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## Second Creek MDP and FHAD Kickoff Meeting Minutes

Date: December 7, 2016, 1:00 PM  
Location: UDFCD Building  
Distributions: Meeting Agenda and Project Schedule

### Attendees:

<b>NAME</b>	<b>ORGANIZATION</b>	<b>E-MAIL</b>
Shea Thomas	UDFCD	<a href="mailto:stomas@udfcd.org">stomas@udfcd.org</a>
Anna Sparks	Adams County	<a href="mailto:asparks@adcogov.org">asparks@adcogov.org</a>
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Maria D'Andrea	Commerce City	<a href="mailto:mdandrea@c3gov.com">mdandrea@c3gov.com</a>
David Delagarza	RESPEC	<a href="mailto:david.delagarza@respec.com">david.delagarza@respec.com</a>
Mike Bannister	RESPEC	<a href="mailto:mike.bannister@respec.com">mike.bannister@respec.com</a>
<b>Joining via phone:</b>		
Catherine Rafferty	Denver International Airport (DIA)	<a href="mailto:catherine.rafferty@flydenver.com">catherine.rafferty@flydenver.com</a>
Alan Leak	RESPEC	<a href="mailto:alan.leak@respec.com">alan.leak@respec.com</a>

## I. Purpose

The purpose of this meeting was to introduce all project stakeholders, discuss project goals, and request information and data from the project sponsors.

## II. Study Overview and Goals

The meeting was opened with introductions. David Delagarza gave a brief overview of the Master Drainageway Plan (MDP) and Flood Hazard Area Delineation (FHAD) processes. The differences between FHADs and effective FEMA floodplains were also described. Shea Thomas noted that the conceptual design phase of the MDP will provide a good cost estimate for improvements.

The project sponsors were asked what their goals for the study were. Russel Nelson stated that Adams County was concerned about how to control flow splits to Third Creek caused by the Highway 85 and railroad crossings. He also wanted to understand what CDOT and the railroad's obligations are regarding improving crossing structures. Anna Sparks noted that solutions that didn't involve raising road grades were much more practical to represent. It was decided that raising the road grade less than a foot was

probably realistic if required. Mr. Delagarza noted that knowing the return period conveyance requirements for individual crossings would allow RESPEC to provide better recommendations. Ms. Thomas asked that all sponsors provide design criteria for bridges and culverts in their jurisdictions. It was also noted that information on planned future roadways would be useful.

Scott Olsen stated that the City of Brighton would like to see detention used to reduce discharges and decrease the required size of roadway crossings.

Sarah Young stated that the City of Aurora would like to minimize the amount of land dedicated to detention which would then be undevelopable. Ms. Young also commented that it was desirable to get rid of the IGA limiting flows to 500-cfs during the 100-year event.

At this point Ms. Thomas described the IGA mentioned by Ms. Young. The IGA is between DIA, the City of Aurora, and the UDFCD and limits the 100-year discharge on Second Creek entering DIA to 500 cfs. The source of the 500 cfs value is unclear and historical 100-year flows at this location are more likely to be in the range of 2000 cfs. It was stated that DIA and the City of Aurora would like to be able to discharge more than 500-cfs during the 100-year event.

Maria D'Andrea stated that Commerce City is currently working on a diversion project to redirect the runoff from 400 acres of land from Third Creek to Second Creek. Ms. D'Andrea also stated that there are a series of planned (2004 OSP) detention ponds for various return periods and that the city would like to combine some or all of them if possible.

The City of Brighton noted that they are currently working on the city master plan. Brighton is also looking at diverting flows from the Second Creek basin directly to the South Platte River.

Catherine Rafferty noted that DIA would like to understand the source of the 500-cfs number in the IGA and would like to determine what a realistic historical flow is. Ms. Rafferty also stated that DIA does not want detention built on DIA property. It was noted that it might be possible to adjust the plans for detention basin S235 and that DIA would like to see basin S219 "go away". Ms. Rafferty noted that DIA is working on expanding Pena Blvd and that it would be beneficial to know expected discharges on Second Creek as soon as possible.

It was noted by DIA that basin S235 is in the approach for runway 725 and that enlarging the pond is not desirable. Ms. Rafferty stated that while FAA regulations require detention facilities to drain within 48 hours, DIA prefers to use a 40-hour drain time which matches UDFCD recommendations.

Ms. Thomas asked if the DIA drainage masterplan was complete. Ms. Rafferty stated it was. Ms. Thomas noted that the existing MDP is upstream and downstream of DIA and that the current FHAD that begins with this meeting will be entirely downstream of DIA.

The use of existing hydrology upstream of DIA was discussed. Ms. Thomas noted that the entire basin will be modeled using CUHP 2.0 and flows will be compared to existing flows. Mr. Delagarza stated concern about potentially using two different sets of hydrology within the project. Ms. Thomas mentioned that using two different hydrologic models is acceptable and that the issue will be discussed in more depth in a future meeting. It was also noted that no calibration should have to be performed on the hydrology.

### **III. Information Gathering**

Information required for the study was discussed. Ms. Thomas noted that the structure survey for the project was complete and that she will place it on Dropbox. It was stated that the FEMA LIDAR flown after the 2013 flood will be used for the study. Mr. Delagarza requested that project sponsors provide relevant data for the project. A list of requested information is on the agenda for the meeting.

It was noted that new aerial imagery may shortly be available from the Denver Regional Coalition of Governments (DRCOG).

Ms. Thomas stated that she had information related to the Fulton and Obrien ditches and that she would forward it to RESPEC.

Alan Leak stated that it would be important to know what water rights if any the ditch companies had related to Second Creek.

Ms. Thomas noted that project sponsors should share any information they have regarding future road crossings over Second Creek with RESPEC.

### **IV. Schedule**

Mr. Delagarza suggested having the next meeting in the end of January 2017. Ms. Thomas stated that the meeting should be scheduled ASAP due to the number of participants and the difficulty encountered while scheduling the kickoff meeting.

### **V. Action Items**

- Project sponsors will provide pertinent information to RESPEC.
- RESPEC will begin work on the baseline hydrology.
- The UDFCD will forward hydraulic structure survey and information on ditches/canals to RESPEC.
- The UDFCD will send RESPEC updated aerial imagery when it becomes available.

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*These minutes are true and accurate to the best of my knowledge based on notes and recollection. Should any attending party have additions or corrections to these minutes, please forward them to David Delagarza of RESPEC Consulting within one week of the date of receipt. The absence of a response will be considered concurrence to the previous information and these minutes will be considered matter of fact.*