# Wallow Fire Impacts on Fish Populations Arizona Game and Fish Department Survey Results September-October 2011

### **Rivers and Streams with High Impact**

Bear Creek – Most fish (brown trout) killed throughout stream (possible complete kill, no fish found)
Bear Wallow Creek (Apache trout recovery stream) – Most fish (Apache trout) killed throughout stream (possible complete kill, no fish found); Habitat looks relatively intact; Barriers relatively intact
Black River – Most fish (brown trout, dace, suckers) killed downstream of Beaver Creek; Habitat looks relatively intact; Should recover quickly

**Buckelou Creek** (Gila trout candidate stream) – Most fish killed throughout, no fish collected **Colter Creek** – Most fish (hybrid rainbow-Apache trout) killed throughout stream (possible complete kill, no fish found); Habitat looks relatively intact

**Fish Creek** (Apache trout recovery stream) – Most fish (Apache trout) killed throughout stream; Habitat severely impacted; fish barrier blown out; Loss of canopy cover in upper reaches

**Hannagan Creek** (Apache trout stream, nonrecovery) – Most fish killed throughout stream (possible complete kill, no fish found); Habitat impacted in upper and middle reaches

**KP Creek** (Gila trout candidate stream) – Most fish (hybrid rainbow-Apache trout) killed throughout stream, only two live trout collected in extreme headwaters; Habitat severely impacted throughout most of stream; Barrier intact

**Lower East Fork Little Colorado River (LCR)** – Most fish (brown trout) killed in short lower reach just above Church Camp in Greer; Habitat severely impacted for short reach

**Lower Grant Creek** (Gila trout candidate stream) – Most fish (hybrid rainbow-Apache trout) killed throughout lower reaches, no fish found in lower surveys; Habitat looks relatively intact

**Paddy Creek** – Most fish (hybrid rainbow-Apache trout) killed throughout stream (possible complete kill, no fish found); Habitat looks relatively intact

Raspberry Creek (Gila trout recovery stream) – Most fish killed throughout stream (possible complete kill, no Gila trout found); Moderate impact to habitat, many pools filled in; Barrier intact

Snake Creek – Most fish killed throughout stream

**South Fork LCR** (Apache trout recovery stream) – Most fish (Apache trout) killed throughout, only three trout collected; Barriers intact; Habitat relatively intact

**Upper Coleman Creek** (Gila trout candidate stream) – Most fish (Apache trout) killed in upper reaches above barrier falls (possible complete kill, no fish found); Habitat severely impacted, scoured to bedrock in some places

**Upper Nutrioso Creek** – Most fish (spinedace, dace, suckers, fathead minnows, green sunfish) killed from headwaters to Nelson Reservoir, no fish (hybrid rainbow-Apache trout) found upstream of Nutrioso, no spinedace collected; Habitat severely impacted upstream of Nutrioso

**Upper Rudd Creek** – Most fish (brook trout) killed throughout upper reaches, moderate density of brook trout found in very short reach of headwaters, no trout below that down to Sipe Wildlife Area

## **Rivers and Streams with Moderate Impact**

Beaver Creek – Lower numbers of fish collected, but most species present

**Castle Creek** – Brown trout impacted in upper reaches and lower reaches, moderate numbers collected in middle reach

**Hayground Creek** (Apache trout recovery stream) – Lower numbers of fish collected, but all species present

Lower Coleman Creek - Native fishes in good numbers, but no young fish, no brown trout collected

**Lower West Fork Black River** (Apache trout candidate stream/reach) – Lower numbers of fish collected, but all species present in variety of size classes; Habitat relatively intact

Middle LCR – Lower numbers of all species collected, but all present, spinedace in low numbers

### **Rivers and Streams with Low Impact**

Boneyard Creek - Fish densities good

**Coyote Creek** – Fish densities good in lower reaches, unknown in upper reaches

**East Fork Black River** – Fish densities good for most species (dace, suckers), young-of-year brown trout impacted in lower reaches, juvenile and adult brown trout okay, all brown trout okay in upper reaches, no loach minnow found; Habitat looks relatively intact

**Lower Nutrioso Creek** – Fish densities good downstream of Nelson Reservoir, no spinedace collected **Lower Rudd Creek** – Fish densities good downstream of Sipe Wildlife Area, spinedace in good numbers **North Fork East Fork Black River** – Fish densities good

Reservation Creek - Fish densities good

Soldier Creek (Apache trout recovery stream) - Fish densities very good; Barrier intact

Stinky Creek (Apache trout recovery stream) – Fish densities good; Barrier intact

**Upper East Fork LCR** (Apache trout recovery stream) – Fish densities good through middle and upper reaches

**Upper Grant Creek** (Gila trout candidate stream) – Fish densities (hybrid rainbow-Apache trout) good in upper reach

**Upper Little Colorado River** – Fish densities (brown trout) good through Greer Valley and downstream of River Reservoir to South Fork confluence, including X-Diamond Ranch

**Upper West Fork Black River** (Apache trout recovery stream above barriers) – Densities of all species good; Barriers intact

West Fork LCR (Apache trout recovery stream) – Fish densities very good throughout

# **Lakes**

Ackre Lake – Total loss, nearly drained during fire suppression, resulted in fish kill

Big Lake – No impact, very small watershed; Concession intact

**Bunch Reservoir** – No impact, located off channel of LCR, no ash flows

Crescent Lake – No impact, very small watershed

**Hulsey Lake** – Total loss, drained prior to monsoon rains to buffer flood flows from Escudilla Mountain, expected to fill with sediment

**Luna Lake** – Moderate fish kill reported prior to monsoon rain, not related to fire, concerned about nutrient loading

Nelson Reservoir - Moderate fish kill in July, great fish in fall, concerned about nutrient loading

River Reservoir – No fish kill reported, concerned about nutrient loading

**Tunnel Reservoir** – No impact, located off channel of LCR, no ash flows

#### Outside of fire area, no impact

Lee Valley Lake, Carnero Lake, Becker Lake

Fort Apache Indian Reservation streams and lakes (except for Black River)

Streams surveyed by others – Blue River, Campbell Blue River, Eagle Creek