

COLUMNS

Notes From SEFD – Fighting a Fire, Part Two: Driven by the Wind



by Eddie McArthur
April 4, 2024



A plane dumps fire retardant on the Elgin Bridge Fire in 2022. Photo by Marion Vendituoli

[\(Read “Fighting a Fire Part 1” here.\)](#)

May 23, 2022, 10:42 AM, [Sonoita Elgin Fire District](#) was “toned out” (called out via 911) to a fire near the Elgin Bridge. An engine, a brush truck and a tender responded with a total of 6 personnel and the Fire Chief as Incident Commander (IC). Temps in the mid 80s,

humidity below 10%, and 10 mph winds gusting to over 20 mph set the scene for rapid spread of fire. Upon arrival what had been a small roadside fire was already spreading with flames four to six feet high, fire “running” in the grass and spreading to brush and trees.

The three requirements for fire—fuel, heat and oxygen—were in more than ample supply. Ongoing windy conditions and reduced humidity had left the fuel sources (grass, brush and trees) in a very dry and flammable condition. Once the initial source of ignition occurred, the fire began to supply its own heat. Continued wind with gusts nearing 30 mph pushed the fire forward, supplying oxygen. These are the conditions that lead to unpredictable fire behavior.

The IC called in additional resources from other agencies. Arizona State Forestry was called immediately, and calls quickly went out to Patagonia Volunteer Fire & Rescue and the Whetstone Fire District. Santa Cruz County Sheriff’s office automatically showed up to assist. Temperatures continued to rise and humidity to drop. Firefighters battled the spreading blaze as wind speeds increased, reaching 18 mph sustained winds gusting to 28 mph. The IC made a call to evacuate properties on Mustang Ranch Rd., and to make a Declaration of Need to the State. AZ Department of Forestry and Fire Management (DFFM) arrived and began to stage two divisions of firefighters. Other local resources arrived and were assigned. Unified command between DFFM and SEFD was established.

The fire footprint and complexity increased rapidly and the incident was upgraded to type 3. The fire had by now grown to threaten power lines on State land. The Department of Forestry and DFFM assumed command and called in air resources to drop retardant. SEFD continued to assist and kept an ambulance on standby.

Evacuation notices were given along Mustang Ranch Rd., though by then the fire had moved on past that area and no actual evacuations occurred. Coordinated firefighting efforts continued and SEFD was released at around 8:30 that evening. Our ambulance remained on medical detail until finally released on day two.

This particular fire was a great example of cooperation between agencies, with a seamless transition to State & Federal control. No structures were lost and no injuries occurred, but valuable grazing land was burned. We were very fortunate this day, especially given the conditions.