

UPPER BRUSHY CREEK WATER CONTROL AND IMPROVEMENT DISTRICT

2012 ANNUAL REPORT



**Prepared by Ruth Haberman
January 4, 2013**



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The District Board of Directors drafted a 2011 Action Plan for the District, with recommended immediate, near-term, and long-term goals for the District. With that document as a reference, the following immediate and near-term goals have been met this year:

- ***Perform actions necessary to maintain the dams in good working condition and in compliance with State and Federal requirements.***
 - Regular dam maintenance has been performed this past year. A Request for Qualifications was published, the District selected a long-term service provider to develop and implement a systematic dam maintenance program. That program has been initiated;
 - Damage from Tropical Storm Hermine at Dams 13A, 4, and 6 has been repaired;
 - Trash racks and drain valves have been replaced at nearly all of the District dams.
- ***Take appropriate measures to protect public safety as well as the economic infrastructure of the District.***
 - Careful planning is underway to find the most appropriate, fiscally responsible and fair design solutions for the two remaining dams requiring modernization: Dams 7 and 8.
 - Analysis is underway to find a solution to prolonged upstream flooding at Dam 4, and potentially at other dams experiencing the same issue.
 - A Watershed Study and Flood Protection Planning Project is underway, with partial funding from the Texas Water Development Board, to identify existing flood hazards within the District and to develop a list of potential regional projects to mitigate those hazards.
- ***Be a source of technical information about rainfall, reservoir status, high stream flows, flood events, and inundation areas (modeling and historic data).***
 - The District office is regularly contacted with requests for information regarding rainfall and reservoir levels, general floodplain issues, District roles, watershed study results, and other technical information. We are able to immediately provide information and insight by having a dedicate District office with staff focused on nothing but the needs of the District and its constituents.
 - The District mailed letters to all property owners downstream of District dams that could be impacted by flow through the auxiliary spillways in a major flood event. The letters included a brief history of the District, a description of the functionality of the dams, current contact information for the District, and a graphic representation of the areas that could potentially be impacted by spillway discharges. The response from the public was very positive. Some property owners called for clarification, and others called to thank the District for the useful information.



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- The District has met with and presented to the communities within the District to inform them of the District's activities, including the ongoing Watershed Study and Flood Protection Planning Project. The District also presented to a Hydrology class at the University of Texas in Austin, including a tour of one of the District's dams.
- The flood monitoring system is operational, but is in need of maintenance and improvements to ensure that accurate and dependable data is provided to the community at large. A Request for Qualifications was published and the District selected a Professional Engineering firm to provide a system assessment and improvement plan for the flood monitoring system. The District will use that assessment to determine a plan of action to methodically upgrade the system.
- ***Communicate potential flood hazards to property owners located in floodways prior to flood events.***
 - The District is working with the Texas Commission on Environmental Quality (TCEQ) to finalize Emergency Action Plans for the District's dams. As a part of that task, staff is coordinating with the Williamson County Emergency Operations Coordinator and EOCs from the communities in the District to develop the optimal Notification Flowchart to be used in the event of flooding emergencies.
- ***Accomplish these objectives without growing government. The District should identify opportunities for existing governmental organizations to work together, bridge gaps, and accomplish benefits that otherwise may not be achieved.***
 - As a part of the Watershed Study and Flood Protection Planning Project, the District has initiated a Technical Advisory Committee that is comprised of floodplain administrators and other representatives from the communities within the District; Leander, Cedar Park, Austin, Round Rock, Hutto and Williamson County. This provides the opportunity to solicit input from these communities throughout the project, and to develop long-lasting relationships with the communities that will allow for future collaboration on flood mitigation projects.
- ***Finish and submit the Emergency Action Plans to TCEQ by the December deadline.***
 - The EAPs have been submitted to TCEQ, and TCEQ has provided comments on some of them. Those comments are currently being addressed.
- ***Participate fully with and encourage FEMA to continue the ongoing Physical Map Revision of Williamson County to include the entire Upper Brushy Creek watershed and to maintain accurate Digital Flood Insurance Rate Maps in the future.***
 - As a byproduct of the Watershed Study and Flood Protection Planning Project, the District was able to gain the attention of FEMA, who has now committed to including the results of the watershed study in the next Digital Flood Insurance Rate Maps (FIRM) and Flood Insurance Study (FIS). The District has contracted with the TWDB to receive funding from FEMA to incorporate the data developed by the watershed study into a



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complete set of new DFIRM and FIS for the Upper Brushy Creek watershed. FEMA has awarded a \$268,000 grant to the District to fund the first phase of the project.

- ***Investigate funding from Texas Water Development Board (TWDB) to support work to define flood hazard in the Upper Brushy Creek watershed.***
 - As noted earlier, the District was awarded a grant by the TWDB for a Watershed Study and Flood Protection Planning Project. The initial grant was for \$360,000. An additional grant in the amount of \$67,000 was recently awarded to the District to expand the scope of the original project.
- ***Establish a location for retention of the District's records. Evaluate the tradeoffs associated with having an independent District office.***
 - The District successfully opened their office in July 2011 in Round Rock, TX. The General Manager and Administrative Assistant offices are at that location and the District monthly Board meetings are held there.
 - The District has submitted a Records Management Plan. Most of the District's records have been consolidated at the location, and all official District records are planned to eventually be housed there.
- ***Consider the duties and requisite qualifications of the General Manager and the employment relationship of the General Manager, in perspective of the District's long-term future.***
 - A new General Manager, who is a professional engineer and certified floodplain manager with local experience, was hired in April 2011.
- ***Improve the website functionality, reliability, and security.***
 - The District is currently investigating solutions for making functionality, reliability, and security improvements to the main District website and the Flood Monitoring System website.
- ***Evaluate the District's Regional Detention Policy.***
 - The District has initiated a conversation regarding the District's Regional Detention Policy with the Technical Advisory Committee, which was developed to facilitate regional participation in the Watershed Study and Flood Protection Planning Project. After the watershed study has been completed, more detailed discussions will be initiated.

A comprehensive list of District activities that have taken place this past year is provided on the following pages.



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OPERATION AND MAINTENANCE

DAMS

- Dam maintenance at District dams
- Inspections at District dams
- RFQ for annual dam maintenance services
- Initiation of a two year dam maintenance plan

FLOOD MONITORING SYSTEM (FMS)

- FMS calibration
- Visual observation of stage gage vs. website during rain events
- RFQ for FMS Assessment and Improvement Plan
- Initiation of FMS Assessment and Improvement Plan
- Initiation of FMS preventative maintenance

OFFICE

- Open, furnish and operate day to day business at new District office

VEHICLE

- Purchase, equip and maintain new District vehicle

RECORDS

- Identify, locate and compile District records
- Research and develop records management plan
- Initiate records management plan

CONTRACTS, POLICIES, PROCEDURES

- Standard Professional Services Contract - Board approved
- Purchasing Policy - Board approved
- Budget Amendment Policy - Board approved
- Directors' Fees and Expense Reimbursement Policy - Board approved
- Employee Evaluation Policy - Board approved
- District Infrastructure Naming Policy - Board discussion
- Water Rights and Permitting Policy - Board discussion



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ENGINEERING

DESIGN AND CONSTRUCTION

FNI engineering contract management
Design, Bid and Construction of Dam 13A, 4 and 6 Emergency Repairs
Design, Bid and Construction of Trash Rack and Valve Replacement
Close out - Dam 18 construction contract
Close out - Round Rock Police Tower construction contract
Contract with FNI for Dam 4 Secondary Spillway analysis
Property and design options for Dam 7 modernization

WATERSHED STUDY

TWDB Contract management
URS engineering contract management
Coordinate with state, county, and city leaders regarding study
Coordinate with county and city floodplain administrators regarding study
Facilitate TAC Meetings (6)
Achieve consensus from TAC members for all modeling decisions
Review Technical Memorandums (4)
Facilitate Public Meetings (2)
Develop, deliver and respond to Right of Entry letters (+/-450)
Publish watershed study website
TWDB Grant Award - \$360,000 for Watershed Study and Flood Protection Planning Project
TWDB Grant Application - additional \$67,000 FPP funds (awarded)
FEMA Grant Application - \$268,000 for Risk Map Flood Study (awarded)

DEVELOPMENT REVIEW

Leander Transit Oriented Development Drainage Study (Dam 2)
Scottsdale Crossing Development (Dam 3)
Muir Lake Multi-family Development (Dam 6)
Avery Ranch Veterinary Clinic (Dam 6)
Park at Lakeline Drainage Study (Dam 6)
Brushy Creek Road Improvements (Dam 7)
SH 45 / O'Connor Drive Improvements (Dam 9)



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REGULATORY COMPLIANCE

INSPECTIONS

Respond to TCEQ Inspection Reports for Dams 3, 4, 6, 7, 8, 12, and 13A
Facilitate TCEQ Inspections for Dams 1, 9, and 18
Review Emergency Action Plans

FINANCES

AUDIT

Facilitate FY 2011 Audit
Facilitate FY 2012 Audit

BUDGET

Develop FY 2012 Budget
Develop FY 2012 Budget Amendment #1
Develop FY 2012 Budget Amendment #2
Develop FY 2012 Cash Ending Balance
Develop FY 2013 Budget

TAXATION

Research and disseminate information regarding tax rate – Truth-in-Taxation requirements
Set and publish 2012 Tax Rate
Set and publish 2013 Tax Rate

ACCOUNTING

Manage and document District accounts payable and payroll
Coordinate with Bjorge & Parker for bookkeeping services
Transition from outsourced to in-house bookkeeping

PURCHASING (MAJOR)

District office furnishings and supplies
District Vehicle
Emergency and safety equipment
Mapping and analysis software
Data management server and software



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COMMUNICATION

GENERAL CORRESPONDENCE

Letters to property owners downstream of District dams
Contact information survey for property owners at District dams

PRESENTATIONS/NETWORKING

National Weather Service (NWS) – Weather data sharing
Texas Association of Watershed Sponsors (TAWS) – Dam sponsors
University of Texas Center for Research in Water Resources (CRWR) – Water data sharing
Integrated Water Resources Science and Services (IWRSS) – Water data sharing
Williamson County Emergency Operation Center (EOC) – Emergency Action Planning
Natural Resources Conservation Service (NRCS) – Dam construction and maintenance
City of Austin – Regional water data collection and sharing
U. S. Geological Survey (USGS) – Water data collection and sharing
Taylor Soil & Water Conservation District (TSWCD) – Dam sponsors
Brazos River Authority (BRA) – Water rights
City of Round Rock City Council – Presentation regarding watershed study
University of Texas Hydrology Class – Presentation and field trip regarding hydrology, dams, and water data collection and sharing
Water Web Services Jamboree – International water data sharing
Meet with property owners/stakeholders – Dam modernization

BOARD AND STAFF

ELECTIONS

Research and disseminate information regarding election

EMPLOYEE BENEFITS

Research, manage and document employee benefits

TRAINING

National Hydrologic Warning Council (NHWC) Training Workshop
Association of State Flood Plain Managers (ASFPM) Conference
Texas Municipal League Intergovernmental Risk Pool (TML IRP) Hurricane Preparedness Webinar
Texas Commission on Environmental Quality (TCEQ) Dam Safety Workshop



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Dam Maintenance at Dam 1 – Before and After



Dam Maintenance at Dam 21 – Before and After



Old Drain Valve being removed at Dam 20



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New Trash Rack and Drain Valve at Dam 2



Repair of Erosion caused by Tropical Storm Hermine at Dam 4 Auxiliary Spillway



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Repair of Erosion caused by Tropical Storm Hermine at Dam 6 Auxiliary Spillway



Repair of Erosion caused by Tropical Storm Hermine at Dam 6 Auxiliary Spillway



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Repair of slope failure caused by Tropical Storm Hermine at Dam 13A



Repair of slope failure caused by Tropical Storm Hermine at Dam 13A



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Repair of slope failure caused by Tropical Storm Hermine at Dam 13A



Repair of slope failure caused by Tropical Storm Hermine at Dam 13A



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VISION FY 2013

OPERATION AND MAINTENANCE

DAMS – Maintain the dams to be structurally sound and aesthetically attractive.

FLOOD MONITORING SYSTEM – Develop and implement a plan to **improve**: the accuracy, functionality and usability of the data; reliability and ongoing maintenance of the system; and public awareness and perception of the website. This will require a complete assessment of the existing hardware, software, and communication system; the development of a plan to make the desired improvements; and proper management of the proposed improvement and ongoing maintenance plans.

RECORDS – Organize existing District hard and soft files to be easily retrievable by staff. Develop and implement a plan to scan appropriate hard files and archive soft files to be indexed and searchable by staff and Board.

POLICIES – Update the District’s Developer Policy and Notice to Purchasers. Facilitate the development of a Regional Detention policy with input from the Board and communities within the District.

ENGINEERING

DESIGN –Dam 7 Modernization, Dam 8 Modernization, Dams 10A and 10B evaluation, Dams 3, 4 and 6 reservoir drawdown analyses.

CONSTRUCTION –Dam 7 Modernization, Dam 8 Modernization, Dams 3, 4 and/or 6 spillway modifications as scheduling will allow.

STUDY – Complete Upper Brushy Creek Watershed Study and Flood Protection Planning Project. Continue work on Upper Brushy Creek Watershed Floodplain Mapping Project. Coordinate with Technical Advisory Committee to follow through with Flood Protection Planning projects.

REGULATORY COMPLIANCE

EMERGENCY ACTION PLANS – Coordinate with Williamson County and other communities within the District to develop communication plans that will be acceptable to TCEQ. Respond to TCEQ comments and resubmit EAPs for approval. Plan and implement table top exercise with surrounding communities and TCEQ.

COMMUNICATION

GENERAL CORRESPONDENCE – Continue to build strong relationships with all of the communities within the District, property owners at all of the District dams, regulatory and co-sponsoring agencies, and other flood hazard management organizations.