Bulletin No. 4

FLOODPLAIN MANAGEMENT INFORMATION SERIES

Driving into Floodwaters: Is it worth the risk?

Published by the Oklahoma Water Resources Board

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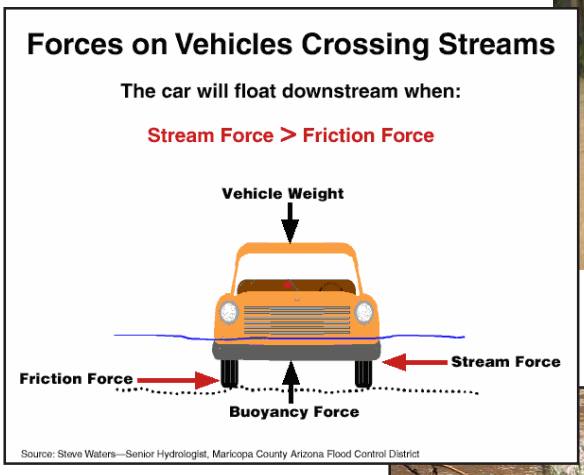
Driving into Floodwaters: Is it worth the risk?

Oklahoma is well-known for the awe-inspiring tornados that frequent the state each year. However, more deaths occur in an average year due to flooding than from any other natural hazard. Specifically, almost one-half of all flash flood fatalities occur in vehicles. While most Oklahomans respect the destructive potential of tornadic storms and go to great lengths to shelter themselves and their families from such disasters, most tend to underestimate the force and power of moving water.

Drivers with poor judgment attempt to navigate their vehicles through dangerous floodwaters. They drive around road barricades, into flooded underpasses, or through water flowing across a road.

Tragic Results of Driving into Floodwaters

- April 26, 1998—One adult and two children died as their car was swept off a road and down a tributary of Burris Creek in Pontotoc County.
- April 27, 1998—A man died as his car was swept off a low-water crossing over Fred Creek in southwest Tulsa, a crossing with permanent warning signs.
- June 20, 1999—A person died when his vehicle was swept off the road while attempting to cross a low-water bridge over a branch of Pryor Creek near Adair, Oklahoma.
- June 30, 1999—The driver of a pickup truck attempted to cross a marked low-water bridge over Evansville Creek in Adair County east of Stilwell, Oklahoma. He died when his truck was swept off the road into fast-moving waters. Fortunately, the passenger managed to swim to safety.
- May 2000—A Tulsa woman was killed after the car she was driving stalled in floodwaters.



When there is moving water on the roadway, your life may depend on remembering these facts:

Fact #1
It is often impossible to tell how deep the water is or if the road is even there. Floodwaters often scour deep holes and break huge chunks off paved surfaces.

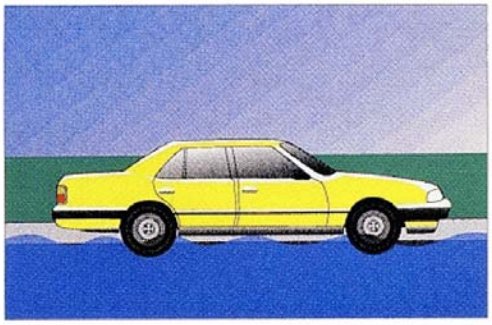
Fact #2
Just a foot or two of moving water over the roadway can provide the force to lift a car off the road and put the lives of its passengers in grave danger.

Fact #3
Accidents in floodwaters can happen to the best of drivers. Even if the car ahead of you makes it through safely, you may not.

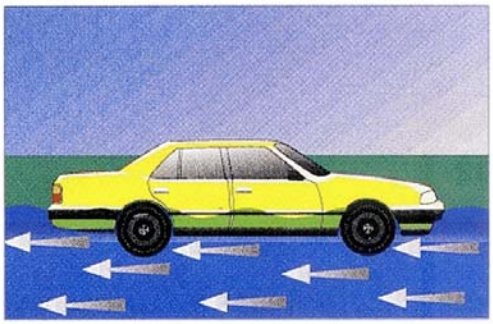
Fact #4
The faster you drive through water, the less contact your tires have with the road, making it easier to lose control of your vehicle.

Fact #5
Limited visibility makes floodwaters especially treacherous at night, increasing the vulnerability of the driver to hidden dangers.

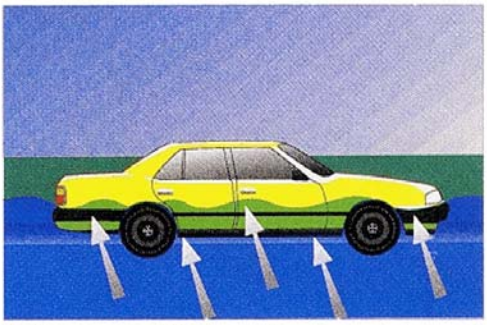
Fact #6
Drive with special care when it's raining. Turn back or choose an alternate route if you encounter moving water. Your life may depend on it.



Water weighs 62.4 lbs. per cubic foot and typically flows downstream at 6 to 12 miles an hour.



When a vehicle stalls in the water, the water's momentum is transferred ot the car. For each foot the water rises, 500 lbs. of lateral force is applied to the car.



But the biggest factor is buoyancy. For each foot the water rises up the side of the car, the car displaces 1,500 lbs. of water. In effect, the car weighs 1,500 lbs. less for each foot the water rises.

Two feet of water will carry away most automobiles.

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