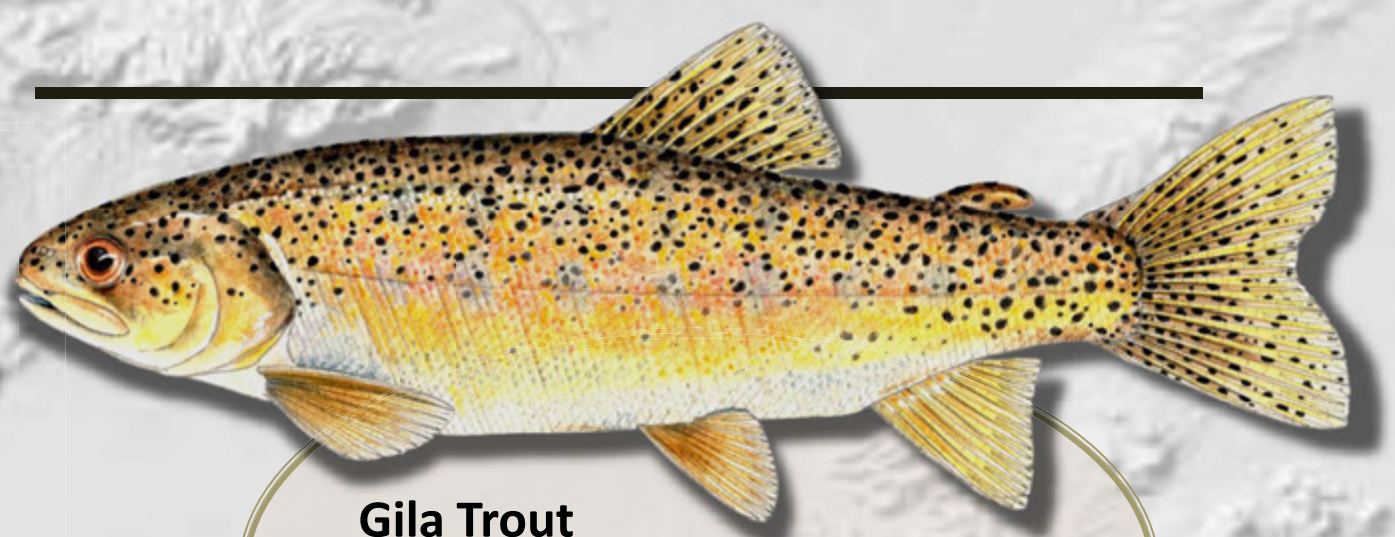


# NATIVE FISHES OF THE GILA RIVER BASIN, NEW MEXICO



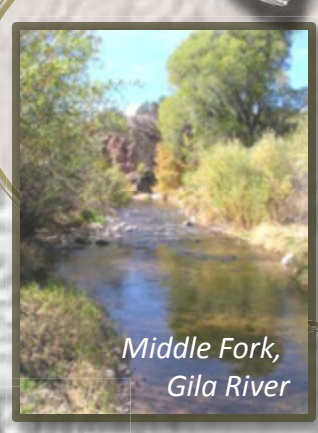
**Loach minnow**  
*Tiaroga cobitis*



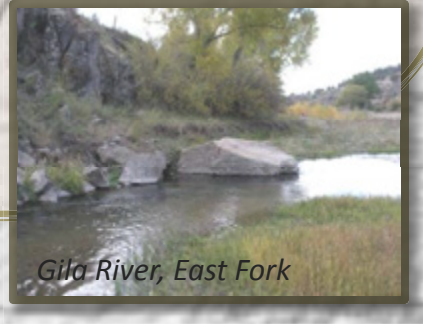
**Gila Trout**  
*Oncorhynchus gilae*



**Longfin Dace**  
*Agosia chrysogaster*



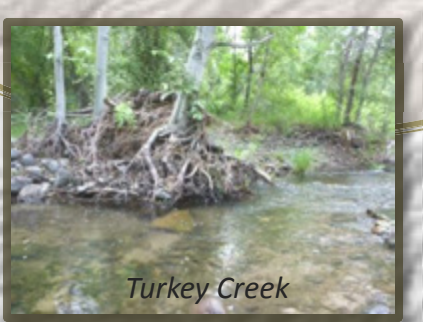
**Headwater Chub**  
*Gila nigra*



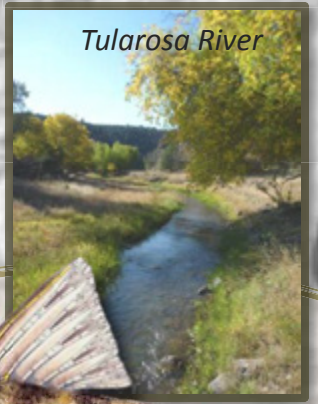
**Speckled Dace**  
*Rhinichthys osculus*



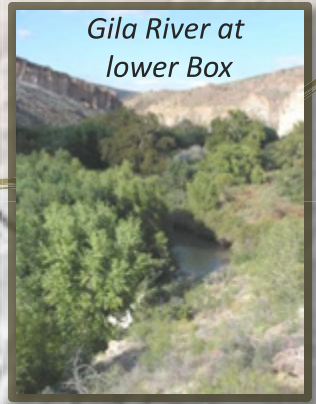
**Gila chub**  
*Gila intermedia*



**Spikedace**  
*Meda fulgida*



**Roundtail Chub**  
*Gila robusta*



**Desert Sucker**  
*Catostomus pantosteus clarkii*



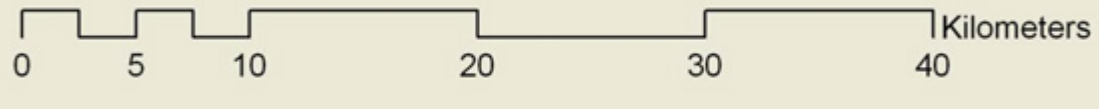
**Sonora Sucker**  
*Catostomus insignis*



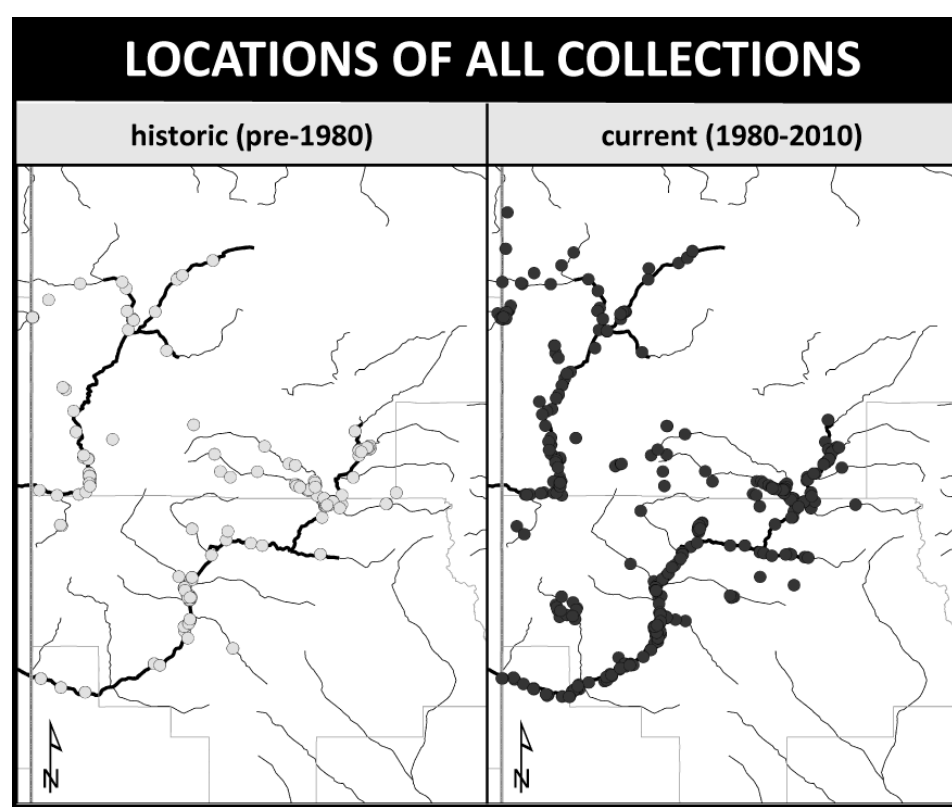
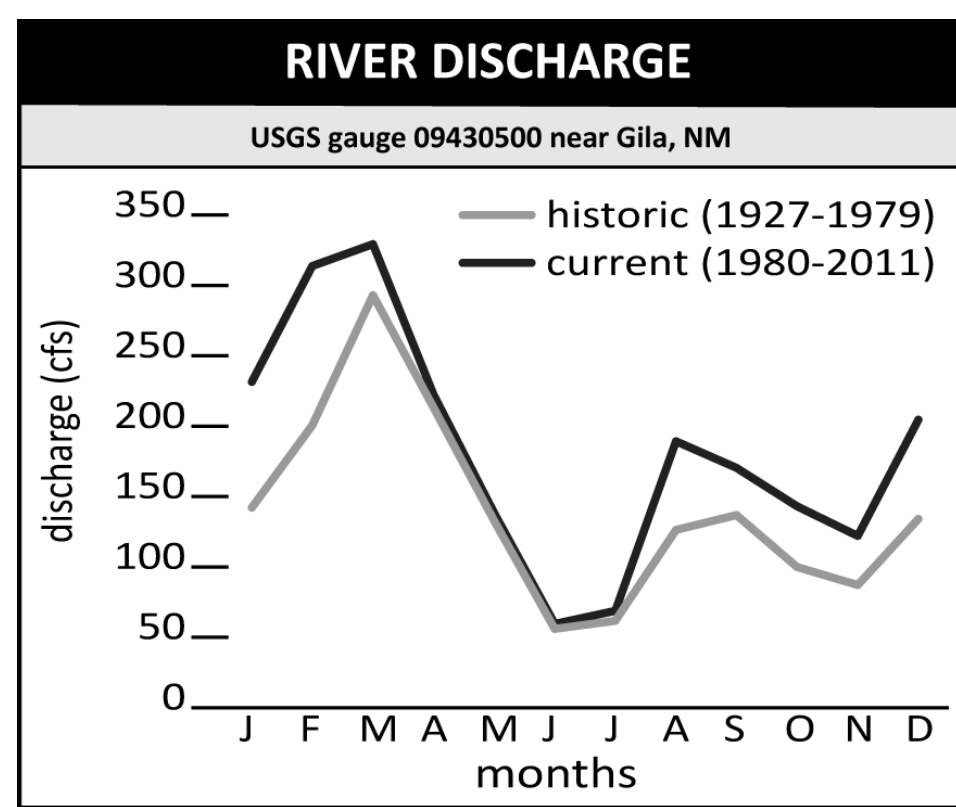
Arizona  
New Mexico



New Mexico Department of Game and Fish  
Share With Wildlife







# Native fishes of the Gila River Basin, NM

## New Mexico's last free-flowing river

The Gila River Basin in New Mexico is composed of two major rivers, Gila and San Francisco Rivers. The headwaters of both rivers are found at high elevations in the Mogollon Mountains. Headwater streams of the Gila River form the river's West, Middle, and East forks. The rivers and creeks of the Gila Basin flow through vast forested wilderness, deep rocky canyons, and desert grasslands. Increasing water demands threaten this unique system. Fortunately, there are numerous conservation entities working hard to preserve this pristine wilderness and the fauna and flora that depend on it. Find out more at: [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us), [www.fs.usda.gov/gila/](http://www.fs.usda.gov/gila/), [www.gilaconservation.org](http://www.gilaconservation.org).

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### DEFINITIONS OF TERMS AND SYMBOLS

length	
SL:	Standard length (tip of snout to base of caudal fin)
TL:	Total length (tip of snout to end of caudal fin)
stream type	
	intermittent
	small
	moderate
	large
substrate	
	silt and sand
	gravel
	cobble
food resources	
	fish
	zooplankton
	insects
	algae
	aquatic vegetation
	non-insects
	detritus
flow type	
	backwater
	off channel, zero velocity habitat
	pool
	run
	riffle

Longfin Dace	
<i>Agosia chryso-gaster</i>	
max. length	lifespan
65mm SL	3 years
Federal status	State status
not listed	limited protection
stream type	
substrate	
food resources	
microhabitat	cool mountain brooks to intermittent mountain streams; low elevation
spawning period	J F M A M J J A S O N D
life history	saucer-shaped depressions used as nest; sexual maturity within first year
threats	non-native fish hybridization habitat change
conservation efforts	long term fish community monitoring

Gila chub	
<i>Gila intermedia</i>	
max. length	lifespan
200mm TL	3 years
Federal status	State status
endangered	endangered
stream type	
substrate	
food resources	
microhabitat	pool habitats in streams and cienegas; cover (e.g. vegetation, boulders, logs)
spawning period	J F M A M J J A S O N D
life history	adults crepuscular feeders; young are active during the day
threats	non-native fish hybridization habitat change
conservation efforts	habitat restoration; re-establishing populations in historic areas; exclusion of non-native piscivores

Headwater Chub	
<i>Gila nigra</i>	
max. length	lifespan
500mm TL	8-10 years
Federal status	State status
candidate	endangered
stream type	
substrate	
food resources	
microhabitat	prefers pools with cover (e.g. boulders, uprooted trees, undercut banks)
spawning period	J F M A M J J A S O N D
life history	females escorted by several males; eggs scattered over substrate
threats	non-native fish hybridization habitat change
conservation efforts	habitat restoration; re-establishing populations in historic areas; exclusion of non-native piscivores

Roundtail Chub	
<i>Gila robusta</i>	
max. length	lifespan
500mm SL	check
Federal status	State status
species of concern	endangered
stream type	
substrate	
food resources	
microhabitat	prefers pools with cover (e.g. boulders, uprooted trees, undercut banks)
spawning period	J F M A M J J A S O N D
life history	adhesive eggs laid in gravel or cobble substrates/spawn in riffles or pool-riffles
threats	non-native fish hybridization habitat change
conservation efforts	reduce non-native populations; maintain habitat; interstate conservation plan (Three Species Agreement)

Spikedace	
<i>Meda fulgida</i>	
max. length	lifespan
75mm TL	1-2 years
Federal status	State status
endangered	endangered
stream type	
substrate	
food resources	
microhabitat	clear water with permanent flow; intermediate elevations
spawning period	J F M A M J J A S O N D
life history	eggs demersal & adhesive; larvae drift in stream; first two dorsal fin rays fused
threats	non-native fish hybridization habitat change
conservation efforts	population monitoring; exclusion of non-native piscivores; investigations into captive rearing; critical habitat designated

Speckled Dace	
<i>Rhinichthys osculus</i>	
max. length	lifespan
70mm TL	2-3 years
Federal status	State status
not listed	limited protection
stream type	
substrate	
food resources	
microhabitat	headwater streams; shallow, rocky; swift flow
spawning period	J F M A M J J A S O N D
life history	males build nests and exhibit territoriality; eggs demersal and adhesive
threats	non-native fish hybridization habitat change
conservation efforts	long-term fish community monitoring

Loach Minnow	
<i>Tiaroga cobitis</i>	
max. length	lifespan
60mm SL	2 years
Federal status	State status
endangered	endangered
stream type	
substrate	
food resources	
microhabitat	riffle; fast velocity water
spawning period	J F M A M J J A S O N D
life history	adhesive eggs deposited under flat cobble; older fish occupy faster water
threats	non-native fish hybridization habitat change
conservation efforts	maintain free-flowing, unaltered streams including flooding to maintain non-natives and to move sediment

Sonora Sucker	
<i>Catostomus insignis</i>	
max. length	lifespan
310 mm SL	8-10 years
Federal status	State status
species of concern	sensitive
stream type	
substrate	
food resources	
microhabitat	warm and cold water habitats; habitat generalist
spawning period	J F M A M J J A S O N D
life history	eggs deposited in riffles - incubate in interstices between gravel; larvae drift
threats	non-native fish hybridization habitat change
conservation efforts	long term fish community monitoring

Desert Sucker	
<i>Catostomus pantosteus clarkii</i>	
max. length	lifespan
325mm TL	8-10 years
Federal status	State status
species of concern	sensitive
stream type	
substrate	
food resources	
microhabitat	rapids and flowing pools of streams; gravel-rubble, sandy silt in interstices
spawning period	J F M A M J J A S O N D
life history	juveniles gather in pools near the bank; specialized mouthparts for scraping algae
threats	non-native fish hybridization habitat change
conservation efforts	long-term fish community monitoring

Gila Trout	
<i>Oncorhynchus gilae</i>	
max. length	lifespan
250mm SL	3-5 years
Federal status	State status
threatened	threatened
stream type	
substrate	
food resources	
microhabitat	clear runs (narrow and shallow) or pool habitat in small mountain streams
spawning period	J F M A M J J A S O N D
life history	redds of small pebbles and gravel; females produce up to 200 eggs
threats	non-native fish hybridization habitat change
conservation efforts	stocking of non-native trout eliminated; habitat improvement; restoration of populations to dedicated stream reaches

Gila Topminnow	
<i>Poeciliopsis occidentalis occidentalis</i>	
max. length	lifespan
40mm SL	1 year
Federal status	State status
endangered	threatened
stream type	
substrate	
food resources	
microhabitat	stream shoreline: low velocity, shallow water
spawning period	J F M A M J J A S O N D
life history	viviporous; tolerant of very high salinity and water temperature
threats	non-native fish hybridization habitat change
conservation efforts	extirpated in New Mexico and re-established by NMDGF (1988-1989)