



**FLOOD CONTROL DISTRICT of Maricopa County**  
**2801 West Durango Street, Phoenix, AZ 85009-6399**  
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## Flood Control District of Maricopa County (FCDMC) Offers 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 two workshops for “River Mechanics and Storm Drainage Hydraulics” using the new version of DDMSW (Version. 5.0.0). 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” workshops will cover the same topics and course materials. The same is true for the two “River Mechanics and Storm Drainage Hydraulics” workshops.

### Major Changes in DDMSW version 5.0.0:

Some new features and capabilities of DDMSW include: streamlined GUI for hydrology & hydraulics and river mechanics; sediment bed load computation to use average width; warning activation for XKSAT values with -9999 or “null” values; increase precisions for “Peak Storage” and “Stage”; increased precision for “max volume” in the DT card; import of cross-section data from other projects; import of peak flows and volumes from hydrology model results for use in river mechanics; import issue of HEC-RAS data table has been fixed; incorporation of the MAG catch basin inlet standards; use of GIS shapefile to assemble routing data for normal depth, kinematic wave and Muskingum-Cunge methods; increased precision of storage volume used in storage routing for rational method; import of cross-section data into river mechanics analysis; Manning’s equation hydraulic calculator; import scour depths and riprap size results for launchable riprap analysis; increase precisions for key model parameters; and incorporation of new land use codes. Also, significant issues identified from previous versions of the program have been addressed. For an extensive list of the new features and capabilities of the program, please refer to the “New DDMSW Features and Capabilities” section.

### 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	8:30 a.m. - 4:30 p.m.	03/09/2016, Wednesday
No. 2	River Mechanics and Storm Drainage Hydraulics	8:30 a.m. - 4:30 p.m.	03/10/2016, Thursday
No. 3	Hydrology	8:30 a.m. - 4:30 p.m.	03/14/2016, Monday
No. 4	River Mechanics and Storm Drainage Hydraulics	8:30 a.m. - 4:30 p.m.	03/15/2016, 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)

## Instructor:

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 Stormwater 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.

## 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 Merkevicus by email ONLY at [mrm@mail.maricopa.gov](mailto: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 February 22, 2016.**

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 indicate “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 prior to the February 22, 2016 deadline to secure a seat. 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 “Hydrology” and “River Mechanics/Storm Drainage Hydraulics” 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. These workshops have not been pre-approved for CFM or other continuing education credits.

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 Merkevicus at [mrm@mail.maricopa.gov](mailto:mrm@mail.maricopa.gov).

## For Technical Questions:

Please contact:

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## New 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



**MCDOT**

2901 W. Durango St  
Phoenix, 85009

**RC Easterbrooks Blvd**

**27th Ave**

**Durango St**

Workshop location  
2919 W. Durango St  
Phoenix, AZ 85009  
Ring the bell to enter the building.  
After you enter the building, turn right.  
The computer room is on the right.

**FCDMC**  
2801 W. Durango St  
Phoenix, 85009





# Lunch Places near the Workshop

