# Floodplain Management Program Notes By Bill DeGroot, P.E., Chief, Floodplain Management Program

### **Pilot project**

On July 1 we began a one-year pilot project with FEMA to assume the responsibility to review requests for Conditional Letters of Map Revision (CLOMRs) and Letters of Map Revision (LOMRs) for the 32 communities within the District that are participating in the National Flood Insurance Program (NFIP). The project is funded by a \$100,000 grant administered through Region 8. We have retained ICON Engineering, Inc. to assist us in the technical reviews of these requests.

It would probably not be appropriate for me to discuss too many details about our experiences to date, at least not until we have our six-month progress review with FEMA, which is now scheduled for February. I will say that 5 ½ months into this effort our experience has been about as good as I could have imagined or hoped for. I'll have a lot more to say at the conclusion of this effort.

It is not too early, however, to recognize Mike Buckley, Matt Miller, Mike Grimm and Sally Magee at FEMA Washington for taking this step and for allowing us to do the work. I also want to thank Dan Carlson at FEMA Region 8 for helping me with the paperwork, and Tom Smith and his colleagues at Michael Baker, Jr. for all of their assistance.

#### **Future floodplains on FIRMs**

As I reported in this space last year, one of the first and best policy decisions of the District was to delineate and regulate 100-year floodplains based on projected future development of the watershed. This belief was reinforced when the 2000 census numbers were released and we found that Colorado had added a million people over the last ten years, with most of them landing in the District's area.

We have had a running battle with FEMA, and before them the Federal Insurance Administration, about this issue. They insisted on using existing conditions floodplains on their FIRMs, and, of course, we wanted to use the future conditions floodplains. A couple of years ago the FEMA staff began to take a look at how they could accommodate those of us who wanted to use the future conditions floodplains.

That effort was headed up by Mike Grimm, who worked for Fort Collins before heading to Washington. Mike's efforts culminated on November 27, when FEMA published a rule that allows future conditions hydrology floodplains to be shown on FIRMs, for informational purposes, at the request of the community. This approach allows FEMA to continue to require flood insurance based on the present risk, while helping progressive communities to plan for the future by recognizing the future flood hazard. My thanks to Mike for a job well done.

## FEMA funding breakthrough

For the first time in many years FEMA's budget includes money (\$25 million) from the general fund for mapping. For the last several years mapping costs have been funded by a fee charged to flood insurance purchasers only. It is too early to know how FEMA will utilize this new source of funds

During Congress's deliberations regarding this funding, a remarkable coalition of organizations came together to support it, including National Association of Counties, National League of Cities, National Association of Development Organizations, Coastal States Organization, National Emergency Management Association, Association of State Floodplain Managers, Association of State Wetland Managers, National Association of Flood and Stormwater Management Agencies, American Congress of Surveying and Mapping, American Planning Association, American Public Works Association, National Association of Home Builders, National Association of Realtors, National Lenders Insurance Council, and American Society of Civil Engineers.

Susan Gilson from NAFSMA played a key role in assembling this coalition.

FEMA really needs this money to upgrade their maps. I hope this is the start of many years of increasing levels of funding.

#### The year in review

We continue to be just about maxed out on development referrals, and it is a constant struggle to assure that new development doesn't increase the flood hazard potential within the District.

Our maintenance eligibility program continues to flourish under David Mallory's direction. He currently has over 200 separate projects somewhere in the process between design review and final acceptance of construction. See David's column elsewhere in this issue.

Kevin Stewart continues to assure that we have the best possible flood detection system, and he continues to be in demand as an expert in this field (see his list of professional activities on page 20 and his column in this issue). If you check out our web site at <u>www.udfcd.org</u> you will also see Kevin's handiwork.

# **Implementation efforts**

Implementation of portions of our master plans, particularly regional detention facilities, is always a challenge. We continue to have some successes that I would like to highlight.

The E-470 Public Highway Authority has constructed a major detention facility, which also served as a borrow area, on Third Creek. They also constructed another detention pond/borrow area on the Buffalo Run Tributary to Third Creek.

Last year I reported that we had negotiated an intergovernmental agreement (IGA) with Aurora, Denver, Gateway Regional Metro District and Town Center Metro District (Oakwood Homes) for implementation of the (Continued on page 17)

# Floodplain (from page 4)

regional detention facilities called for in the upper First Creek master plan, including cost sharing for the Green Valley Ranch Golf Course Pond and the Blue Grama Pond. The IGA called for Town Center to construct the Green Valley Ranch pond in conjunction with golf course construction and to be reimbursed by the other parties. That pond has been built and paid for.

# **Floodplain delineation**

This year we added approximately 84 miles of newly identified 100-year floodplains to our inventory in two major studies that were completed in conjunction with Outfall Planning Studies. The first was *Flood Hazard* 

Area Delineation for Lower Box Elder Creek Watershed, September, 2001, by Wright Water Engineers (53 miles); followed by Flood Hazard Area Delineation, Plum Creek & Tributaries, November, 2001, by WRC Engineering, Inc. (31 miles).

We have modified our scope of work for these studies to have the flood data prepared in digital form which should be compatible with FEMA's Digital Flood Insurance Rate Map (DFIRM) specifications. Our hope is that it will be easier to add these floodplains to the DFIRMs by having them in digital form.

## Master planning efforts

As I reported last year I somehow ended up managing two difficult master planning projects, even though the District has a separate Master Planning Program. We have almost completed the final report for the lower portion of the First Creek watershed. It should have a December or January date.

Our recommended plan for South Boulder Creek was accepted by the University of Colorado but rejected by both Boulder and Boulder County. This was the District's third attempt (my second and last) to prepare a plan that had a chance to be implemented.

Please see Ben Urbonas for any of your future master planning needs.

# Two District projects win CASFM awards

Two projects sponsored in part by the District won awards at the annual conference of the Colorado Association of Stormwater and Floodplain Managers (CASFM) held in Steamboat Springs in September. Brief descriptions of the projects are given below.

The winner of the Grand Award was the Grange Hall Creek Channel Improvements. Local sponsors were the City of Northglenn Public Works and Parks and Recreation Departments. The lead consultant was Muller Engineering Company, Inc. with Wenk Associates.

A 6,000-foot length of channel in Northglenn was stabilized through the use of sculpted and colored concrete drop structures. Existing 15- to 25-foot vertical banks were filled and laid back while preserving trees and wetlands. A wildlife habitat island was created in one location, and a portion of vertical bank was retained for nesting birds. A water-quality pond and a sedimentation basin were built on the North Tributary. A trail bridge-crossing was designed/built similar in appearance to the drops. The project was constructed from May 1999 to April 2001.

The Jewell Wetlands project received an Honor Award at the same conference. Local sponsors were the City of Aurora Utilities and Parks and Open Space Departments. The lead consultant was ICON Engineering, Inc. with Design Concepts.

A 57-acre natural area was preserved and enhanced in Aurora. Drainage and flood-control protection was provided to a residential area and downstream cityowned facilities through construction of channel stabilization and a flood-control dam/reservoir. Wetland and uplandarea educational opportunities were included through the use of a boardwalk and interpretive signs. A hummingbird viewing area was created. Volunteer efforts, including schools and citizen

participation, were extensive as was fundraising involving multiple partners.





Two of the Grange Hall Creek sculpted structures.

Design was initiated in 1997 and construction was completed in 2000.