



Risk ADVISOR

Texas Water Conservation Association Risk Management Fund



We Talk Safety but How do We Walk the Walk?

Over the last ten years Fund loss control consultants have presented dozens of safety workshops, consulted with water districts and authorities hundreds of times and provided their expertise to help Fund members address specific safety needs and situations. There has also been a growing awareness of safety among members as they gain an understanding of the financial, morale and productivity costs of worker injury. Part of the information presented to members is their own history of workers' compensation costs. From these "loss runs" they can calculate the cost of the medical expense and lost time payments on a per capita or percent of payroll basis to understand part of the cost of risk to the district.

The Fund also looks at this history to detect trends, assign resources and maintain the financial integrity of the Fund for its owners, each member district or authority. The results over the last complete ten years are presented here to help members understand the largest drivers of cost and some of the causes of claims. This information can help focus efforts to control claims and their resulting cost.

The number and average cost of claims by the cause of injury are presented here to help get everyone pulling in the same direction to prevent employee injuries and improve everyone's bottom line. Overall claim totals as of March 31, 2015 are used for the annual figures and for the cause of claim analysis. Causes of claims totaling 97% of amount paid and 75% of the total number of claims over the ten year period are included in the cause analysis.

The first table shows the total incurred claims and the number of claims each year through June 30, 2014 as of March 31, 2015. The term "total incurred" means both paid amounts and the amounts set aside as reserves for future payments of medical or lost time expenses for claims that are still open (consistent with the claims information on your monthly loss runs.) One of the first things to notice is the wide variability in both the number of claims and their cost each year. The annual number or frequency ranges from 335 to 201. The average severity ranges from \$7,935.01 to 2,831.84. Although there appears to be a favorable trend, the variability makes it hard to rely on what we see. What contributes to this variability? In three of the years, 2005, 2006 and 2012 there were a number of large claims costing over \$100,000. There were five over \$100,000 in 2005, four over \$100,000 in 2006 and two in 2012. One 2012 claim that is still open has a paid and reserved total of \$635,699. Although claims this large are unusual the cause and circumstances are not. Of the eleven claims, five are back strains as the result of lifting or pulling, one is a motor vehicle accident (causing multiple strain injuries) three are caused by the employee being struck by something and two are the result of falls.

TWCARMF Workers' Compensation Claims 2005 - 2014			
Year	Number	Total Incurred	Average
2005	291	\$ 2,092,020.20	\$ 7,189.07
2006	202	\$ 1,602,871.76	\$ 7,935.01
2007	216	\$ 712,157.66	\$ 3,297.03
2008	255	\$ 1,381,688.29	\$ 5,418.39
2009	335	\$ 1,231,382.05	\$ 3,675.77
2010	266	\$ 996,504.77	\$ 3,746.26
2011	239	\$ 808,856.67	\$ 3,384.34
2012	226	\$ 1,687,297.98	\$ 7,465.92
2013	201	\$ 569,199.91	\$ 2,831.84
2014	217	\$ 643,291.27	\$ 2,964.48
Totals	2448	\$ 11,725,270.56	\$ 4,789.73

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Loss Control Briefs

Upcoming Safety and Risk Management Workshops

Safety is a serious business for Texas water districts and authorities. The one-day seminar addresses current safety issues and provides guidance for managing water district and river authority safety programs. Presenters will discuss specific problems being encountered by Fund members and offer practical solutions to help reduce accidents and resulting losses. This course will be conducted by safety professionals of the TWCA Risk Management Fund. Topics include:

- ◆ Hazard Identification and Correction
- ◆ Understanding a Job Hazard Analysis
- ◆ Current Claim Trends
- ◆ Accident Analysis
- ◆ Selling Safety to Staff and Management

This seminar is designed for all persons who have responsibility for safety within their water district or authority. Suggested participants include safety or risk management staff, project managers, and other management and supervisory personnel. There is no cost to members of the Texas Water Conservation Association Risk Management Fund. **The workshop has been approved by TCEQ for 5 hours of continuing education credit for Water and Wastewater Operator licensees.**

Lubbock – May 27 at High Plains Groundwater Conservation District

Aubrey – June 10 at Mustang Special Utility District

In addition to the Safety Workshops two additional seminars are planned:

Property Casualty Claims Workshop

Austin – September 24, Omni Southpoint, Austin, Texas

TWCA Risk Management Seminar

San Antonio – October 14, on the Wednesday before the Fall TWCA Conference at the The Wyndham San Antonio Riverwalk Hotel, San Antonio, Texas

Call Renee Harris at 800-580-6467 or register online at www.twcarmf.org.

Ensuring Protection for New Workers

The risk of injury is much greater for new employees than for more experienced workers. In fact, the U.S. Bureau of Labor Statistics has reported that 40 percent of workers that are injured have been on the job less than one year. This fact illustrates the need for safety information and training for all new employees as well as those who may be changing jobs or assuming new duties within the organization.

Employers should make safety training a fundamental part of new employee orientation, and should also cover the specific equipment employees will be using, personal protective equipment, chemical use, and other essential safety concerns

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Questions, comments, tips, advice, ideas, opinions, criticism, and news are welcomed and encouraged. Every effort has been made to ensure the accuracy of the information published in *Risk Advisor*.

Opinions on financial, fiscal, and legal matters are those of the editors and others. Professional counsel should be consulted before taking any action or decision based on this material.

Fund Administrator: York Risk Services Group, Inc.
800-580-8922

Hurricane Season Already?

On May 6, 2015 the National Hurricane Center designated an area of disturbed weather near the Bahamas and Florida as Invest 90 meaning an area to watch for possible tropical cyclone development. The system moved north and impacted the coasts of South and North Carolina. This is one of the earliest declarations of an invest in the Atlantic but does this indicate an active hurricane season?

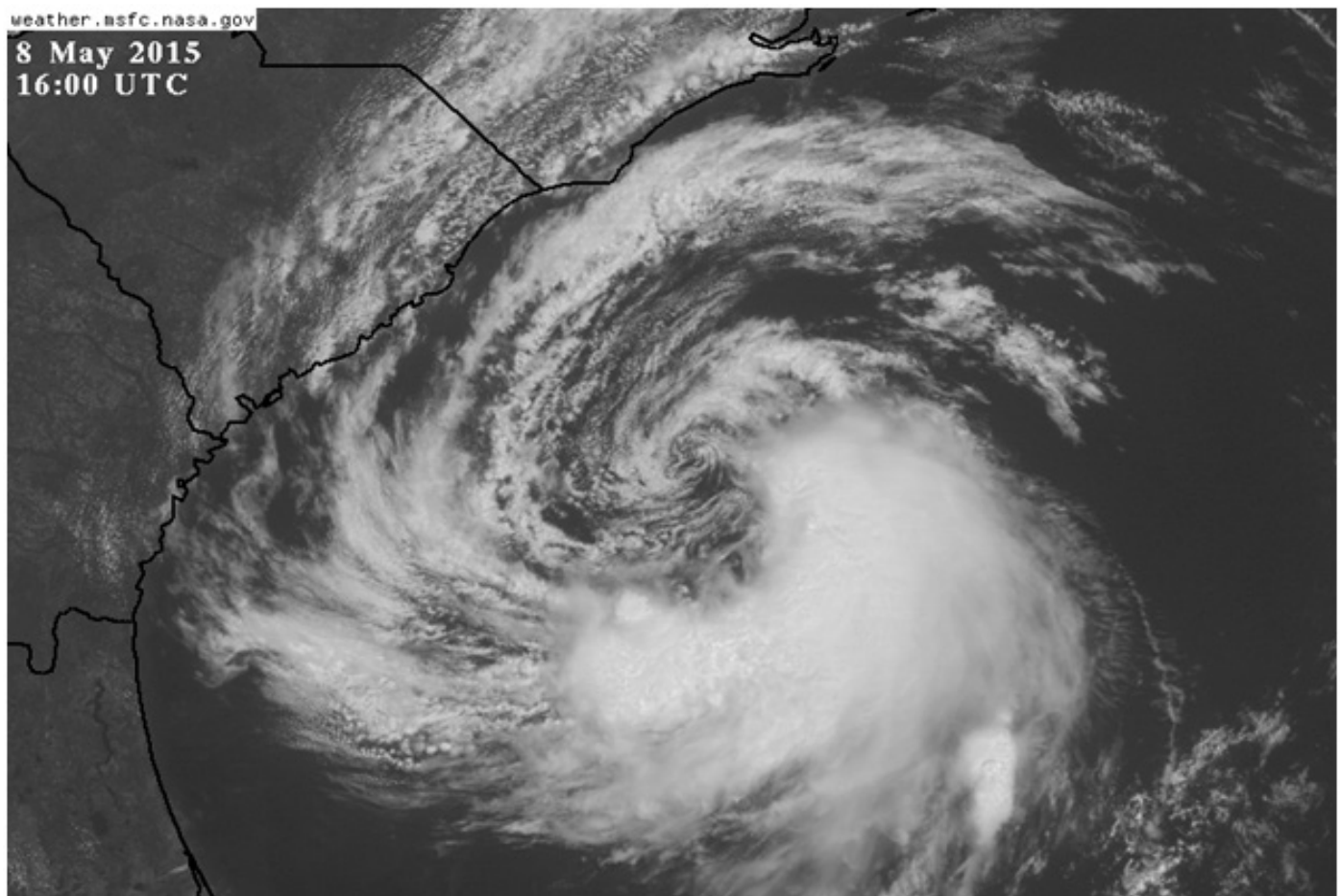
According to the Tropical Meteorology Project at Colorado State University the 2015 season will be below normal for formation of tropical storms in the Atlantic basin. Their “Extended Range Forecast of Atlantic Seasonal Hurricane Activity and Landfall Strike Probability for 2015” predicts seven named storms including three hurricanes with one of those reaching “major” status or between the Category 3 and 5 storm strength. They also predict a 15% probability of a storm strike along the Gulf coast from the panhandle of Florida to Brownsville, Texas. The usual average is 30%.

There appear to be a couple of major reasons for the low estimate of tropical cyclone activity. One of them is the relatively cool sea surface temperatures in the eastern Atlantic where storms first begin to develop after they come off the continent of Africa. In early May those temperatures were running one to three degrees Celsius below normal. Tropical storm development usually requires temperatures above 80 degrees (26 degrees Celsius) and sea surface temperatures in the area of primary storm formation off the coast of Africa are only in the 70’s.

Another main reason for a lower estimate of the number of storms is the presence of an El Nino in the Pacific Ocean. El Ninos cause a west to east wind flow over the Gulf of Mexico and the Caribbean that creates wind shear above tropical cyclones. The wind shear tears off the tops of thunderstorms in the cyclone and weakens potential development. The wind shear can tear storms apart or reduce their intensity significantly.

There is, however one other factor present in May of 2015 that could lead to the formation of storms in the Gulf of Mexico. Sea surface temperatures in the Gulf are higher than normal so storms could form in the Gulf and move quickly over the coast anywhere from the Rio Grande delta to the southern tip of Florida. These storms can be a real problem because the preparation lead time available to coastal residents is much shorter than a storm that has been tracked all the way across the Atlantic Ocean.

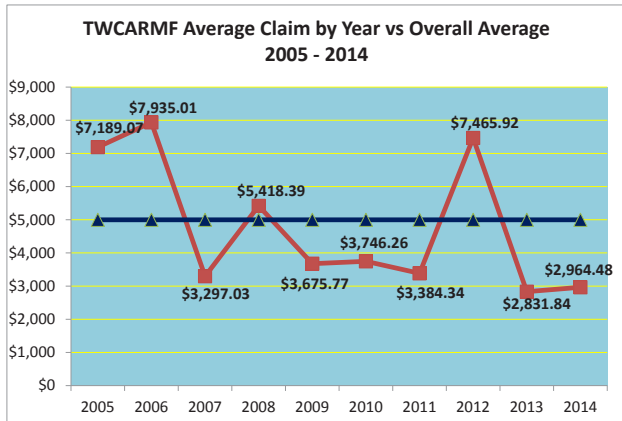
Districts should monitor any tropical development, update storm response plans and be ready to protect people and property in the event a tropical storm heads your way. As Dr. Gray at Colorado State says, “Despite the forecast for below average activity, coastal residents are reminded that it only takes one hurricane making landfall to make it an active season for them. They should prepare the same for every season, regardless of how much activity is predicted.”



Sub-tropical storm Ana from NOAA and National Hurricane Center on May 8, 2015

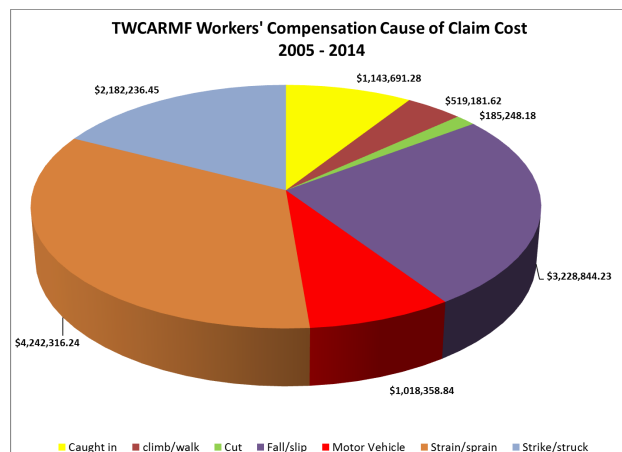
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Another way of looking at the data is to plot the average claim size over time as in the first chart below. The average claim is represented by the blue line near the \$5,000 level in the chart. Some presentations of this data might remove or limit the amount included of the large claims from the calculations to even out the peaks and valleys. However, the large claims described are common types of claims without any particularly unusual circumstances other than the cost.



All of the 11 large claims occurred during operations common to the district's business. Of the eleven, ten fall into the three largest categories of claim causes shown in the next chart. These categories are claims that are caused by strain injuries, claims as a result of slips or falls and injuries occurring when an employee is struck by an object or strikes something.

Strain injuries are due to over exertion in the course of work. This can occur suddenly or through repetition. Lifting or pulling causes most of the injuries and the weight involved may or may not be substantial. A lot depends on the body mechanics involved and the leveraged forces exerted on backs, necks, shoulders and arms. Many of these injuries could be prevented by using lift assist devices or requesting the assistance of co-workers.



Slip and fall injuries usually occur on the ground or floor. Tripping over objects, uneven ground or slippery surfaces cause most injuries of this type. However, the most serious of these usually involves a fall from height. The large claim mentioned earlier involved a fall of about six feet. The worker had one foot on a scaffold and one foot on a ladder. When the object he was trying to remove slipped, so did he. As he fell he hit his head and injured his back. The lasting effects of the traumatic head injury and back injury have resulted in continuing medical treatment despite the fact that he was able to return to work.

Claims as a result of being struck by an object or striking something while moving through the work space are a third category of costly injuries. They are often caused by falling or flying objects or losing balance and bodily falling into something. The most serious injuries in this group are the result of being struck by moving equipment. The second most expensive claim in the group of 11 claims over \$100,000 currently shows a paid and reserved total of \$362,485. Somehow a backhoe boom began to move when the machine was started causing serious head, ear, neck, elbow and shoulder injury. Although this occurred in 2005, it is a haunting pre-cursor to the fatality that was caused by a backhoe this year. The 2015 fatality claim also occurred when a boom started in motion when the backhoe was started.

When all the charts and tables are examined, there is cause for both concern and encouragement. The members of the Fund benefit from the good claim years and pay the price for the bad years. Despite the best efforts of Fund loss control consultants, the workers' compensation results are still up to the employees of member districts and authorities. It takes a concerted effort across the board to reduce the devastating effects of serious injuries from falls, strains, and being struck by or striking something. Motor vehicle accident and other causes also contribute to the overall picture. Districts and authorities should keep the focus on safety as consistently as they focus on water quality, availability or control. As always, the Fund's loss control consultants, risk management consultant and program managers are available to help with any of your safety needs.

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The Fund will distribute future editions of *Risk Advisor* electronically to those who prefer a paperless version. The newsletter is provided in PDF format. To add your name to the distribution list, send your e-mail address to Renee Harris at the Fund (renee.harris@yorkrsg.com).

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involving their jobs.

New employees should follow these important rules:

- ◆ Be sure you understand all necessary safety precautions before you start to work. If the explanation is unclear, ask again.
- ◆ Use what you learn all the time.
- ◆ If respirators or other personal protective equipment are required, wear them consistently and maintain them properly. Do not start work until you have been issued the appropriate protective equipment.
- ◆ If guards are required on equipment, make sure they are in place.
- ◆ Don't take short-cuts. Follow safety and health instructions to the letter.
- ◆ Follow the hazard warnings on chemicals you use. Obtain further information from the material safety data sheet on hazardous chemicals.
- ◆ Ask your employer about emergency procedures and be prepared to follow them in the event of chemical spill, fire or other emergency.

Preventive Maintenance for Vehicles

Most vehicle accidents are the result of operator error, but there are some that can be attributed to a defect in the vehicle such as worn tires, cracked windshields or bad brakes. A costly vehicle liability claim can be avoided through a timely repair job. Here are some basic preventive maintenance tips to consider for your vehicle safety program.

- ◆ Maintain a repair and maintenance file for each vehicle. The file should contain a schedule for regular maintenance (oil changes, tire rotation, etc.), inspection reports, work orders and documentation of work performed in-house, and invoices from outside repair shops. Vehicle mileage at each maintenance operation should also be recorded.
- ◆ Assign someone the responsibility to review vehicle maintenance logs regularly and order the scheduled maintenance.
- ◆ Make drivers responsible for inspecting their vehicles each day using a checklist.
- ◆ District policy should govern the use of vehicles that are taken home after work.
- ◆ Assign someone the responsibility of ordering repairs and following through to assure completion when defects become known.
- ◆ Keep the interiors of vehicle clean with all equipment being carried in the cab secured so it will not fly around during a sudden stop or collision.
- ◆ Thick accumulations of mud should be cleaned from fenders and wheel wells to prevent rocks and mud clods from damaging other vehicles. Any rocks jammed between dual wheels should

be removed immediately so they are not thrown out while your truck is in motion.

Hail

Spring in Texas can be beautiful and horrific on the same day as sudden changes in weather occur. Recently an outbreak of severe weather caused tornados, hail and flooding in large areas of north and northeastern Texas. Tornados are the most dangerous and destructive of the natural hazards facing most districts, but hail is a close second and much more widespread. Some of the largest claims paid by the Fund over the years have been hail claims that have devastated vehicles, roofs, windows and the walls of buildings. Property claims adjusters for the Fund have the following recommendations for members in the event of hail:

- ◆ Even fairly small hail can cause damage. Report any hail event to the Fund so we can have an expert examine your buildings and vehicles for damage.
- ◆ Contact the Property and Liability Claims Department of the Fund at 800-580-8922 first before you make any arrangements with roofers or auto repair shops. After a hail storm roofers flood the telephone lines and even go door to door promising new roofs, free upgrades, no deductibles and free estimates. Auto repair shops promise no deductibles and quick response that may be unrealistic.

The first step is to report the claim and allow the Fund to guide you through the process to make sure reputable and reliable roofers and auto repair shops do the repairs. Protect property from further damage. If the roof leaks or windshields are broken, protect contents from further water damage.

- ◆ If you can safely do so, get pictures of the hail and note the date and time of the event.
- ◆ Hail damage that is not visible initially can appear over time and cause a roof to leak months or years after the hail storm. If there is hail damage and a claim is paid, have the roof fixed. If a claim was paid but the repair was not done, future damage may not be covered.

Earthquake

Texas is not known as a very active earthquake zone, unlike large parts of the West Coast or the northern Rockies. However, there has been an alarming swarm of small earthquakes in the North Texas area that seem to be associated with the Barnett Shale oil and gas drilling boom. Several earthquakes in the range of 2.5 to 4.0 on the Richter scale have been experienced in the counties surrounding Fort Worth since 2008. On May 7, 2015 an earthquake registered 4.0 on the Richter scale and caused some minor damage in Mountain Creek about 35 miles southwest of Dallas. The current hypothesis about the cause of the quakes proposed in a study by SMU is that the re-injection of produced salt water and its extraction from producing wells is causing an increase in underground fluid pressure leading to slippage along



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old, inactive fault lines. Well fracking occurs over a very small area surrounding the well bore, but salt water disposal wells pump huge volumes of water thousands of feet underground into large formations. This can affect large areas as the salt water pushes out from the injection point. Most oil and gas wells in the Barnett Shale field produce up to 100 barrels of salt water per day along with hydrocarbons. This brine, several times saltier than sea water has no practical use and must be pumped back into the Ellenburger formation that is over 7,000 feet deep and lies below the Barnett Shale formation.

In response to the earthquake activity in North Texas Fund members have asked about coverage for earthquake damage to their buildings or facilities. Generally, the grant of coverage is “all risk of physical loss of or damage except as hereinafter excluded.” There is not a direct exclusion of damage from earthquake. Earth movement is defined as “any natural or man-made earth movement including but not limited to earthquake.” Damage because of fire, explosion, sprinkler leakage or flood because of earth movement is not considered to be loss due to earth movement. Other coverage language would apply in that case. An occurrence caused by earth movement is defined as the “sum total of all loss or damage” arising out of earth movement(s) during a continuous 72 hour period and includes “time element” coverage that can replace lost revenues due to the earthquake. There are several limitations and exclusions to various types of

property including:

- ◆ Above ground and Underground Pipelines
- ◆ Automatic Coverage
- ◆ Errors and Omissions Coverage
- ◆ Miscellaneous Personal Property Coverage
- ◆ Miscellaneous Unnamed Locations Coverage
- ◆ Off Premises Storage for Property Under Construction
- ◆ Personal Property Not at a Location
- ◆ Service Interruption Property Damage Coverage
- ◆ Time Element Coverages of Ingress/Egress
- ◆ Service Interruption Time Element Coverage

If you have additional questions about this coverage contact your Account Service Associate.

Sources: Fort Worth Star Telegram, Salt Water Disposal Wells, November 18, 2007, Natural Gas Intelligence Newsletter, April 21, 2015, Associated Press reports, May 7, 2015