

MINUTES OF THE AUGUST 18, 2011 REGULAR MEETING OF THE PUEBLO CONSERVANCY DISTRICT

Directors Present: Sandstrom, Barela, Farley

Also Present: Administrator Rick Kidd, Councilor Don Banner

Guests: Pat Coffee, Engineer for Pueblo County Department of Public Works; Dennis Maroney, Drainage Engineer Consultant to the City of Pueblo; Daryl Wood, Engineer of the City of Pueblo Storm Water Enterprise; Dawn Gladwell, Mapping Project Manager for FEMA; Thuy Patton, Floodplain Mapping Coordinator for the Colorado Water Conservation Board; Chris Pauley, Senior Project Manager for Anderson Consulting Engineers; and Ryan Carroll, Project Manager for Michael Baker Jr, Inc.

Sandstrom, Farley, Barela, Banner, and Kidd met at the School District 60 Dutch Clark Stadium at 7:00 am and then ferried to the Moffat Street Parking Lot to begin the walk along the Arkansas River from the Santa Fe Avenue bridge to Dutch Clark Stadium. The following normal maintenance items of work noted to be done are: 1) Removal of a dead tree at the Moffat Street Parking Lot, 2) Notify landowners on the east side of Moffat that the District documentation shows that it has ownership of property across the alley east of them and request them to either provide their ownership documentation of these properties or else to vacate them, 3) Clean and trim up willows and remove elm trees along the bike path, 4) Remove tree that is establishing at the pier of the Main Street Bridge, 5) Observed the condition of the grouted sandstone block area that is a part of the long term plan for maintenance/repair, 6) Talked about the crack sealing of the concrete sections surfacing the levee that is a part of the long term plan for maintenance/repair, 7) Remove dead or nearly dead trees along the bluff, and 8) Remove dead trees that are out in the River. The walk ended at approximately 8:20 am for the regular Board meeting at 9:00 am at the Heritage Center.

With a quorum present, the Pueblo Conservancy District regular board meeting was called to order at 9:00 am. The guests noted above were in attendance for this meeting.

It was noted that the postings of the meeting notice and agenda were made at the Interim City Hall, the Heritage Center, the Thatcher and the County Courthouse.

Minutes:

The minutes of the July 21, 2011 Regular Meeting were reviewed. Farley moved to approve the minutes with a pen-in-ink change noting that the Board was to meet at the Dutch Clark Stadium and then proceed to the Moffat Street Parking Lot to begin the maintenance walk. Motion passed.

Treasurer's Report:

The accountant's report July was reviewed and the current bills discussed. Sandstrom reported that the Department of Corrections had completed the tree clearing below Aberdeen Bluffs and Sharmar Village. The residents above have expressed appreciation for this work. The bill from Corrections is \$6150. Farley moved to receive and file the accountant's report and pay the bills. Motion passed.

August 18, 2011 Minutes, Page 2 of 4

Bills – The following bills were posted for review and approval:

\$ 300.00	MBD&G, Accountant fees
\$ 400.00	Don Banner, Attorney fees
\$ 500.00	Kidd Engineering, Administrator/Engineer fees
\$ 94.35	Sandstrom, Director's Fee
\$ 56.61	Farley, Director's Fee
\$ 56.61	Barela, Director's Fee
\$ 615.00	Chem-Way Lawn Care, Levee Weed Control
\$ 6,150.00	Colorado Department of Corrections, Tree and Brush Removal

Wildhorse Creek/Arkansas River Flood Mapping:

Gladwell, Carroll, Pauley, and Patton presented an update to the flood plain mapping status. Their last presentation to the Board was on January 17, 2007. The minutes of that meeting show that after FEMA determined flood level elevations and levee sections probably acting as levee structures that they would report back to the District. FEMA worked through accepted hydrology and hydraulics and agreed to Arkansas River flood flows with the City in March 2010. The flood flows for Fountain Creek were agreed to in December 2010. Anderson Consulting Engineers took the agreed to flood flows and determined 100-year flood elevations by routing the flows down the River systems. They provided drawings showing the flood elevations in Wildhorse Creek and the Arkansas River. They also presented mapping indicating areas of the City that could be impacted by a 100-year event if the levees did not exist. This mapping is based on methodology used by FEMA for a number of years. The methodologies employed were questioned by Congress because they gave no credit for structures that were in place, but possibly not in full compliance with levee design and construction criteria. Since March 2011 FEMA has been working on changing their criteria for analysis allowing for consideration of structures that do exist and look more precisely at how these structures would impact flooding. FEMA anticipates that the new guidance on evaluation criteria will be out of public review in September or October 2011. The guidelines are to look at "real" risk for overtopping or breach. When asked about roadways and railroad beds FEMA responded that their impact will not be considered. The new concepts could allow for engineering judgment and risk management with respect to existing flood control structures. There will be a 30-day public review period before the guidelines are published. A decision tree for the evaluation process has not been developed yet.

FEMA has decided that the 100-year flood flow rates down Wildhorse Creek is 11,000 cfs, for Goodnight Arroyo it is 5-6,000 cfs, and since Pueblo Dam construction in 1972 the Arkansas River contributes 6,000 cfs above the confluence with Wildhorse Creek. By way of accepted routing procedures, they have determined that flood flows at the upper reach of the River are approximately 16,000 cfs and this drops to 7,000 cfs in the lower reaches. Asked about this reduction they responded that the drop-off is due to the affects of spread, timing, and attenuation. Their preliminary assessment, based upon topographical mapping is that there is about 550 lineal feet of the Wildhorse Creek Levee and approximately 4,700 lineal feet (two reaches combined) of the Arkansas River Levee that are actually acting as levees. Areas acting as levees are defined as areas where the flood water elevation is higher than the land elevations on the opposite side of the levee. This assessment of areas was determined based upon topographic mapping, not on actual land surveys. Land surveys need to be conducted to determine the levee sections that are acting to control flooding from the 100-year storm event.

Gladwell is going to go back to FEMA and discuss the scenario of the Arkansas River Levee being a large embankment with minimal head against it. This may put it into a class of a non-levee embankment that is adequately serving to control flooding without levee certification. Information that could impact flood levels and mapping is to be provided by either the City or

August 18, 2011 Minutes, Page 3 of 4

the District to Thuy Patton, with the Colorado Water Conservation Board. The City and the District will work to copy the other entity on any information sent to or received from FEMA, so that all parties will be fully informed.

President's Report:

HARP has asked if we can do a flat budget for them. This would leave the IGA amount at \$50,000 and \$10,000 for cleaning maintenance to help protect Thomas Phelps Creek and Lake Runyon.

DOW Lake Runyon Lease- Banner has sent a letter to the Colorado Division of Wildlife with a lease proposal. He has not yet received a response.

Black Hills Energy is going to be closing their power plant at the Riverwalk. The District needs to confirm ownership and easements in the area of Upper Lake Elizabeth. HARP would like to do some enhancement in this area.

Lincoln Renewable Energy is looking at placing a solar farm east of Boone and north of Highway 96. They have requested a letter stating that their proposed site is outside of the existing District boundary. The letter was approved by consensus.

Administrator's Report:

The Army Corps of Engineer's conducted their annual inspection of the Arkansas River Levee from below the Santa Fe bridge to the end along Lake Runyon. They were happy with the improvements made since the 2010 inspection. There are some areas of woody vegetation that has been killed that they would like clipped next to the ground. Some vegetation needs to have continued chemical treatment to get it killed. Actual locations of a couple trees need to be checked. If they are less than 15-ft from the toe of the Levee then they must be removed. The trees in the property fence line along the upper reach do not have to be removed even though they are within the 15-ft criteria. They would like for repairs to be done and barriers placed to control pedestrian and bicycle traffic from the Phelps Creek walkway over the top of the Levee. They would also like some repair of the track hoe tracks from previous tree removal work. They would like all woody vegetation cut close to the ground so that there will not be rodent nesting areas. Weeds and grass should be cut or controlled to also limit rodent burrowing or nesting.

Sandstrom is going to talk to the DOC about a long term agreement for tree and brush removal work. They had indicated to him that they could lower our costs if we agreed to a certain number of days of work per year and had projects in place so that they could schedule at their convenience. Some of the work that needs to be done along the Levee in the Lake Runyon area could fit in with services that the DOC crew can provide.

Organization and Planning:

No discussions at this time.

Old Business:

Pueblo Non-payment of Assessments – It was decided to hold off on any more action until we hear more from the City. City Attorney Tom Florczak had a conversation with Banner and we need to know more about the City's proposals.

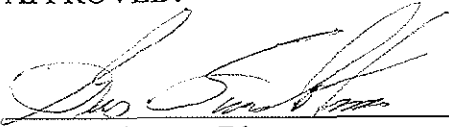
New Business:

None.

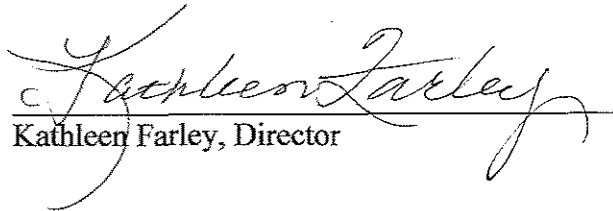
There being no further business to come before the Board, the business meeting was adjourned at 10:43 am. The next regular meeting date will be September 1, 2011.

August 18, 2011 Minutes, Page 4 of 4

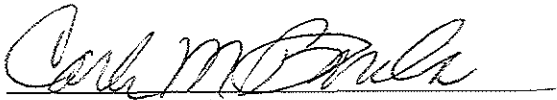
APPROVED:



Gus Sandstrom, Director



Kathleen Farley, Director



Carla Barela, Director

THE PUEBLO CONSERVANCY DISTRICT

NOTICE OF
REGULAR MEETING

DATE: AUGUST 18, 2011 (THURSDAY) AT 7:00 A.M. Board Walking Levee
from Dutch Clark. **MEETING SESSION at 9:00 A.M.**
PLACE: SOUTHEASTERN COLORADO HERITAGE CENTER,
201 WEST B STREET, PUEBLO, COLORADO

AGENDA

THE BOARD WILL BE MEETING AT THE MOFFIT STREET PARKING LOT AT
7:00 AM FOR A MAINTENANCE WALK OF THE RIVER FROM SANTA FE TO
DUTCH CLARK STADIUM. IT IS ANTICIPATED THAT THE BOARD WILL
THEN RECONVENE FOR THE REGULAR MEETING, AT THE HERITAGE
CENTER, AT APPROXIMATELY 8:30 TO 9:00 AM.

1. ROLL CALL
2. APPROVAL OF THE JULY 21, 2011 MINUTES
3. TREASURER'S REPORT
 - a. ACCOUNTANT'S COMPILATION REPORT
 - b. PAYMENT OF BILLS
4. FEMA - LEVEE CERTIFICATION PRESENTATION
6. PRESIDENT'S REPORT
7. ADMINISTRATOR'S REPORT
8. PROJECT PLANNING
9. OLD BUSINESS
 - a. Response concerning action on City of Pueblo non-payment of Maintenance Fund Assessment
 - b. DOW Lake Runyon Lease Agreement
10. NEW BUSINESS
11. OTHER BUSINESS AS MAY BE BROUGHT BEFORE THE BOARD
12. ADJOURNMENT

2011 MEETING DATES:

Regular meetings will generally be held on the third Thursdays of the month.
Adjustments will be made as required. Special meetings may be scheduled as needed.
Please contact the District's Administrator at 719-544-5239 to confirm dates and
locations of all meetings.

September 1*
October 20

November 17

December 15

Arkansas Basin Roundtable
August 10, 2011
Meeting Notes

Roundtable Business

Chairman Barber called the meeting to order at 12:30 pm. Members and visitors introduced themselves. Twenty six (26) members were present. There are 38 active roundtable members at this time - 18 is a quorum.

June Minutes

A motion was made and seconded to approve the minutes of the June meeting. The motion passed unanimously. July's meeting was cancelled.

Review agenda

Public comment

Subcommittee Report

Non-Consumptive Needs Committee – SeEtta Moss

A CD of our Basin's study of Non-Consumptive Needs is available today.

IBCC Report – Jeris Danielson, Jay Winner

Jeris-The IBCC met June 23rd, and will meet again in September, in Grand Junction. At June's meeting, each basin's Needs Assessment Report was reviewed. They talked a lot about portfolio development and the Colorado River Study.

Jay attended a Public Education Public Outreach (PEPO) Sub-Committee meeting whose goal was figuring out the role of PEPO. They are deciding whether their role is to push the development of the '3 legs of the stool'. They also discussed how to better educate the public, not just roundtable members.

Eric Hecox – Back in the spring, Director Stulp put out a roadmap of how to proceed. He's been working on that since. The roadmap gave directions and set three goals for the Roundtables:

1. Complete the Needs Assessment Reports
2. Engage in the statewide discussion of how we are going to meet the state's long term water needs.
3. Think about specific projects and methods that need to move forward in order to meet our roundtable's consumptive and non-consumptive needs.

The Portfolio Tool is to be used in conjunction with the above-listed items to assist in meeting our needs.

Pat Edelman from USGS is retiring. The Roundtable gave him a round of applause, and Gary asked Pat to come back in September for an official thank you.

Lissa Pinello is moving to Wyoming, and this will be her last Roundtable meeting. Gary thanked her for her dedication and contributions to the roundtable. Lissa's position was that of At-Large Small Municipal Provider Rep.

Annual Meeting in October

There are two types of roundtable members, members appointed by various elected or appointed bodies, and At-Large members that are appointed by the Roundtable. There are now two At-Large spots open. Gary is putting his hat in the ring for one of the At-Large spots, because he will have to let go of being the El Paso County Rep. The RT is calling for interested parties to apply for the At-Large openings. The decision will be made by a regular majority.

Consensus was reached to make these appointments in September.

From bylaws:

"Ten at-large members appointed by the Roundtable members in consultation with the Director of Compact Negotiations five of whom shall be own a water right pursuant to Article II, Section 12 and these Bylaws, including:

1) One representative of agricultural interests; 2) One representative of a regionally, state-wide or nationally recognized environmental conservation organization that has operated in Colorado for at least five (5) years; 3) One representative of industrial interests; 4) One representative of a local domestic water provider, and; 5) One representative of recreational interests."

Ag Gap Subcommittee

The Executive Committee discussed moving this subject forward by forming a subcommittee and doing something similar to what we've done with the M&I gap. The goal would be an assessment that identifies the gap in Ag. We could possibly engage the assistance of the Colorado Water Institute, and begin by defining the question that we're trying to answer, with the idea that it's tied to agricultural productivity.

This opportunity recognizes that an Ag gap exists. It will attempt to identify how important this is in the plan out to 2050. Per Todd, SWSI 2016 is also interested in answering this question.

The RT took a break, and interested members talked to Reeves Brown to volunteer to be involved with this subcommittee.

Basin Needs Report: IPP's & Storage

Gary called for a discussion regarding possible presentations regarding IPP's and Storage options at the Roundtable, to increase understanding of those projects, determine how the Roundtable might be able to assist in furthering these projects, and be better able to use the Portfolio Tool.

IPP's

- Arkansas Valley Conduit – presentation moved to September
- Southern Delivery System
- Rotating Ag Fallowing
- Ability to move water from downstream back upstream

Storage Alternatives

- Alluvial Aquifer Storage
- Preferred Options Storage Plan – PSOP
- Upstream storage necessitates downstream storage for exchanges
- Porosity Storage
- Mitigation involved with increasing reservoir capacity (i.e. Turquoise Lake campgrounds)
- Trinidad Reservoir has 37,000 af of capacity available that goes unused each year. Would like to lease that storage, or at least become an augmentation source for coal bed methane.
- Others?

WSRA Applications

YOU TOO CAN BECOME A MEMBER OF THE NEEDS ASSESSMENT COMMITTEE. Please let Gary and/or Jay know if you are interested in participating on this committee.

Basin RT Project Exploration Committee: Flaming Gorge

The first application explored whether a task force should be formed to look at a possible Flaming Gorge project. The outcome of that grant study was that yes, a task force should be formed. This grant application forms that task force.

\$150,000 from statewide funds, \$10,000 from Arkansas BRT funds, \$30,000 from Metro BRT funds, and Platte BRT funds.

SeEtta: There was some concern that the Environmental Committee was opposed to this grant application. SeEtta went on the record stating her support of the grant app.

Gary Barber: The reason why he became involved was so that we have a voice in the conversation, and can ensure that our water rights are considered before a project like this is implemented.

Discussion ensued, and is summarized here:

There are currently two project partners. This puts us at the table with those partners.

When we prioritized projects a few months ago, this project was ranked near the top.

One of the tenets of the Ag Transfer Committee is to get all our cards at the table at the beginning.

How would this project potentially affect water rights and compact calls?

Colorado needs to develop a process of how to look at new projects so that all stakeholders are at the table. How can private projects be built together?

This study doesn't decide whether or not we support the project.

Gary Barber asked for consensus. The application passed by consensus.

Presentation and Discussion

Portfolio and Trade-Off Tool and Developing a Statewide Strategy – Eric Hecox and Todd Doherty Allowing roundtables to define their vision for how to best meet the state's M&I Needs

1. Define demand levels in 2050
Can include (or not): low, mid or high demands; oil shale; replacement of South Metro & Northern El Paso nontributary groundwater; additional supply/demand factor to account for concerns like climate change
2. Define IPP success levels by basin and by project/type
3. Define conservation level and how much can be applied to the gap.
4. Define amount of new supply and Ag transfer water for both West and East slopes.
5. Define percent of water that can be reused (if desired)

Outputs: Statewide, regional, and basin specific portfolios; Data table; Statewide, regional, and basin specific portfolios by water source

Trade-Offs: Amount of irrigated acres dried up; Cost of portfolio compared to status quo; Amount of irrigated Ag acres needed to go into rotational fallowing program; Nonconsumptive benchmarks on West Slope; Accretion/depletion of SP flows.

Eric and Todd walked the roundtable through the worksheet as it appears online.

M&I Needs are already entered in the system. A portfolio of IPPs has already been entered for each Basin Roundtable, but the User can go in and turn IPPs on or off, depending on whether User thinks they will actually be implemented.

The User defines the percent of success expected in the following categories: Ag Transfer, Reuse, Existing Supplies, In-Basin Project, Transbasin, and In-Basin FIRMING.

The User defines the level of conservation that their Basin is expected to achieve (low, medium or high) – a worksheet is available to explain the differences in levels of conservation.

The User defines the amount of new water they think is available from the Colorado River.

The User may also define a percentage of Ag Transfers (or not).

Eric and Todd encouraged Roundtable members to play with the tool, be creative and be thoughtful. The tool may be found at <http://cwcb.state.co.us/technical-resources/portfolio-tool/Pages/main.aspx>

Review of the next meeting's agenda

Because of numerous conflicts with next month's date, the next RT meeting has been moved to September 7th.

The meeting was adjourned at 3:00 p.m.

Respectfully submitted,
Jay Winner

MINUTES OF THE JULY 21, 2011
REGULAR MEETING
OF THE PUEBLO CONSERVANCY DISTRICT

Directors Present: Sandstrom, Barela, Farley

Also Present: Administrator Rick Kidd, Councilor Don Banner

Guests: Jeremiah Johnson, Colorado Division of Wildlife

With a quorum present, the Pueblo Conservancy District board meeting was called to order at 8:05 am.

Minutes -- The minutes of the June 16, 2011 Regular Meeting were reviewed. Barela moved to approve the minutes as posted. Motion passed.

Kidd reported that he made the postings at the Interim City Hall on the 18th and the Heritage Center on the 19th. Banner reported that meeting notices had been posted at the Thatcher Building on the 18th. Kidd emailed the notice with agenda to be posted at the County Courthouse on Friday.

Treasurer's Report:

Sandstrom said the Larry Daveline is to provide the District with a paper about the new requirements for governmental accounting next month.

The accountant's report June was reviewed and the current bills discussed. Farley moved to receive and file the accountant's reports and pay the bills. Motion passed.

Bills -- The following bills were posted for review and approval:

\$ 400.00	Black Hills Energy, Lake Runyon Electrical
\$ 300.00	MBD&G, Accountant fees
\$ 400.00	Don Banner, Attorney fees
\$ 500.00	Kidd Engineering, Administrator/Engineer fees
\$ 94.35	Sandstrom, Director's Fee
\$ 56.61	Farley, Director's Fee
\$ 56.61	Barela, Director's Fee
\$ 4,000.00	Colorado Vegetation Management, Arkansas Levee Weed Control Agreement with Pueblo County

President's Report:

Sandstrom was contacted by Glen Ballantine about a corporation he represents who is interested in tree planting and cleanup projects. He is to get more information to Sandstrom.

Runyon - Sandstrom met with the Sheriff and City Police about their patrols of Lake Runyon. The City Police said that they have been in four times to clean out transients. They are trying to do a patrol loop twice per night and the Sheriff once per night. The Chief has asked if the District could dedicate some funding to support a three time per night patrol with spotlighting of certain areas. The Chief is to get back with more details on this request. Johnson said that it is costing the Division of Wildlife \$5 - \$7,000 per year to maintain the toilet. This expense is for pumping and painting over graffiti. Spring and fall are the worst times. He said that the problem is that

July 21, 2011 Minutes, Page 2 of 3

this is basically a city park area with DOW fish in it and that the DOW has a problem funding the maintenance required. They would like to go to only a fish stocking agreement.

Banner suggested a posting that the area will be closed in 12 months unless users start cleaning and self policing the area. Sandstrom suggested that the District look to see if they can help the DOW support the maintenance. Another suggestion presented is to have a public meeting to discuss the potential for closure. Banner is to draft a concept for changes in the contract with the DOW. These changes may include reducing the term from 10 to 3 years and that instead of the DOW paying the District an annual lease that they put that money into a budget for maintenance of the area. Banner will send a letter to DOW Real Estate concerning the lease extension.

City of Pueblo - Sandstrom said that he had not heard anything from the City of Pueblo about payment of their Maintenance Fund Assessment. Kidd said that he had not received any letters and that the City's payment was not included in the last check from the County Treasurer.

FEMA - Sandstrom was contacted by Dawn Jones and FEMA would like approximately 45 minutes at the August 18 meeting to discuss the FEMA findings and draft report.

Administrator's Report:

Kidd reported that he had been contracted by Sun Construction asking if the District would be interested in selling some of the rock that is stockpiled at the Pearl Street Parking Lot. Kidd stated that since the City proceeded with their project along the kayak course it will now be more expensive for the District to get in and do additional revetment and improvements along the toe of the Levee. This work will probably not be possible this fall. After discussion it was agreed that Kidd should talk to Sun Construction and solicit a proposal for sale of some of this material, but that the price needed to be at least what the District paid for the material.

Organization and Planning -
No discussions at this time.

Old Business -

Tree Removal - Sandstrom reported that he had met, on site below Aberdeen Bluffs and Sharmar Village, with the Department of Corrections concerning a contract for tree removal. Their proposal is approximately \$6,150 for removal of trees and debris in this area. It was agreed to have the DOC proceed with the tree removal and clearing.

New Business -

City of Pueblo Non-Payment of Assessment:

Sandstrom asked Banner if he had researched the options and had a recommendation. Sandstrom specifically asked about a "mandamus" order. Banner informed the Board that under statute the District must adopt a resolution for mandamus to enforce payment. The proposed order is stated as follows:

The Board of Directors of the Pueblo Conservancy District, at its meeting on July 21, 2011, does hereby order that the City of Pueblo comply with the Requirements of C.R.S. §37-1-101, et. seq. and pay assessments assessed for the City of Pueblo properties for the years 2008, 2009, and 2010, each in the amount of \$150,000 or more, together with penalties and interest.

Farley moved that the District adopt a resolution for the order as stated above and direct the Attorney to prepare a transmittal of said order to the City Manager, City Clerk, President of the City Council, and the City Attorney. Motion passed.

RECORD OF PROCEEDINGS

July 21, 2011 Minutes, Page 3 of 3

Maintenance Walk from Santa Fe to Dutch Clark Stadium – It was agreed that we will meet at the Moffit Street Parking Lot and 7:00 am before the August 18 Board meeting. Don Banner will use his car to shuffle attendees back to Moffit Street. The Regular Meeting of the Board will convene at 9:00 am at the Southeastern Colorado Heritage Center.

There being no further business to come before the Board, the business meeting was adjourned at 9:15 am. The next regular meeting date will be August 18, 2011.

APPROVED:

Gus Sandstrom, Director

Kathleen Farley, Director

Carla Barela, Director



McPherson,
Breyfogle,
Daveline &
Goodrich, PC
Certified Public Accountants

503 N Main, Suite 740
Pueblo, CO 81003
Phone (719) 543-0516
Fax (719) 544-2849

INDEPENDENT ACCOUNTANTS' COMPILATION REPORT

Board of Directors
The Pueblo Conservancy District
Pueblo, Colorado

We have compiled the accompanying balance sheets – general fund only – of the Pueblo Conservancy District as of July 31, 2011 and December 31, 2010, and the related comparative statements of revenue and expenditures – actual and budget – general fund for the seven months ended July 31, 2011 and the year ended December 31, 2010. We have not audited or reviewed the accompanying financial statements and, accordingly, do not express an opinion or provide any assurance about whether the financial statements are in accordance with accounting principles generally accepted in the United States of America.

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America and for designing, implementing, and maintaining internal control relevant to the preparation and fair presentation of the financial statements.

Our responsibility is to conduct the compilation in accordance with Statements on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants. The objective of a compilation is to assist management in presenting financial information in the form of financial statements without undertaking to obtain or provide any assurance that there are no material modifications that should be made to the financial statements.

Management has elected to omit substantially all of the disclosures required by accounting principles generally accepted in the United States of America. If the omitted disclosures were included in the financial statements, they might influence the user's conclusions about the District's financial position and results of operations. Accordingly, these financial statements are not designed for those who are not informed about such matters.

McPherson, Breyfogle, Daveline & Goodrich, PC

August 15, 2011

PUEBLO CONSERVANCY DISTRICT
BALANCE SHEET - GENERAL FUND ONLY
JULY 31, 2011 AND DECEMBER 31, 2010

	<u>7/31/2011</u>	<u>12/31/2010</u>
ASSETS		
VECTRA BANK CHECKING	\$ 150,505	\$ 78,575
VECTRA BANK MONEY MARKET	11,892	11,889
BROKERAGE MONEY MARKET ACCOUNTS	38,681	111,913
COLOTRUST INVESTMENT	25,000	25,000
WELLS FARGO INVESTMENT	557,833	591,717
STIFEL NICOLAUS INVESTMENT	281,624	309,261
ACCRUED INTEREST	<u>-</u>	<u>3,669</u>
 TOTAL ASSETS	 <u>\$ 1,065,535</u>	 <u>\$ 1,132,024</u>
 LIABILITIES AND FUND EQUITY		
ACCOUNTS PAYABLE	\$ -	\$ 800
PAYROLL TAXES PAYABLE	87	395
DEFERRED INCOME	<u>2,083</u>	<u>1,042</u>
 TOTAL LIABILITIES	 <u>2,170</u>	 <u>2,237</u>
RESERVE FOR EMERGENCIES	7,000	6,000
DESIGNATED FOR SUBSEQUENT YEAR'S EXPENDITURES	92,330	-
UNDESIGNATED	<u>964,035</u>	<u>1,123,787</u>
	-	
 TOTAL FUND EQUITY	 <u>1,063,365</u>	 <u>1,129,787</u>
 TOTAL LIABILITIES AND FUND EQUITY	 <u>\$ 1,065,535</u>	 <u>\$ 1,132,024</u>

SEE ACCOUNTANTS' COMPILATION REPORT

PUEBLO CONSERVANCY DISTRICT
COMPARATIVE STATEMENT OF REVENUE AND EXPENDITURES -
ACTUAL AND BUDGET - GENERAL FUND
FOR THE SEVEN MONTHS ENDED JULY 31, 2011
AND THE TWELVE MONTHS ENDED DECEMBER 31, 2010

	ACTUAL				
	CURRENT MONTH	YEAR TO DATE	2011 BUDGET	UNUSED BUDGET	2010 ACTUAL
REVENUES					
INTEREST INCOME					
COLOTRUST	\$ 2	\$ 21	\$ -	\$ -	\$ 50
MONEY MARKET ACCOUNTS	1	16	-	-	38
WELLS FARGO	1,583	12,733	-	-	26,656
STIFEL NICOLAUS	1,268	7,219	-	-	18,258
UNREALIZED GAINS (LOSSES)	6,571	15,234	-	-	2,674
TOTAL INTEREST INCOME	9,425	35,223	40,000	4,777	47,676
MAINTENANCE FUND ASSESSMENT	12,419	171,689	332,000	160,311	169,415
LEASE PAYMENTS	208	1,458	2,500	1,042	2,500
OTHER INCOME	-	15,132	-	(15,132)	-
TOTAL REVENUES	\$ 22,052	\$ 223,502	\$ 374,500	\$ 150,998	\$ 219,591
EXPENDITURES					
80 LEGAL FEES	\$ 400	\$ 6,797	\$ 4,800	\$ (1,997)	\$ 4,800
81 DIRECTORS FEES	220	1,540	3,000	1,460	2,580
82 FICA TAXES	-	-	230	230	197
83 ENGINEER/ADMINISTRATIVE	500	3,188	6,000	2,812	6,000
90 AUDIT & BOOKKEEPING	300	1,800	3,900	2,100	3,600
92 INSURANCE/BONDS	-	3,056	3,200	144	817
96 OFFICE EXPENSE	-	691	500	(191)	228
97 OFFICE RENT	-	840	1,000	160	940
100 PROFESSIONAL FEES	-	3,790	10,000	6,210	6,241
APPRaisal	-	-	3,000	3,000	-
103 TRAVEL	-	-	1,200	1,200	-
105 REPAIRS & MAINTENANCE	-	12,596	50,000	37,404	30,508
ARKANSAS RIVER LEVEE REPAIRS	4,400	194,174	220,000	25,826	-
LEVEE CERTIFICATION-PRELIM	-	-	50,000	-	-
108 CONTINGENCIES	-	-	5,000	5,000	-
109 EMERGENCY REPAIR	-	-	15,000	15,000	-
110 CAPITAL IMPROVEMENTS	-	-	25,000	25,000	23,265
111 PLANNING & DEVELOPMENT	-	1,453	5,000	3,547	-
112 HARP - O & M / HARP - IGA CNTRB	-	60,000	60,000	-	61,000
113 SALES TAX	-	-	-	-	-
TOTAL EXPENDITURES	5,820	289,925	466,830	176,905	140,176
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	\$ 16,232	\$ (66,423)	\$ (92,330)	\$ (25,907)	\$ 79,415

SEE ACCOUNTANTS' COMPILATION REPORT

PUEBLO CONSERVANCY DISTRICT
INVESTMENTS
7/31/2011

8/15/2011 5:05 PM

<u>BROKER</u>	<u>DESCRIPTION</u>	<u>MATURITY DATE</u>	<u>RATE</u>	<u>PAR VALUE</u>	<u>BALANCE 12/31/2010</u>	<u>ADDITIONS</u>	<u>MKT VALUE CHANGE</u>	<u>REDEMPTION SALES</u>	<u>BALANCE 7/31/2011</u>	<u>INTEREST RECEIVED 7/31/2011</u>
<u>CASH ACCOUNTS</u>										
VECTRA BANK	Money Market Account				11,888.97	3.41	-	-	11,892.38	3.41
STIFEL NICOLAUS	Money Market Account				53,074.99	30,180.81	-	70,000.00	13,255.80	10.70
WELLS FARGO	Cash Sweep Account				58,838.29	46,586.12	-	80,000.00	25,424.41	2.08
TOTAL CASH ACCOUNTS WITH BROKERS					123,802.25	76,770.34	-	150,000.00	50,572.59	16.19
<u>INVESTMENTS</u>										
COLOTRUST	Acct. 7081 - PLUS		6.240%		25,000.00		-	-	25,000.00	25.48
TOTAL COLOTRUST					25,000.00	-	-	-	25,000.00	25.48
WELLS FARGO	FHLMC 2646 LL RETAIL LOTTERY	8/15/2033	5.000%	78,000.00	17,075.14	-	(63.08)	11,000.00	6,012.06	237.50
	FHLMC 2640 LL RETAIL LOTTERY	7/15/2033	5.000%	70,000.00	999.20	-	0.80	1,000.00	-	4.17
	FNMA 06-107 PD REMIC MULTICLASS CMO	6/25/2035	5.000%	78,000.00	82,453.80	-	3,135.60	-	85,589.40	2,275.00
	GNMA 08-7 PN REMIC MULTICLASS CMO	1/20/2037	4.250%	60,000.00	35,244.10	-	352.21	5,598.04	29,998.27	661.36
	FHLMC 3393 BY REMIC MULTICLASS CPN	11/15/2037	5.500%	94,000.00	100,110.94	-	3,346.40	-	103,457.34	2,584.98
	FNMA 2008-74B REMIC MULTICLASS CMO	9/25/1938	5.000%	50,000.00	57,018.46	-	1,515.27	-	58,533.73	1,700.44
	FHLMC 3626 UA REMIC MULTICLASS CMO	9/15/2039	5.000%	50,000.00	38,791.54	-	(63.95)	3,868.63	34,858.96	903.80
	GNMA 10-62 LA REMIC MULTICLASS CMO	1/20/2040	4.500%	50,000.00	37,891.31	-	(180.70)	11,003.08	26,707.53	622.21
	GNMA 10-85 HQ REMIC MULTICLASS CMO	3/20/2040	5.000%	144,000.00	135,602.69	-	(285.50)	14,114.29	121,202.90	3,156.80
	FNMA 10-141 AL REMIC MULTICLASS CMO	12/25/2040	4.000%	90,000.00	86,529.60	-	4,942.80	-	91,472.40	2,100.00
TOTAL WELLS FARGO					591,716.78	-	12,699.85	46,584.04	557,832.59	14,246.26
STIFEL NICOLAUS	FEDL HOME LN MTG CORP #170217	3/1/2017	8.000%	1,120,000.00	2,365.99	-	(13.68)	282.24	2,070.07	83.43
	GNMA POOL #676875	3/15/2023	6.500%	235,000.00	159,458.15	-	(147.09)	5,323.92	153,987.14	4,702.56
	GNMA POOL #003851	5/20/2036	5.500%	165,000.00	73,014.96	-	1,426.92	9,279.98	65,161.90	1,803.36
	GNMA REMIC SER 2009-79	2/20/2039	5.500%	56,000.00	7,221.81	-	(13.93)	7,207.88	-	106.71
	GNMA REMIC SER 2010-98	7/20/2039	4.000%	70,000.00	67,199.79	-	1,281.61	8,076.09	60,405.31	1,316.65
TOTAL STIFEL NICOLAUS INVESTMENT					309,260.70	-	2,533.83	30,170.11	281,624.42	8,012.71
TOTAL INVESTMENTS					925,977.48	-	15,233.68	76,754.15	864,457.01	22,284.45
TOTAL ALL ACCOUNTS					1,049,779.73	76,770.34	15,233.68	226,754.15	915,029.60	22,300.64

PUEBLO CONSERVANCY DISTRICT

JULY 2011 - AUGUST 2011

RECEIPTS

VENDOR	ITEM	AMOUNT
First Clearing, LLC	Interest Payment	\$ 601.01
First Clearing, LLC	Interest Payment	\$ 707.63
First Clearing, LLC	Interest Payment	\$ 867.92
Stifel Nicolaus	Interest Payment	\$ 1,255.12
Wells Fargo	ColoTrust Dividend	\$ 1.84
Pueblo County	Maint Fund Assessment	\$ 1,276.28
		\$ 4,709.80

DEBITS

VENDOR	ITEM	AMOUNT	CHECK	CODE
Black Hills Energy	Electrical Billing	Pre-paid		105
MBDG, PC	Bookkeeping	\$ 300.00	3842	90
Don Banner - B&B, PC	Attorney Fees	\$ 400.00	3843	80
Kidd Engineering	Engineer/Admin Fees	\$ 500.00	3844	83
Director Sandstrom	Fees	\$ 94.35	3845	81
Director Farley	Fees	\$ 56.61	3846	81
Director Barela	Fees	\$ 56.61	3847	81
Chem-Way	Levee Weed Control	\$ 615.00	3848	105
Colorado DEC	Tree Brush Removal	6150.00	3849	105
		\$ 2,022.57		

Fwd: Levee Data for Aug. 18th Presentation to Board

From: g.sandstrom@comcast.net
To: cortez@mcleodusa.net, kiddecms@earthlink.net, kmfarley47@comcast.net, dbanner@comcast.net
Subject: Fwd: Levee Data for Aug. 18th Presentation to Board
Date: Jul 26, 2011 1:32 PM
Attachments: [Without Levees Letter To FEMA.pdf](#) [Without Levees Response From FEMA.pdf](#) [Treatment of Levees in Flood Risk Studies Fact Sheet.pdf](#) [Levee Approach FAQs.pdf](#)

From: "Dawn Gladwell" <Dawn.Gladwell@fema.gov>
To: "g sandstrom" <g.sandstrom@comcast.net>
Cc: "Ryan Carroll" <RCarroll@mbakercorp.com>, "Thuy Patton" <Thuy.Patton@state.co.us>, "Dawn Gladwell" <Dawn.Gladwell@dhs.gov>, "Mark Kempton" <mkkempton@acewater.com>, cjpaley@acewater.com, dmaroney@pueblo.us, dwood@pueblo.us
Sent: Tuesday, July 26, 2011 12:02:11 PM
Subject: Levee Data for Aug. 18th Presentation to Board

Dear Gus,

Thank you for helping me setup a time to meet with the Pueblo Conservancy District. As part of presenting draft data to you along the Arkansas and Wild Horse Dry Creek levees we would also like to give you some information about a congressional letter that FEMA received in regards to levees and FEMA's planned approach to address that letter. Before giving this data to you we wanted to have a draft floodplain analysis so that a more informed discussion could occur to discuss what options we have moving forward. Below is a summary of what we plan to cover on the 18th. The analysis that will be presented is a draft version of what is referenced below as "without levee" analysis.

FEMA received a letter from Senatorial and Congressional representatives requesting that FEMA discontinue the use of "without levee" analyses when the levee structure does not meet the regulatory requirements for accreditation. FEMA issued a response letter stating that new methodologies for performing "without levee" analysis will be developed to replace the existing methods; both of these letters are attached for your review. I have also attached a "Treatment of Levees in Flood Risk Studies Fact Sheet" and "Levee Approach FAQs", which I hope will be of assistance in answering some of the questions you may have.

The regulatory requirements for FEMA to recognize the flood protection capabilities of levees are found in the Code of Federal Regulations, Title 44, Section 65.10 (44 CFR Section 65.10). Levee certification requirements per Code of Federal Register (CFR) 44 Section 65.10 have not changed. In order for a levee to be shown as providing protection against the 1-percent-annual-chance flood event, the levee must meet the requirements of 44 CFR Section 65.10. If a levee meets the requirements of 44 CFR Section 65.10, the levee will be accredited or provisionally accredited by FEMA. The area landward of the accredited or provisionally accredited levee will be shown as a moderate-risk flood zone (Zone X shaded) on the Flood Insurance Rate Map (FIRM). If a levee does not meet the requirements of 44 CFR Section 65.10, the levee will not be accredited by FEMA. The areas behind the levee will be mapped as a high-risk flood zone (Zone AE or Zone A) on the FIRM.

The current FEMA methodology for performing "without levee" analysis in areas with levees that do not meet

the requirements of 44 CFR Section 65.10, is to compute the 1-percent-annual-chance flood elevations as if the levee did not exist. None of the subject levee is recognized as providing 1-percent-annual-chance flood protection unless there are portions of the levee system that can meet requirements of 44 CFR Section 65.10 independent of the remaining levee system. However, in response to the congressional request, FEMA is working on a new approach for performing "without levee" analysis for areas with levees that do not meet the requirements of 44 CFR 65.10. The details of the new approach are still being finalized so a new method has not been adopted by FEMA.

The options for the Arkansas and Wild Horse Dry Creek Levees are:

- **Levee accredited on the FIRM** – This option is based on the submittal of data and documentation by the levee owner demonstrating full compliance with 44 CFR 65.10. The area landward of the accredited levee is shown as a moderate-risk flood zone (Zone X shaded).
- **Provisionally Accredited Levee (PAL) (for the Arkansas Levee only due to lack of freeboard along the Wild Horse levee)** - A PAL is an option for a levee that FEMA has previously accredited with providing protection on an effective FIRM, and for which FEMA is awaiting data and/or documentation that will demonstrate compliance with the requirements of 44 CFR 65.10. Before FEMA will designate a levee as a PAL, the levee owner and community will need to sign and return an agreement that indicates that documentation required for compliance with 44 CFR 65.10 will be provided within a specified time frame. The area landward of the provisionally accredited levee is shown as a moderate-risk flood zone (Zone X shaded).
- **Levee Not Accredited or De-accredited on the FIRM** – This option will be employed if data and documentation demonstrating full compliance with 44 CFR 65.10 is not submitted and a PAL agreement is not entered into. The area landward of the De-accredited levee is shown as a high-risk flood zone (Zone AE or Zone A) based on the new approach for "without levee" analysis (details being finalized).

We look forward to meeting with the Board on August 18th at 9 am to go over all of this data.

Dawn

Dawn Gladwell, P.E. CFM
FEMA Region VIII
Denver Federal Center, Bldg 710A
P.O. Box 25267
Denver, CO 80225
303.235.4718
303.819.7813 cell
dawn.gladwell@dhs.gov

United States Senate

WASHINGTON, DC 20510

February 3, 2011

The Honorable W. Craig Fugate
Administrator
Federal Emergency Management Agency
500 C Street, Southwest
Washington, D.C. 20472

Dear Administrator Fugate:

We write to urge you to use your current authorities to discontinue the Federal Emergency Management Agency's (FEMA) use of "without levees" analysis to determine new Flood Insurance Rate Maps (FIRMs) in cases where a final determination has not been made and an affected community objects to such analysis in favor of more precise methods of flood modeling. "Without levee" modeling methods assume that a levee or flood control structure that exists in physical reality does not exist for the purposes of modeling, reducing the precision of flood maps and eroding public confidence in the mapping process itself.

We value the efforts of the National Flood Insurance Program to accurately reflect flood risk to the American public, but we also understand the negative impact the issuance of insufficiently accurate or insufficiently precise maps can have on communities at a time of economic uncertainty across our country. In investigating the methods and processes FEMA uses to make such flood hazard determinations, we have found that FEMA knowingly assumes that certain flood control structures that do exist in physical reality do not exist in the ensuing FEMA models, primarily for the sake of simplicity.

We support FEMA's efforts to maximize taxpayer dollars by choosing simpler, more cost-effective modeling techniques when appropriate. However, in cases where FEMA treats a flood control structure as if it has been completely wiped off of the map, we may be unnecessarily devaluing property and hurting the economies of cities, towns, counties and businesses. This approach is particularly troubling since FEMA has the tools at its disposal to obtain more precise data. Just because a levee is under repair or needs to be rectified does not mean that it provides no flood protection at all or that its level of protection cannot be sufficiently modeled. Current FEMA modeling techniques allow us to more precisely reflect the level of flood protection of such structures. When American jobs are at risk, FEMA should use the methods readily available to it rather than settle for an all-or-nothing approach, thus shifting the financial burden from the federal government to local governments and their citizens.

For these reasons, we request that you prohibit the use of such all-or-nothing modeling approaches when a community notifies you that it believes that it is negatively affected by "without levees" modeling. Even with such a prohibition in place, we are hopeful that FEMA will continue to use simpler, more cost-effective techniques when no community is harmed.

Thank you for your attention to this matter. Please do not hesitate to contact us if you have any questions about this request.

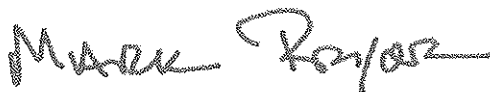
Sincerely,



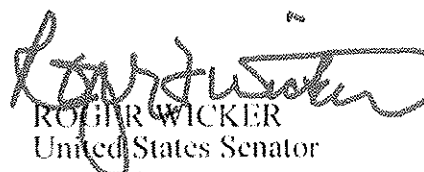
RICHARD DURBIN
United States Senator



THAD COCHRAN
United States Senator



MARK PRYOR
United States Senator



ROGER WICKER
United States Senator



TOM HARKIN
United States Senator



KAY BAILEY HUTCHISON
United States Senator



RON WYDEN
United States Senator



PAT ROBERTS
United States Senator



MARY LANDRIEU
United States Senator



MIKE CRAPO
United States Senator



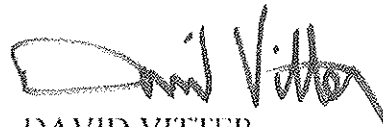
CHARLES SCHUMER
United States Senator



LAMAR ALEXANDER
United States Senator



FRANK LAUTENBERG
United States Senator



DAVID VITTER
United States Senator



JIM WEBB
United States Senator



MIKE JOHANNNS
United States Senator



CLAIRE McCASKILL
United States Senator



MARK KIRK
United States Senator

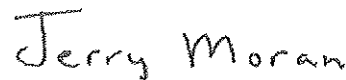


AMY KLOBUCHAR
United States Senator

JAMES RISCH
United States Senator



JON TESTER
United States Senator



JERRY MORAN
United States Senator



JEFF MERKLEY
United States Senator



JOHN BOOZMAN
United States Senator



KIRSTEN GILLIBRAND
United States Senator



ROY BLUNT
United States Senator

United States Senator



United States Senator



FEMA

The Honorable Thad Cochran
United States Senate
Washington, DC 20510

Dear Senator Cochran:

Thank you for your letter dated February 3, 2011, to the Department of Homeland Security, Federal Emergency Management Agency (FEMA). On behalf of your constituents, you joined a number of other Senators in asking that FEMA discontinue the National Flood Insurance Program (NFIP) use of "without levee" analyses when the levee structure does not meet the regulatory requirements for accreditation and an affected community objects to such analysis in favor of more precise methods of flood modeling. You expressed concern that this type of modeling does not consider the impacts of a levee or flood control structure on the 1-percent-annual-chance flood, and erodes public confidence in FEMA's mapping process.

As you are aware, over the past year FEMA has been engaged in a comprehensive review of the NFIP to identify reforms designed to enable FEMA to better address the flood risks faced by the American public. We recognize that our approach to mapping the flood risk associated with levees that do not meet Federal accreditation requirements has been a concern for many. As such, we have included this subject as an important consideration in our ongoing NFIP reform efforts, while also exploring short-term resolutions.

Some changes in the program must take place in the near term. In order to increase the credibility of our Flood Insurance Rate Maps in areas where levees are not accredited, I have directed my staff to replace the "without levee" modeling approach with a suite of methodologies that are technically-sound, credible, and cost-effective. The approach will better meet the needs of our citizens while providing more precise results that better reflect the flood risk in areas impacted by levees. This will not replace the need for levee owners or the associated communities to remain engaged in flood risk management activities or change the existing requirements for them to provide levee accreditation information as outlined in the Code of Federal Regulations (44 CFR 65.10).

The details of this new approach will take some time to finalize. Acknowledging that there are ongoing flood hazard analysis studies where the "without levee" approach has been used, FEMA will temporarily withhold issuing Final Determinations for those communities whose levees do not meet accreditation requirements and would clearly benefit from this new approach. This temporary delay will allow us to properly evaluate affected levees under the new procedures.

While our new procedures are being developed, the risk of flooding remains in many of your communities – whether caused by unforeseen levee failure or heavy rainfall events causing flooding

Senator Thad Cochran

Page 2

inside the levee system. We trust that you and the other Senators concerned about this issue will help to ensure the public does not develop a false sense of security regarding flood risk as we work through and implement these changes. I am requesting your continued assistance to promote flood insurance in these neighborhoods. The Preferred Risk Policies that are available to many individuals currently not shown in Special Flood Hazard Areas are cost-effective means to buy down their risk.

Thank you for your continued interest in this matter and your diligence in helping us find an appropriate resolution. We would be happy to hold a briefing to provide further details on our draft proposal, if that would be helpful. If you need additional information or assistance, please have a member of your staff contact the FEMA Legislative Affairs Division by telephone at (202) 646-4500.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. Craig Fugate', with a stylized, sweeping flourish extending from the end.

W. Craig Fugate
Administrator



FEMA



Treatment of Levees in Flood Risk Studies

Background

As part of its effort to reform the National Flood Insurance Program (NFIP), FEMA is exploring more precise methods for identifying flood risk in areas impacted by levees.

When preparing a flood risk study, FEMA treats accredited levees (levees that meet the requirements of the Code of Federal Regulation, 44 C.F.R. Section 65.10) as providing protection against a 1-percent-annual-chance (or 100-year) flood event. In other words, FEMA assumes that an accredited levee will prevent the flow of water from getting behind the levee during a 1-percent-annual-chance flood.

On the other hand, levees that are not accredited (that do not meet the requirements of 44 C.F.R. Section 65.10) are currently treated as providing no protection against a 1-percent-annual-chance flood event. This means that FEMA assumes water will inundate the area behind a non-accredited levee during a 1-percent-annual-chance flood. This method has been referred to as a “without levee” analysis.

Although it is technically sound, FEMA recognizes that the use of the “without levee” modeling method may be less precise for the establishment of flood zones and resulting insurance rates. Therefore, a new set of more precise modeling methods are being considered for use in flood risk studies. The revised methodologies will account for several typical levee scenarios.

Levee Systems

Need more information on levee systems?

Please visit the levee dedicated pages on the FEMA

Web site at:

www.fema.gov/plan/prevent/fhm/fv_intro.shtml

The NFIP

Looking for more information on the National Flood Insurance Program? Visit:

www.fema.gov/nfip

You can also find information about your flood risk and how to find a flood insurance agent at:

www.floodSmart.gov

FEMA Library

The FEMA Library is a database of publicly available FEMA resources. Many are available for download, including:

“NFIP and Levees: An Overview Fact Sheet”

http://www.fema.gov/plan/prevent/fhm/fv_intro.shtml

“Living With Levee Systems: Information for Property Owners”

http://www.fema.gov/plan/prevent/fhm/fv_intro.shtml

Requirements of 44 CFR Section 65.10: Mapping of Areas Protected by Levee Systems

http://www.fema.gov/plan/prevent/fhm/fv_intro.shtml

RiskMAP

Increasing Resilience Together



Areas behind levees which are overtopped or breached can experience significant damage and loss of life.

Effectiveness of Levees

The level of protection levees provide can vary greatly based on the physical characteristics of the levee, and the amount, height, and duration of flood waters. Levees that were not designed or built to provide protection from events such as the 1-percent-annual-chance flood may not be large enough to provide adequate protection during such events. Other levees designed, built, and maintained to provide protection from the 0.2-percent-annual-chance (or 500-year) flood may provide adequate protection during a flood of that magnitude.

Levee Accreditation

FEMA has implemented procedures to verify that levee systems shown on effective Flood Insurance Rate Maps (FIRMs) provide protection from the 1-percent-annual-chance flood and continue to meet the current criteria for levee systems established by 44 C.F.R. Section 65.10. When FEMA initiates a mapping revision for a community, the levee owner or community is responsible for providing data and documentation showing that a levee meets the requirements specified in 44 C.F.R. Section 65.10.

FEMA's review to accredit a levee is for the purpose of establishing appropriate risk zones for NFIP maps and to communicate flood risk. FEMA does not determine how a structure or system will perform in a flood event.



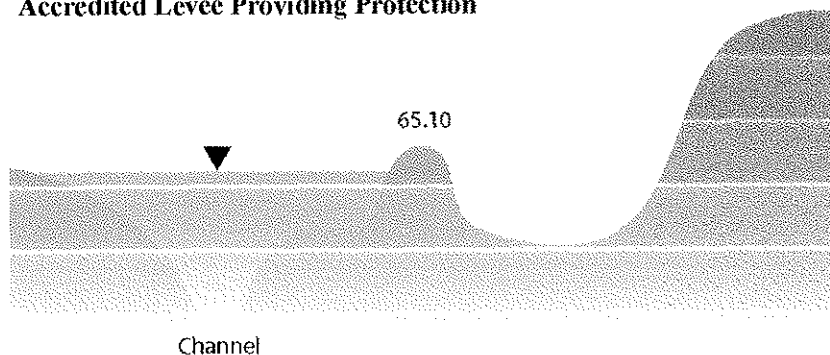
Accredited levees may help prevent properties from being flooded during the 1-percent-annual-chance flood.

RiskMAP

Increasing Resilience Together

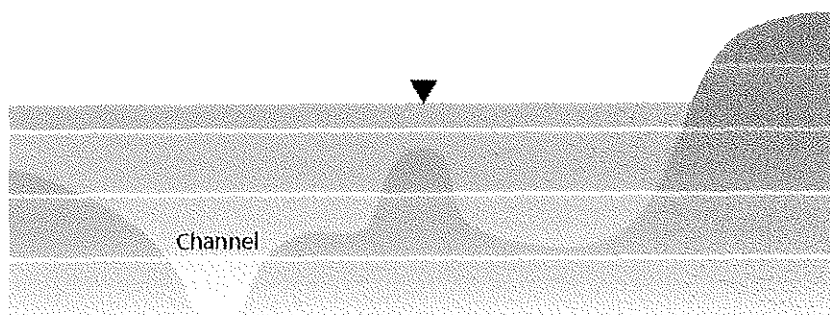
Potential Flood Scenarios

Accredited Levee Providing Protection



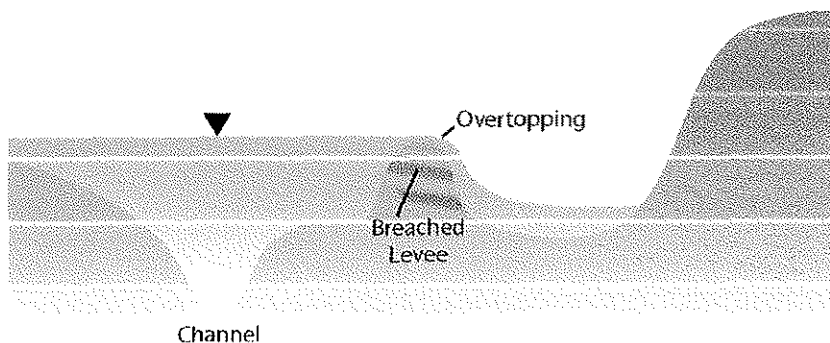
Levees that are designed, built, and maintained to provide protection from large floods such as the 1-percent-annual-chance flood and meet the requirements of 44 C.F.R. Section 65.10 are accredited as preventing the flood waters from getting behind the levee for floods of that magnitude or less.

Levee Not Effective



Some levees are not effective during large flooding events such as the 1-percent-annual-chance flood, and the flood waters are not impeded by the levee.

Overtopping or Breached Levee



When the height of water is above the top of the levee, floodwaters will flow over the levee at which point it is overtopped.

When a part of the levee breaks/fails, leaving an opening for water to flood the land behind the levee, the levee has been breached.

RiskMAP
Increasing Resilience Together

New Approach to Analyzing Levees

The new levee approach for analyzing levees will provide more precise flood risk information. It will include a suite of methods that are technically-sound, credible and cost-effective. Specifically, levee height and structural characteristics will help to determine if and when overtopping and breach calculations might provide a better estimate of flood hazards.

This new approach will also allow for the consideration of analyses performed at the local level, thereby enhancing FEMA's understanding of the levee system and its components.

What It Means for Communities

The new approach will provide a more precise assessment of flood risk in areas impacted by levees. Because the new modeling methods may affect the treatment of levee, FEMA will temporarily withhold issuing flood risk study final determinations for those communities whose levees do not meet accreditation requirements of 44 C.F.R. Part 65.10. This temporary delay will allow FEMA to give proper consideration to levees under the new modeling procedures.

It is important to note that using more precise levee modeling methods does not necessarily mean the flood risk behind levees, as depicted on FIRMs, will decrease. A more precise analysis of a given levee system may indicate a greater flood risk than was previously understood in certain areas.

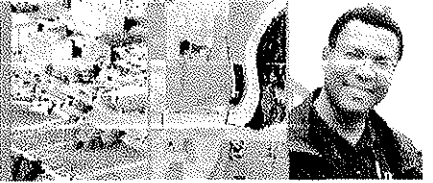
Levees are designed to provide a specific level of protection. They can be overtopped or fail in larger flood events. Levees also decay over time and require regular maintenance and periodic upgrades to retain their level of protection. When levees do fail, they can fail catastrophically.

FIRMs currently carry a warning that overtopping or failure of the levee, dike, or other structure is possible, and that flood insurance and adherence to evacuation procedures are strongly recommended. Accordingly, FEMA urges people to understand their flood risk. Because of the critical role levees play in mitigating flood risk, and their ultimate affect on flood insurance rates and economic well-being, levee owners and associated communities must still remain engaged in flood risk management activities and provide levee accreditation information as outlined in 44 C.F.R. Section 65.10.

RiskMAP
Increasing Resilience Together



FEMA



FEMA's Approach to Levees

Answers to Frequently Asked Questions

March 10, 2011

Q: Why is FEMA changing the way it maps levees?

A: The "without levee" approach is an effective tool to identify flood risk behind uncertified levees. FEMA recognizes, however, that advances can enable FEMA to use improved models and tools to provide more precise flood risk information, and we are committed to updating our mapping methodology. FEMA also is engaged in a systematic effort to reform the National Flood Insurance Program (NFIP), and we view a change in the manner in which we map levees that do not meet the criteria for accreditation as a step toward a long-term solution.

Q: What is FEMA doing to improve its analysis of levees?

A: FEMA is developing a series of targeted modeling approaches to replace the current "without levee" approach.

Q: Are FEMA and the U.S. Army Corps of Engineers (USACE) aligned in this effort?

A: FEMA and USACE have been and will continue to work as a team to develop the new approach.

Q: Will the public be involved?

A: Yes. FEMA will invite the public to review and comment on the new approach and subsequent guidance.

Q: What about maps already in effect?

A: The new approach will be applied to ongoing and future mapping projects. If a community has questions about existing Flood Insurance Rate Maps (FIRMs), it should coordinate with the appropriate FEMA Regional representative to discuss future map updates.

Levee Systems

Need more information on levee systems? Please visit the levee dedicated pages on the FEMA website at:

www.fema.gov/plan/prevent/firm/firm_updates.cfm

Here you will find an array of guidance and information resources to better answer any questions you might have on levee systems.

The NFIP

Looking for more information on the National Flood Insurance Program? Visit:

www.flood.gov/nfip

You can also find information about your flood risk and how to find a flood insurance agent at: www.flood.gov/locate

FEMA Library The FEMA Library is a database of publicly available FEMA resources. Many are available for download, including:

"NFIP and Levees: An Overview Fact Sheet"

www.fema.gov/plan/prevent/firm/firm_updates.cfm

"Living with Levee Systems: Information for Property Owners"

www.fema.gov/plan/prevent/firm/firm_updates.cfm

Requirements of 44 CFR Section 65.10: Mapping of Areas Protected by Levee Systems

www.fema.gov/plan/prevent/firm/firm_updates.cfm

RiskMAP

Increasing Resilience Together

Q: Will the new approach result in smaller Special Flood Hazard Areas (SFHAs)?

A: Not always. SFHAs may decrease, increase or stay the same size as a result of the new approach. The current approach may have overestimated or underestimated flood hazards to some extent. In some scenarios, the anticipated flood risk may be greater than previously identified using our current approach.

Q: Will this new approach impact insurance rates?

A: The rate will be based on the flood hazard identified through the new approach and other factors involved with the particular structure being rated, but the method for rating is not changing.

Q: Will FEMA consider levees with less than a 100-year level of protection?

A: Yes. FEMA is analyzing more precise ways to model flood risk behind levees that are not currently accredited to provide protection against a 1-percent-annual-chance flood (100-year flood). As FEMA continues work on NFIP reform, we will investigate ways to more accurately rate policies in areas behind levees with less than 1-percent-annual-chance flood protection.

Q: Why can't FEMA rate these types of insurance policies today?

A: Rating policies in areas behind levees with less than 1-percent-annual-chance flood protection may require new or modified flood risk zones that do not exist today. This and other considerations may require regulatory and legislative changes.

Q: How soon will the new approaches be developed and in place?

A: A date is not yet set for implementation, but FEMA is working to implement a new approach as soon as possible.

Q: Is the new approach going to be applied to every new mapping activity with unaccredited levees, or do communities need to request it?

A: It will be applied to all new and ongoing mapping activities.

Q: Will my community and/or levee owner still be required to provide FEMA data?

A: Yes. The data requirements for levee accreditation in 44 C.F.R. Section 65.10 will not change, and more precise modeling likely will require more levee data. Communities and/or levee owners still will need to provide data on their levees to enable FEMA to accurately assess the flood risk.

Q: If a community does not agree with the FEMA analysis used in its flood risk study, can it provide FEMA with additional or more detailed information?

A: Yes. As with any study performed by FEMA, local communities can provide additional information for consideration.

Q: Can a community still appeal the findings on the FIRM?

A: Yes. The administrative process currently in effect for flood hazard maps will remain unchanged. There will be an administrative appeal period following issuance of the preliminary FIRM during which a community can provide additional scientific and technical data.

Q: How will the new approach impact the cost of FEMA's flood studies?

A: We are anticipating additional costs for a deeper level of analysis. FEMA will evaluate the cost of applying additional analyses against the value added for a particular study or community based on the risk present in that area. Where there are high levels of risk, additional analysis may be appropriate.

Q: Will FEMA help pay for certification of levees?

A: No. FEMA's authority and mission are in the identification of risk and not in the assessment of the design, construction and maintenance of levees.

Q: Will FEMA finalize maps for communities using the "without levee" analysis?

A: No. FEMA will delay finalizing maps for communities where a levee cannot be accredited until the new approach is finalized.

RiskMAP
Increasing Resilience Together