FLOOD CONTROL DISTRICT of Maricopa County
2801 West Durango Street, Phoenix, AZ 85009-6399
TEL: (602) 506-1501
FAX: (602) 506-4601
TT: (602) 506-5897

Flood Control District of Maricopa County (FCDMC) Offers Four Training Workshops on Drainage Design Management System for Windows (DDMSW)

About the Workshop:

FCDMC is offering four workshops, i.e., two workshops for "Hydrology and Storm Drainage Hydraulics" and two workshops for "River Mechanics" using the latest version of DDMSW (Version. 5.3.0). The workshops will be held in the MCDOT Computer Training Room at 2919 W. Durango Street, Phoenix AZ 85009 (see Map below). The two "Hydrology and Storm Drainage Hydraulics" workshops will cover the same topics and course materials. The same is true for the two "River Mechanics" workshops. **Each workshop carries six hours of Continuing Education Credits (CEC).**

Fee:

A $92 training fee per participant per workshop will be charged to cover the training cost. Training fees for participants from public agencies will be waived.

When:

Workshop	Topics	Time	Date
No. 1	**Hydrology and Storm Drainage Hydraulics**	8:30 a.m. - 4:30 p.m.	12/06/2017, Wednesday
No. 2	**River Mechanics**	8:30 a.m. - 4:30 p.m.	12/07/2017, Thursday
No. 3	**Hydrology and Storm Drainage Hydraulics**	8:30 a.m. - 4:30 p.m.	12/11/2017, Monday
No. 4	**River Mechanics**	8:30 a.m. - 4:30 p.m.	12/12/2017, Tuesday

Where:

Maricopa County Department of Transportation (MCDOT) Computer Training Room
2919 W Durango St, Phoenix Arizona 85009
(South side of MCDOT Traffic Operation Building; see Maps below)

Instructors:

The workshop will be conducted by Mr. Kenneth Lewis, P.E., of KVL Consultants, Inc. of Scottsdale, Arizona. Mr. Lewis is the President of KVL Consultants, Inc., a firm specializing in Storm Water and Flood Control Master Planning and in developing computer applications for GIS/System modeling integration. Before establishing his firm in 1994, Mr. Lewis served as Director of GIS for Boyle Engineering Corporation in the US; Manager of Planning for Europe, the Middle East and Africa for Ingersoll Rand Company in London, UK; Manager, Malaysia for Sinclair Knight Consulting Engineers, in Kuala Lumpur, Malaysia and Project Engineer for Sinclair Knight Consulting Engineers in Sydney, Australia. Mr. Lewis is the developer

of the DDMSW program. The river mechanics fundamentals will be taught by Mr. Carlos Carriaga, Ph.D., PE, CFM and Mr. Bing Zhao, Ph.D., P.E., Engineering Application Development and River Mechanics Branch, Engineering & Permitting Division, Flood Control District of Maricopa County.

Registration and Payment:

Seating is limited for these workshops. Registrations will be on a "first come, first served" basis. To register, please contact Ms. Mona Merkevicius by email ONLY at mrm@mail.maricopa.gov to reserve a seat. To make a payment, please contact the District's Front Desk at (602) 506-1501. **The registration and payment deadline is November 27, 2017.**

Payments shall be made through credit cards (Visa, Master, American Express, Discover), cash, or checks payable to "Flood Control District of Maricopa County. Please make a note on the check to include the following information: "DDMSW training", attendee's name, and training date. When calling the Front Desk for the payment, please indicate that the payment is for "DDMSW training" and provide the attendee's name, training date, company name, and phone number. **Payments must be made by November 27, 2017 deadline**. If payments are not received, the reserved seats will be cancelled.

Only one attendee from each company or agency will be allowed to attend the workshop. However, a company/agency can send one person to attend both the "Hydrology and Storm Drainage Hydraulics" and "River Mechanic" workshops or send two persons to attend these two workshops separately. If more people from one company want to attend the workshop, they can be added to the waiting list. **Each workshop carries six hours of Continuing Education Credits (CEC).**

Please register as soon as possible. Once the deadline is passed and if there are any available seats left, FCDMC will open these seats to those on the waiting list.

Cancellation Policy:

A full refund of the training fee can only be honored if a cancellation email is received two (2) business days before the specific workshop session starts. The cancellation email must be sent to Ms. Mona Merkevicius at mrm@mail.maricopa.gov.

For Technical Questions:

Please contact:

Carlos C Carriaga, Ph.D., P.E., CFM
Software Systems Engineer
Engineering Application Development and River Mechanics Branch
Engineering Division, FCDMC
602-506-5402
carloscarriaga@mail.maricopa.gov

Raj Shrestha, P.E., CFM
Software Systems Engineer
Engineering Application Development and River Mechanics Branch
Engineering Division, FCDMC
602-506-4071
rajshrestha@mail.maricopa.gov

Bing Zhao, Ph.D., P.E.
Branch Manager
Engineering Application Development and River Mechanics Branch
Engineering Division, FCDMC
602-506-3293
biz@mail.maricopa.gov

Recent DDMSW Features and Capabilities:

Hydrology:

- Use of shapefile to assemble routing data for normal depth, kinematic wave, and Muskingum-Cunge
- Activation of warning for XKSAT values with -9999 or “null” values
- Increased precision (2 decimal places) for “max volume” in the DT card
- Issues associated with NOAA2 rainfall data have been fixed
- Use “Limit Tc to 100 Year” limited only for Clark Method
- Precision issue on the “Area” from the flow summary form has been fixed.
- Required map fields for Lca shapefile have been added.
- “Import HEC-1 file” in hydrology is now enabled.
- Updates and corrections on land use data
- Increase precisions for “Peak Storage” and “Stage”
- Correction of the “Steps” label to “NSTPS”
- Mouse tips on data entries
- Simplified import functionality for data
- Increased precision for the Storage Volume in Rational Method

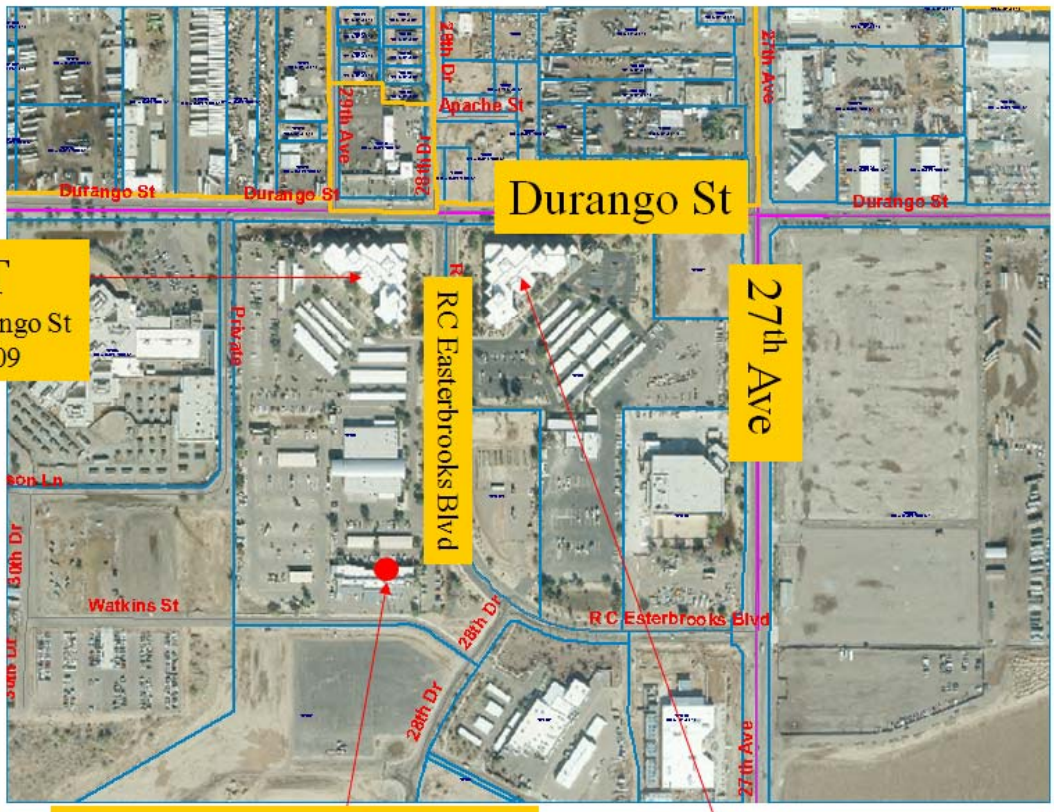
River Mechanics:

- Import of peak flows and volumes from hydrology model results for use in river mechanics
- Import of cross-section data from other projects
- Import of HEC-RAS data table has been fixed
- Sediment bed load computation to use average width
- “Instructions for Riprap” document to use “Bank Slope”
- Correction of the “Lateral Erosion Graphics”
- Correction of the 2-year average velocity for bed load
- Equilibrium slope diagram to show on the “Instructions” document
- Replacement of “length” with “distance” on lateral erosion analysis form
- Import of scour depths into the lateral erosion form
- Import of riprap size and scour depths into the launchable riprap form
- Improved cross-section hydraulics results form for River Mechanics
- Added “Comment Box: on the “Wash Load” form
- Added “Comment Box” on the “Bed Load” form
- Added new land use codes for sediment yield analysis
- Mouse tips on data entries
- Improved import functionality

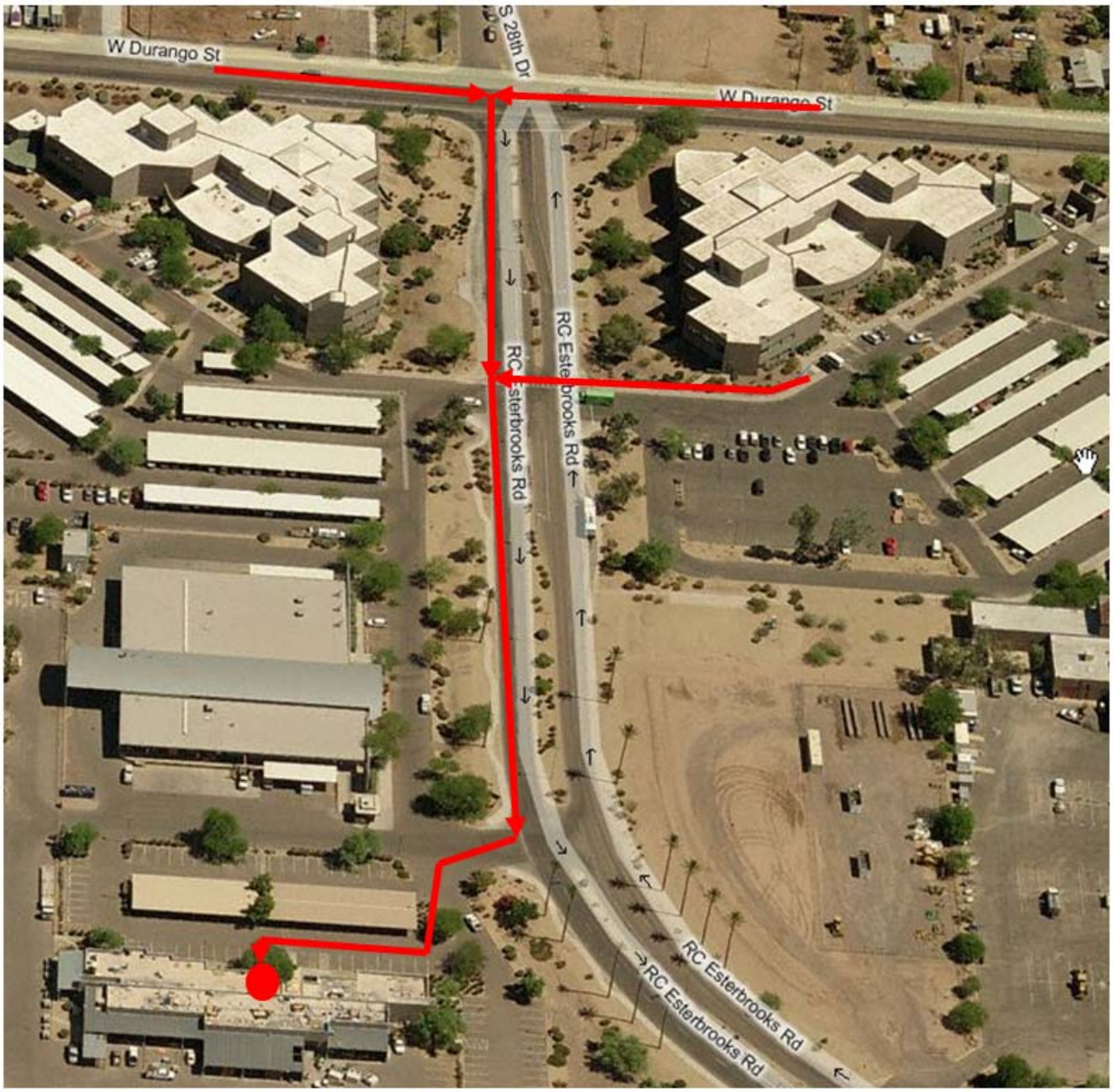
Storm and Street Drainage Hydraulics:

- Manning’s equation calculator
- Incorporation of the MAG catch basin inlets
- Modified Street Drainage Calculator form and instructions
- Increased precisions for Street Drainage Calculator flow rates
- Updated City of Phoenix (COP) catch basin inlet data
- Added “Info” button for StormPro Backwater analysis
- Tab order for the conveyance facilities form has been fixed
- Design flow rate issue for the street drainage calculator has been fixed
- Mouse tips on data entries
- Improved import functionality

Training Venue (Red dot below)



Training Venue (Red dot below)



Lunch Places near the Workshop