edgewater, and Jefferson County in the identification of solutions to stormwater drainage and flood control management problems for major drainageways within the Sloan’s Lake basin (Exhibit A); and

WHEREAS, the cost of engineering and mapping services for this study is estimated to be \$250,000 and is expected to be divided among participating entities as follows:

	<u>Planning Study</u>	<u>FHAD</u>
UDFCD	\$100,000	\$50,000
Denver	\$60,000	\$0
<u>Lakewood</u>	<u>\$40,000</u>	<u>\$0</u>
TOTAL	\$200,000	\$50,000

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Executive Director is authorized to execute an agreement with the City and County of Denver and the City of Lakewood to fund the required engineering and mapping services for the Sloan’s Lake Basin planning study.
2. The Executive Director is authorized to procure any needed mapping and to execute a contract with a qualified engineer(s) for required engineering services.
3. The expenditures for the consulting and mapping services are estimated at \$250,000 and the District’s share of total costs shall not exceed \$150,000 plus interest earned on monies deposited in the project fund which contribution for the planning portion of this project shall be matched by the City and County of Denver and the City of Lakewood.

(SEAL)

THE URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson

THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 62, SERIES OF 2015  
(Authorization for a Planning Study of Sloan's Lake Basin)

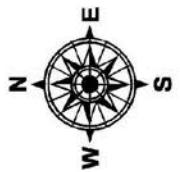
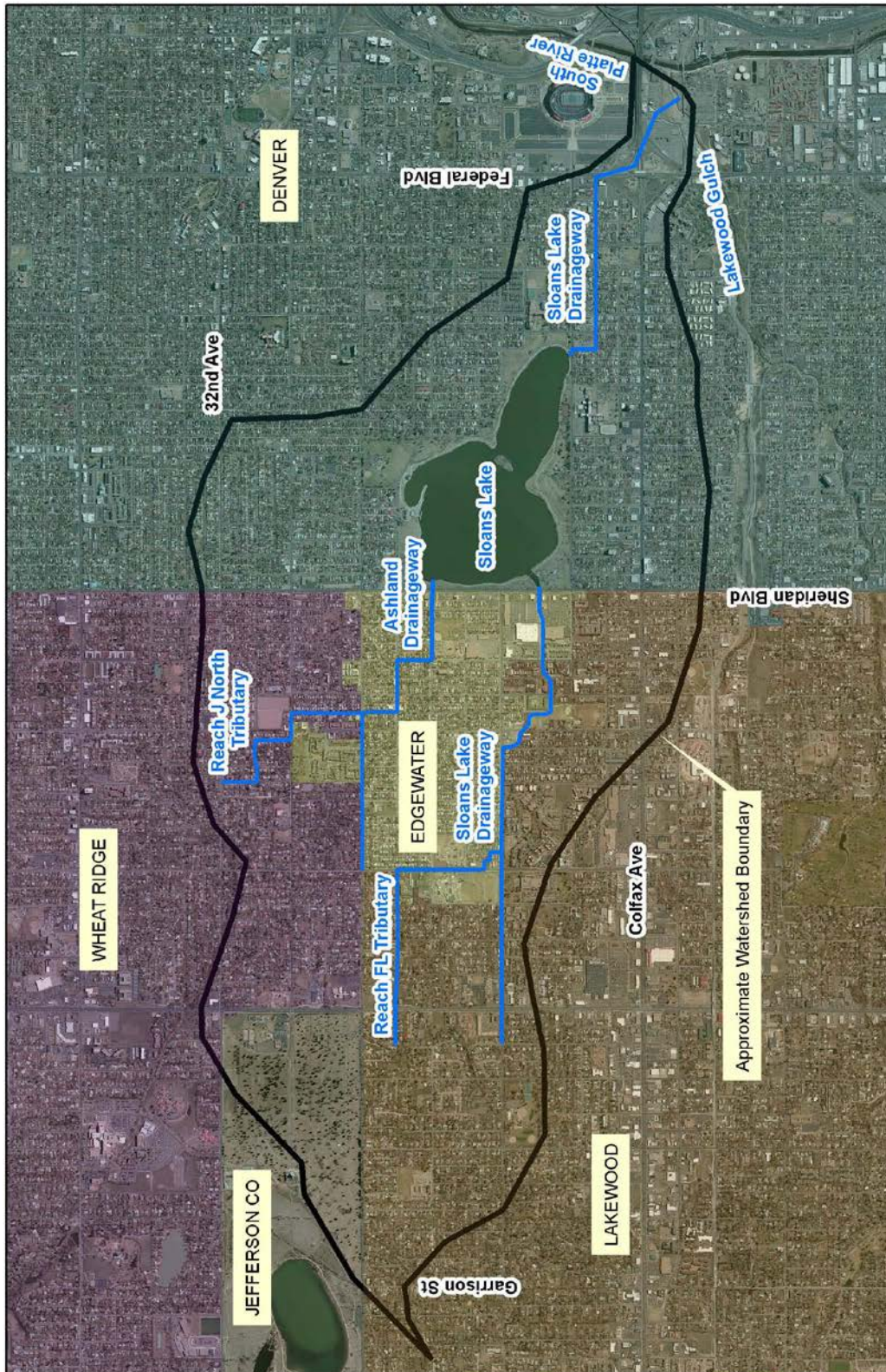


EXHIBIT A  
Sloans Lake Basin MDP & FHAD  
Approximate Study Limits  
November 2015



THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 63, SERIES OF 2015

(Authorization for a Planning Study of Quincy Drainage, Shop Creek and Meadowood Drainageway)

WHEREAS, the District in a policy statement previously adopted (Resolution No. 14, Series of 1970 and Resolution No. 11, Series of 1973) expressed an intent to assist public bodies which have heretofore enacted floodplain zoning measures; and

WHEREAS, the City of Aurora has enacted floodplain regulations; and

WHEREAS, the Board has previously established a Work Program for 2016 (Resolution No. 56, Series of 2015) which includes master planning; and

WHEREAS, the Board previously cooperated with the City of Aurora to prepare the “Outfall System Planning Quincy Drainage & Shop Creek” report (Boyle Engineering, 1985);

WHEREAS, the City of Aurora has expressed a desire to participate in a study leading to an Outfall Systems Plan for Quincy Drainage, Shop Creek and Meadowood Drainageway; and

WHEREAS, the Board wishes to cooperate with the City of Aurora in the identification of solutions to stormwater drainage and flood control management problems for Quincy Drainage, Shop Creek and Meadowood Drainageway (Exhibit A); and

WHEREAS, the cost of engineering and mapping services for master planning is estimated to be \$150,000 and is expected to be divided among participating entities as follows:

	<u>Planning Study</u>
UDFCD	\$75,000
<u>Aurora</u>	<u>\$75,000</u>
TOTAL	\$150,000

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Executive Director is authorized to execute an agreement with the City of Aurora to fund the required engineering and mapping services for the Quincy Drainage, Shop Creek and Meadowood Drainageway planning study.
2. The Executive Director is authorized to procure any needed mapping and to execute a contract with a qualified engineer(s) for required engineering services.
3. The expenditures for the consulting and mapping services are estimated at \$150,000 and the District’s share of total costs shall not exceed \$75,000 plus interest earned on monies deposited in the project fund which contribution for the planning portion of this project shall be matched by the City of Aurora.

(SEAL)

THE URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson

THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 63, SERIES OF 2015

(Authorization for a Planning Study of Quincy Drainage, Shop Creek and Meadowood Drainageway)

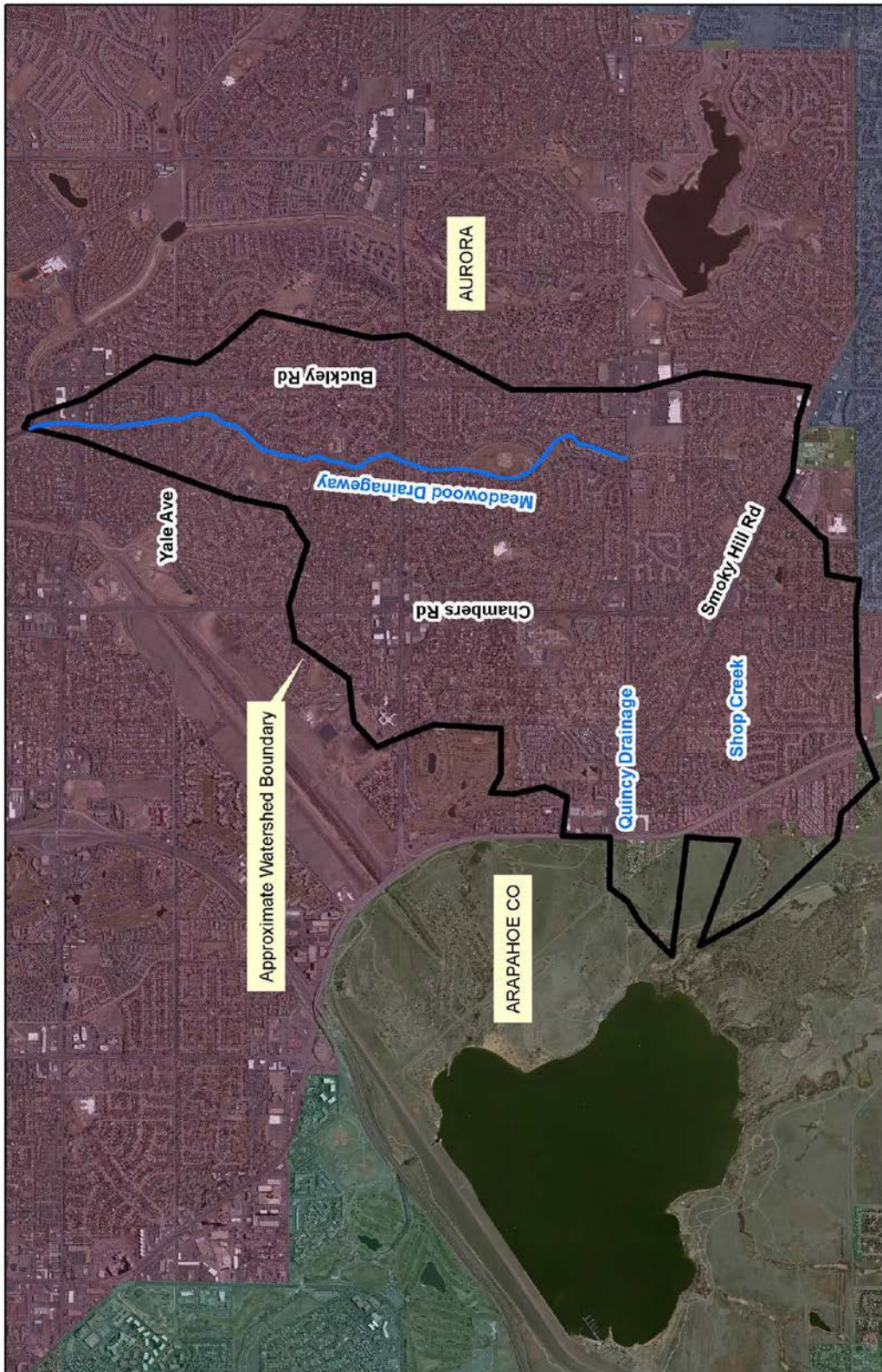


EXHIBIT A  
Quincy Drainage, Shop Creek, Meadowood Drainageway OSP  
Approximate Study Limits  
November 2015





THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 64, SERIES OF 2015  
(Authorization for a Planning Study of Weaver Creek)

WHEREAS, the District in a policy statement previously adopted (Resolution No. 14, Series of 1970 and Resolution No. 11, Series of 1973) expressed an intent to assist public bodies which have heretofore enacted floodplain zoning measures; and

WHEREAS, Jefferson County and the City of Lakewood have enacted floodplain regulations; and

WHEREAS, the Board has previously established a Work Program for 2016 (Resolution No. 56, Series of 2015) which includes master planning; and

WHEREAS, the Board previously cooperated with Jefferson County and the City of Lakewood to prepare the "Flood Hazard Area Delineation Weaver Creek" report (Leonard Rice, 1981);

WHEREAS, Jefferson County and the City of Lakewood have expressed a desire to participate in a study leading to a Major Drainageway Plan and Flood Hazard Area Delineation for Weaver Creek; and

WHEREAS, the Board wishes to cooperate with Jefferson County and the City of Lakewood in the identification of solutions to stormwater drainage and flood control management problems for Weaver Creek (Exhibit A); and

WHEREAS, the cost of engineering and mapping services for this study is estimated to be \$250,000 and is expected to be divided among participating entities as follows:

	<u>Planning Study</u>	<u>FHAD</u>
UDFCD	\$100,000	\$50,000
Jefferson County	\$93,000	\$0
<u>Lakewood</u>	<u>\$7,000</u>	<u>\$0</u>
TOTAL	\$200,000	\$50,000

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Executive Director is authorized to execute an agreement with Jefferson County and the City of Lakewood to fund the required engineering and mapping services for the Weaver Creek planning study.
2. The Executive Director is authorized to procure any needed mapping and to execute a contract with a qualified engineer(s) for required engineering services.
3. The expenditures for the consulting and mapping services are estimated at \$250,000 and the District's share of total costs shall not exceed \$150,000 plus interest earned on monies deposited in the project fund which contribution for the planning portion of this project shall be matched by Jefferson County and the City of Lakewood.

(SEAL)

THE URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson

THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 64, SERIES OF 2015  
(Authorization for a Planning Study of Weaver Creek)

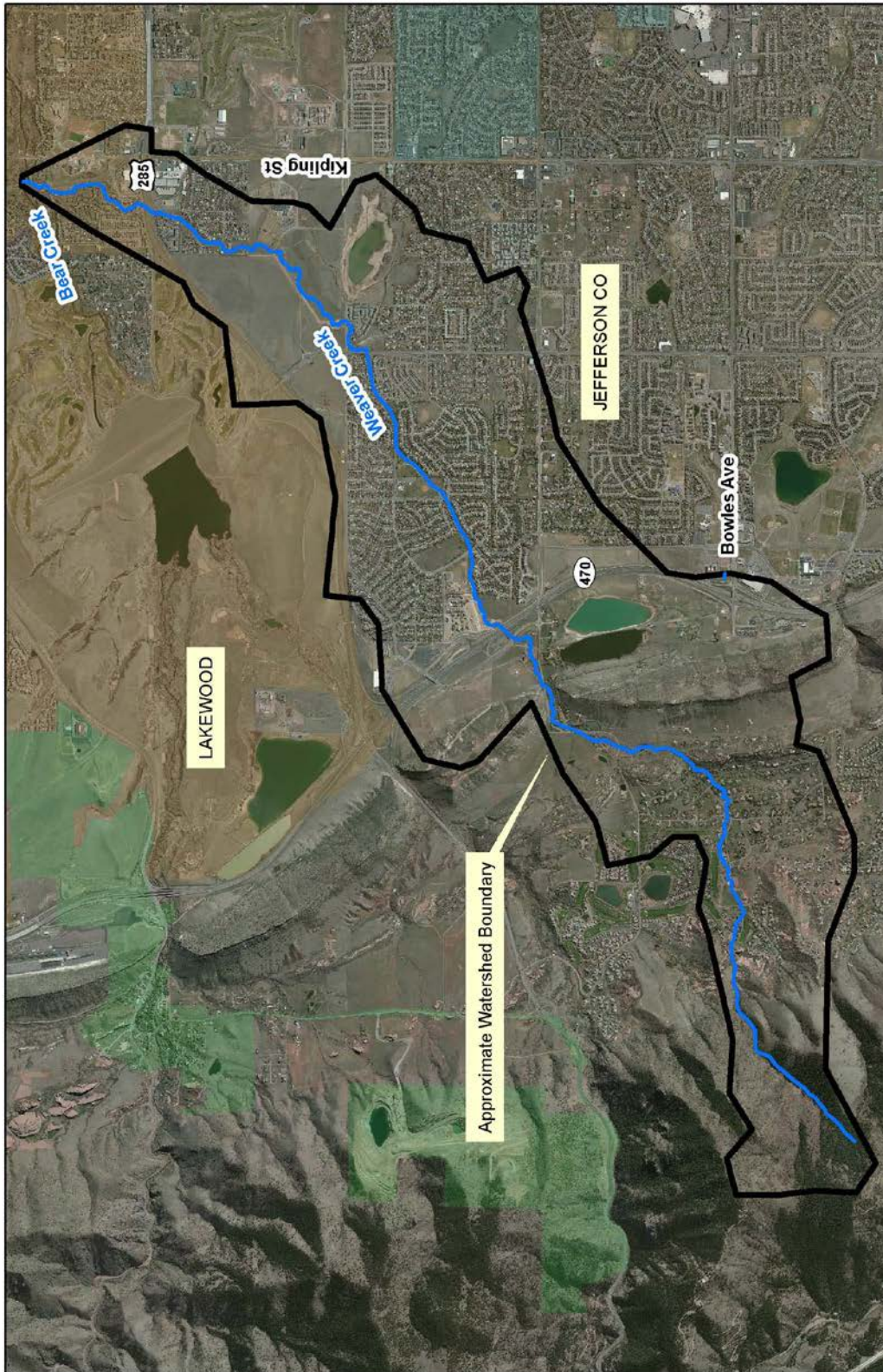


EXHIBIT A  
Weaver Creek MDP & FHAD  
Approximate Study Limits  
November 2015



THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 65, SERIES OF 2015

(Authorization for a Flood Hazard Area Delineation for the South Platte River)

WHEREAS, the District in a policy statement previously adopted (Resolution No. 14, Series of 1970 and Resolution No. 11, Series of 1973) expressed an intent to assist public bodies which have heretofore enacted floodplain zoning measures; and

WHEREAS, Adams County, Arapahoe County, City and County of Denver, City of Brighton, City of Commerce City, City of Englewood, City of Littleton, City of Sheridan, City of Thornton, Douglas County and the Town of Columbine Valley have enacted floodplain regulations; and

WHEREAS, the City of Centennial and Arapahoe County have assigned and transferred to the Southeast Metro Stormwater Authority (SEMSWA) their rights and obligations for this project; and

WHEREAS, the Board has previously established a Work Program for 2015 (Resolution No. 51, Series of 2014) which includes floodplain mapping; and

WHEREAS, the hydrology for the South Platte River has been revised by a Hydrology Conditional Letter of Map Revision; and

WHEREAS, the Board wishes to prepare a Flood Hazard Area Delineation for the South Platte River from Chatfield Dam to Weld County (Exhibit A); and

WHEREAS, the initial cost of engineering and mapping services for floodplain delineation is estimated to be \$168,000 and is expected to be divided among participating entities as follows:

	<u>FHAD</u>
UDFCD	\$95,000
Denver	\$40,000
Adams County	\$18,000
Brighton	\$ 5,000
<u>SEMSWA</u>	<u>\$10,000</u>
TOTAL	\$168,000

It is anticipated that an additional \$85,000 will be required for this project in 2016, and that approximately \$15,000 of that \$85,000 will come from other communities within the project reach with the balance being requested by an additional resolution at that time.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Executive Director is authorized to execute an agreement with the City and County of Denver, Adams County, Brighton, the Southeast Metro Stormwater Authority (SEMSWA), and any other community within the project reach to fund the required engineering and mapping services for the South Platte River Flood Hazard Area Delineation.
2. The Executive Director is authorized to procure any needed mapping and to execute a contract with a qualified engineer(s) for required engineering services.
3. The District's maximum contribution to the South Platte River Flood Hazard Area Delineation, without prior approval of the Board, shall be \$95,000 plus interest earned on monies deposited in the project fund, which contribution shall be added by the City and County of Denver, Adams County, Brighton, SEMSWA, and other communities along the river.

(SEAL)

THE URBAN DRAINAGE AND  
FLOOD CONTROL DISTRICT

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson

THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

RESOLUTION NO. 65, SERIES OF 2015

(Authorization for a Flood Hazard Area Delineation for the South Platte)

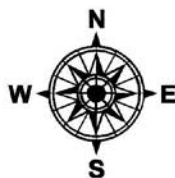
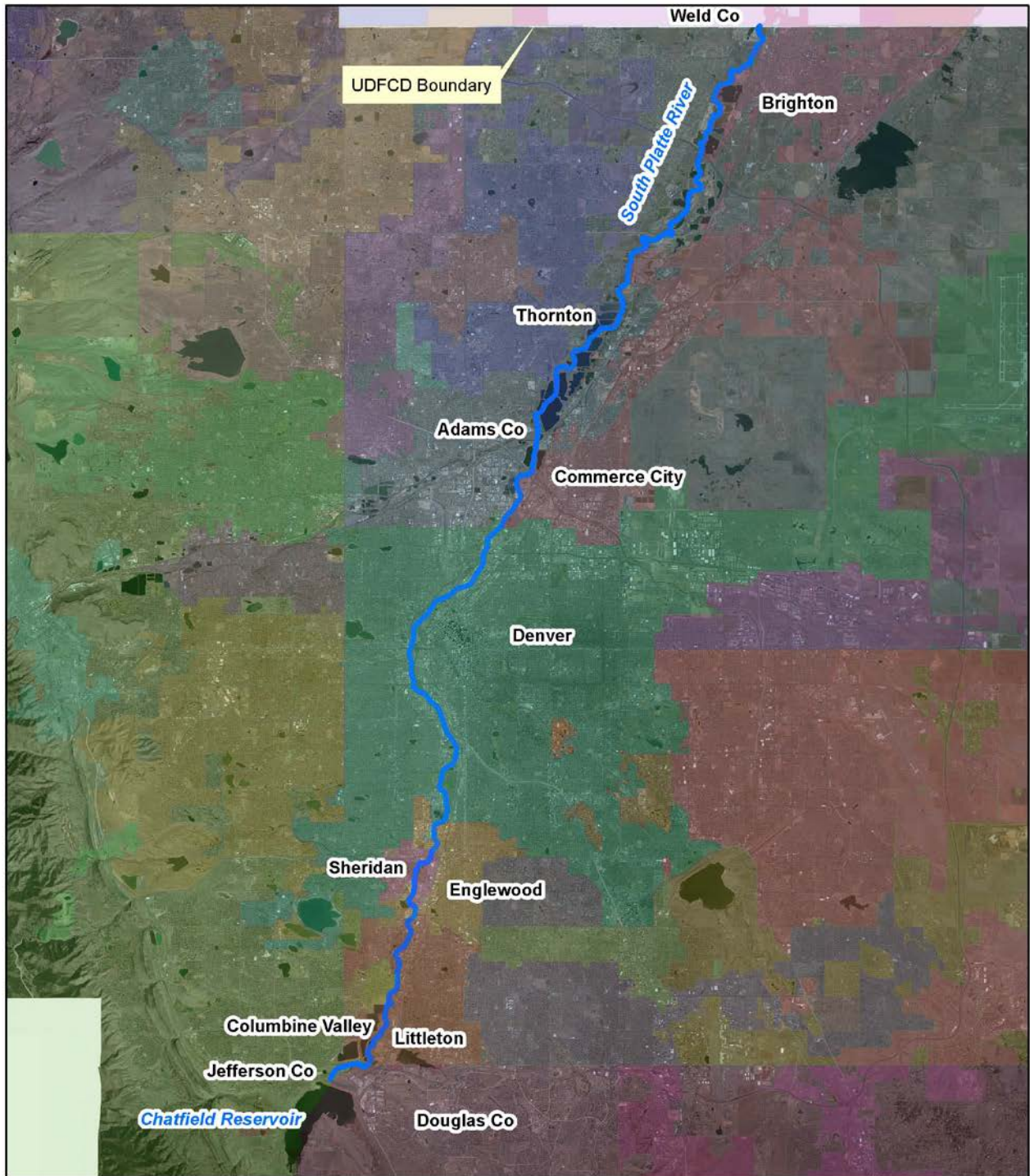


EXHIBIT A  
South Platte River FHAD  
Approximate Study Limits  
September 2015