



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

**April 15, 2010**

**MINUTES**

**Members Present:**

Susan Beckman	Commissioner, Arapahoe County
Bob Broom	Mayor Pro Tem, City of Aurora
Bob Dyer	Mayor Pro Tem, City of Arvada
Faye Griffin	Commissioner, Jefferson County
Bob Hoffmaster	Engineer
Marcia Johnson	Council Member, City and County of Denver
Paul Lopez	Council Member, City and County of Denver
Nancy McNally	Mayor, City of Westminster
Andrew Muckle	Mayor, Town of Superior
Alice Nichol	Commissioner, Adams County
Dave Sellards	Engineer
Nancy Sharpe	Mayor, City of Greenwood Village
Guillermo (Bill) Vidal	Deputy Mayor, City and County of Denver
Ron Weidmann	Mayor Pro Tem, City of Centennial

**Members Absent:**

Jerry DiTullio	Mayor, City of Wheat Ridge
Cindy Domenico	Commissioner, Boulder County
Joyce Downing	Mayor, City of Northglenn
Erik Hansen	Mayor, City of Thornton
Peggy Lehmann	Council Member, City and County of Denver
Bob Murphy	Mayor, City of Lakewood
Jill Repella	Commissioner, Douglas County
Walt Spader	Mayor Pro Tem, City and County of Broomfield

**UDFCD Staff Present:**

Paul Hindman	Executive Director
Ed Krisor	Legal Counsel
Bill DeGroot	Manager, Floodplain Management
Dave Bennetts	Manager, Design, Construction, and Maintenance
Laura Kroeger	Assistant Manager, Design, Construction, and Maintenance
Richard Borchardt	Senior Project Engineer, Design, Construction, and Maintenance
Bryan Kohlenberg	Senior Project Engineer, Design, Construction, and Maintenance
David Mallory	Senior Project Engineer, Floodplain Management
Barbara Chongtoua	Senior Project Engineer, Design, Construction, and Maintenance
Shea Thomas	Senior Project Engineer, Master Planning
Terri Fead	Project Engineer, Floodplain Management
Holly Piza	Project Engineer, Master Planning
Mike Sarmiento	Senior Construction Manager, Design, Construction, and Maintenance
Sandra Gonzalez	Administrative Services Manager

**Others Present**

Jim Kaiser	City of Thornton
Michael Welker	

1. **Call to Order – 1:00 p.m.**  
Chairperson McNally called the meeting to order at 1:00 p.m.
2. **Roll Call - Determination of Quorum**  
Roll was called and a quorum was declared present.
3. **Introductions**
  - a. **Swearing in of New Board Members**  
No board members were sworn in at this meeting.
  - b. **Visitors/Guests**  
Paul Hindman introduced Dave Bennetts as the new Manager of DCM as a result of Mark Hunter’s retirement. Laura Kroeger, Project Engineer, DCM was selected to take over Dave’s former position of Assistant Manager.
  - c. **Awards/Recognition**  
APWA Sustainability – Paul referenced the report that Bill DeGroot headed up to respond to APWA’s request for information on nationwide sustainability programs.
4. **Approval of March 18, 2010 Meeting Minutes**  
The minutes were approved as submitted.
5. **Consent Agenda**
  - a. **Review of Cash Disbursements**  
Cash Disbursement lists dated March and April 2010 were 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. **Authorization to Update the Urban Storm Drainage Criteria Manual Volumes 1 and 2 (Resolution No. 17, Series of 2010)**  
Important changes to Volume 3 of the Urban Storm Drainage Criteria Manual are being finalized. In 2010, Volumes 1 and 2 will need to be revised. While Volume 3 is about stormwater quality best management practices (BMPs), Volumes 1 and 2 deal with: the District’s philosophy, vision, mission and policy, drainage law, master planning of drainage and flood control improvements, developing hydrology (the rainfall and runoff volume and peak flow estimates) necessary for sizing of capital improvements, and many other items such as storm sewers, culverts, flood storage ponds and proper vegetation techniques.  
  
There are also new materials to include in the update, such as a new criteria for sculpted concrete drop structures, void-filled riprap, riffle drop structures, and improved storm sewer inlet design as a result of a four year study conducted at CSU.  
  
A major effort in the Volume 3 rewrite was to improve readability and accessibility of the information. This will also be a priority in the Volume 1 and 2 update. This resolution authorizes the expenditure of \$150,000 to initiate this effort.  
  
There being no further comments or questions, it was the consensus of the Board to place Resolution No. 17 on the Consent Agenda.
  - c. **Authorization to Upgrade the Urban Storm Drainage Technical Software (Resolution No. 18, Series of 2010)**  
Volume 3 of the Urban Storm Drainage Criteria manual concerns stormwater quality best management practices (BMPs). When the manual was revised in 1999, a software package was created to accompany it, called “UD-BMP”. This software package was built with a Microsoft Excel interface so that a water resources engineer anywhere in the world can use it without a large learning curve.

The software is available for free download from the District's website. It is one of 17 freeware packages the District has developed. The District website receives over 30,000 hits per year on the software download page. This software simplifies the design process for stormwater BMPs and ensures that the District's criteria for sound engineering practices are used.

Now that revisions to the criteria manual are being finalized, the software needs to be updated to reflect important changes to designs based on what we have learned in the last decade. This resolution authorizes the expenditure of \$50,000 for this effort.

There being no further comments or questions, it was the consensus of the Board to place Resolution No. 18 on the Consent Agenda.

**d. Authorization for Funding Support of a Stormwater Bioretention Demonstration Project (Resolution No. 19, Series of 2010)**

The District has been working with the University of Colorado and the Urban Watersheds Research Institute to conduct a laboratory research study of rain garden (bioretention) practices. The next step is to take the laboratory findings and construct a full scale project which will be monitored over several years to evaluate the performance and maintenance needs.

A question was asked about "paper wads" forming within the soil mixture and if it would clog the system. It was explained that the paper is combined with other materials and that would eliminate any wad formation. A question regarding mosquitoes was answered that the project is designed to drain in 24 hours, which is too short of a time frame for the mosquitoes to breed.

Council Member Lopez stated that a similar project was presented to area residents and they were pleased with it.

There being no further comments or questions, it was the consensus of the Board to place Resolution No. 19 on the Consent Agenda.

**e. Authorization for a Planning Study of West Toll Gate Creek (Resolution No. 20, Series of 2010)**

The City of Aurora and SEMSWA have asked the District to participate in a planning study leading to a major drainageway plan and a FHAD for West Toll Gate Creek. In 2006, the hydrology for the entire Toll Gate Creek watershed was updated in a study sponsored by the District and the City of Aurora. This current study will utilize the results of the previous hydrology study to produce a major drainageway plan and FHAD for West Toll Gate Creek.

The local sponsors need to have a master plan in place so that they can begin planning capital improvements such as channel stabilization, roadway crossings, and stormwater detention ponds. This study will enable the local sponsors to hold developers responsible for the development share of coordinated improvements that will reduce flooding, improve drainage, and enhance stormwater quality.

The total master planning costs are projected to be \$200,000 with the local sponsors contributing \$100,000 and the Board is asked to authorize the expenditure of the District's share not to exceed \$100,000 plus interest earned in the project's trust and agency account.

There being no further comments or questions, it was the consensus of the Board to place Resolution No. 20 on the Consent Agenda.

**f. Authorization to Participate in Drainage and Flood Control Improvements for a Recreation/Maintenance Access Bridge on Marcy Gulch in Douglas County (Resolution No. 21, Series of 2010)**

This is a joint project with Douglas County, City of Littleton, Centennial Water and Sanitation District, Colorado Water Conservation Board, Colorado State Parks, South

Suburban Parks and Recreation, Highlands Ranch Metropolitan District, and the U.S. Army Corps of Engineers.

The listed parties desire to design and construct improvements along Marcy Gulch in accordance with the "Master Plan of Drainage, for Marcy Gulch" dated 1985. The project includes constructing a recreation/maintenance access bridge on Marcy Gulch, grade control and bank protection.

The US COE/Colorado State Parks already hold the necessary easements and right-of-way where the project will be carried out. The District is administering the design with Muller Engineering Company. The District and the listed parties have identified \$300,000 in total project costs for the design and construction with the District's participation being \$150,000 in 2010 funds. Construction is anticipated in 2011.

Resolution No. 21 authorizes \$150,000 of District funds from the Special Revenue Fund – South Platte River to at least be matched by listed parties for the design 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. 21 on the Consent Agenda.

**6. Vote on Approval of the Consent Agenda**

**It was the consensus of the Board that Resolutions No. 17, 18, 19, 20, and 21, Series of 2010, and Cash Disbursements for March and April 2010 be placed on the Consent Agenda. Mr. Hoffmaster moved to adopt the Consent Agenda. Upon a roll call vote the motion was passed unanimously.**

**7. Reports/Discussion**

**a. Executive Director's Report**

The Executive Director's Monthly Report to the Board was distributed to the Board Members. Mr. Hindman gave a brief summary of his report.

**b. Holly and Englewood Dams Property Transfer to SEMSWA**

Mr. Hindman explained that Englewood Dam and Holly Dam are situated in Arapahoe County at approximately the intersection of Holly Street and Arapahoe Road. Holly Dam was built and Englewood Dam was reconstructed in the mid 1970's by the District, in conjunction with Arapahoe County and the City of Englewood. At the time, before development occurred around the dams, there was not an obvious agency that had the capability of taking ownership of the dams. Therefore, the District took ownership with the intent of transferring that ownership in the future to some other local government.

The Southeast Metro Storm Water Authority (SEMSWA) now exists which does have the capability of ownership. Negotiations are proceeding along those lines to transfer the District's ownership to SEMSWA. The District would remain the entity to perform routine maintenance on the dams. Since SEMSWA's and the District's legal counsel are both Edward Krisor, each of us have retained separate non-bias attorneys to represent our interests in the transfer of the property. The District has retained John Hays. No objections from the Board were voiced, therefore negotiations will continue.

**c. Westerly Creek and Kelly Road Dams Sponsorship**

Mr. Hindman explained that both Westerly and Kelly Road Dam's are located on the Lowry Redevelopment Authority (LRA) property in the City and County of Denver. Westerly Dam was constructed in the early 1990's by the Corps of Engineers and the District. Kelly Road Dam was constructed in the 1940's by the Corps of Engineers and the City of Aurora. The LRA is dissolving soon because they are almost fully developed. Future ownership of the dams is in question. In 1999, the Board passed a resolution allowing the Executive Director to enter into an agreement with the LRA to accept ownership of both dams. However, it also stated that acceptance of the dams is contingent upon environmental issues being resolved or adequately provided for by the U.S. Air Force and the LRA. After investigation, it was discovered that the US Air Force

is ultimately responsible for any environmental cleanup but that agreement was signed by them and Denver, Aurora, and LRA. The District was not a party to that agreement therefore any future environmental issues would not be able to be easily pursued by the District. Therefore, the District now does not wish to become owners of the dams and desire that the dams become Denver's property. However, the District would still remain the sponsor of Westerly Dam and would also take on the sponsorship of Kelly Road Dam which currently resides with the City of Aurora. The sponsor of the dams is required to meet with the Corps of Engineers once a year to inspect the dams and take any remedial action required to keep the dams in a fully functional manner as they were designed.

Questions were raised regarding failure of a dam and the District's liability; whether the District has police authority; and if the agreement for authority will spell out designated responsibility. Mr. Hindman responded that those are topics to be negotiated. An emergency action plan does exist for Holly and Westerly and it does spell out responsibility.

No objections from the Board were voiced, therefore the course of action described above will continue.

**8. Other Business**

There was no other business to discuss.

**9. New Business**

**Colorado Water Conservation Board Draft Regulations**

Mr. Hindman informed the Board that the Colorado Water Conservation Board (CWCB) has published new draft regulations that many local governments are taking issue with, specifically as they pertain to "critical facilities". Mr. Hindman indicated the District has minimum floodplain management criteria, passed by the Board in the 1970's, which local governments within the District boundaries should follow. The critical facilities being out of the 500-yr flood zone that the State is proposing goes beyond those criteria. If some local government, or other governmental agency like the State, wants to be more restrictive than the District's criteria, we will not oppose it. However at the same time the District won't actively support requesting that local governments within the District be required to follow them. We will closely monitor the draft regulations and assist local governments in interpreting them.

**10. Announcements**

Chairperson McNally reminded the Board that the next scheduled meeting would be held on Thursday, May 20, 2010.

**12. Adjournment**

Chairperson McNally adjourned the meeting at 2:10 p.m.