

State of California
Department of Fish and Wildlife

Memorandum

Date: January 17, 2020

To: Sarah Mussulman
Sierra Fisheries Supervisor
Department of Fish and Wildlife
North Central Region

From: Mitch Lockhart
Environmental Scientist
Department of Fish and Wildlife
North Central Region

Subject: Resource Assessment at Cody Lake, El Dorado County

Cody Lake (Lake ID 14462), El Dorado County, is a small lake which drains to Cody Creek and the South Fork American River (**Figure 1**). It is accessed via a short, one-mile hiking trail. Scouts of America maintain a cabin at the lake and use it throughout the summer for scout activities. California Department of Fish and Wildlife (CDFW) actively aerially stocks Cody Lake with fingerling rainbow trout (*Oncorhynchus mykiss*; RT) and brown trout (*Salmo trutta*; BN). In addition, golden shiner (*Notemigonus crysoleucas*; GSH; **Figure 2**) minnows are known to be present. The lake is known as a productive put-and-grow fishery, producing RT and BN in good body condition (**Figures 3 & 4**).

On August 20, 2019, two CDFW Scientific Aids conducted a Visual Encounter Survey (VES) of Cody Lake to determine if any special status diurnal herpetofauna occur

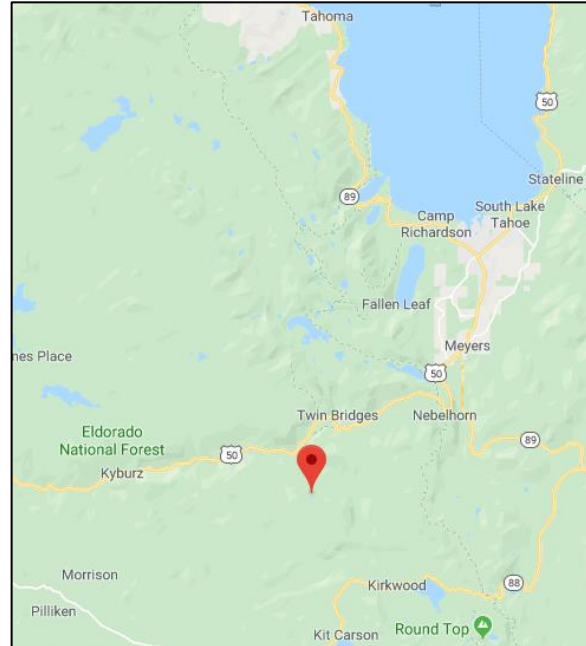


Figure 1. Map indicating the location of Cody Lake, El Dorado Co. (Red Pin) in relation to Lake Tahoe (Google Maps, retrieved 17 Oct. 2019).



Figure 2. Example of golden shiner minnow present in Cody Lake (Mamola 2018).



Figure 3. Example of put-and-grow rainbow trout present in Cody Lake (Mamola 2018).



Figure 4. Example of brown trout present in Cody Lake (Mamola 2018).

at Cody Lake that would preclude the lake from being aurally planted. The VES began at 2:50 pm under clear skies, light wind, and an air temperature of 23° C. The survey concluded at 3:18 pm for a total survey effort of 53 minutes. No herpetofauna were observed. The outlet was dry when the survey was conducted.

The Scientific Aids spent one-hour hook-and-line sampling the lake. Large aggregates of minnows were observed in the shallows. The only fish landed was a 4-inch Lahontan redbreast (*Richardsonius egregius*; LRS). This is the first observation of LRS at Cody Lake, however fish identification was not certain and LRS presence has yet to be independently confirmed.

The absence of special status herpetofauna and the presence of self-sustaining forage fish in high densities suggests Cody Lake continues to be suitable for put-and-grow sports fish management. The observed low catch rate of trout during this survey and while angling in 2018 (Lockhart 2018) is further supported by anecdotal angling reports (Mamola pers. comm.). Seasonality is an important variable for angling success; however, the available forage and unoccupied habitat suggest Cody Lake is suitable for increased allotments and/or increased stocking frequency compared to historic allotments (**Table 1**).

Table 1. CDFW Fingerling Stocking History at Cody Lake, El Dorado Co.

Year	Species	Number	Year	Species	Number
1950	BK	2,000	1978	BK	960
1951	BK	2,000	1979	BK	1,007
1952	BK	2,016	1980	BK	990
1953	BK	2,002	1982	KS	500
1954	BK	2,000	1983	BK	520
1955	BK	2,000	1983	BK	520
1957	BK	2,016	1985	BK	1,000
1958	BK	2,000	1986	BK	1,050
1960	BK	1,980	1987	BK	1,000
1964	BK	1,960	1988	BK	1,000
1965	BK	1,800	1989	BK	1,200
1966	BK	1,980	1990	BK	1,200
1967	BK	2,000	1992	BK	1,000
1968	BK	1,000	1993	BK	1,000
1969	RT	936	1994	BK	1,000
1970	RT	2,048	1996	BK	800
1971	BK	2,000	1997	BK	1,000
1972	BK	1,932	1998	BK	1,000
1973	BK	704	1999	BK	1,000
1974	BK	1,008	2000	BN	2,100
1975	BK	990	2017	BN	2,000
1976	BK	1,000	2017	RT	3,000
1977	BK	1,030	2018	RT	2,000



Photo 1. Overview photo of Cody Lake looking east.

CDFW High Mountain Lakes - Amphibian and Reptile Visual Encounter Survey Data Sheet

Site ID: 14462	Date: 8/20/19	SKY: Clear	Partly Cloudy	Mostly Cloudy	Over-cast	Rain	Snow	Smoke	WIND: Calm	Light	Moderate	Strong
Topo Name: (1:24,000)	County: El Dorado	Elevation: m ft	If not surveyed, provide reason:			Private Property	Frozen	Not Found	No Access			
Surveyors: L. Mitchem, C. Hettrick			Water Type: Lake			Unmapped pond	Marsh/ meadow	Spring seep	Stream (Skip to "STREAMS" on pg. 2)			
Lake Name: (from map) Cody Lake	East UTM:	North UTM:	UTM Zone:									
Color: Clear Stained	Turbidity: Clear Cloudy	Water (.5 m from shore, Temp 10cm deep): 22 @ 1446	0 or F	Air (1 m above water): 23 @ 1445	0 or F	Seasonality: Perennial		Currently Dry? Yes				
Survey START time: 1450	Survey END time: 1518	Total survey duration (min): 53	HERPS SEEN? YES NO	FISH SEEN? YES NO	Seasonality: Ephemeral		Currently Dry? No					
*FOR LAKES/PONDS/MEADOWS: ALSO SURVEY FIRST 200 m OF INLETS AND OUTLETS. RECORD DATA SEPARATELY IN THE "STREAMS" SECTION ON PG. 2												
HERP SPECIES	# adults	# subadults	# metamorphs	# larvae	# egg m.	# swabs	Survey Method					
Calling? Y N							Visual	Trapped				
							Aural	Hand Collected				
							Amp Net	Incidental				
Calling? Y N							Visual	Trapped				
							Aural	Hand Collected				
							Amp Net	Incidental				
Calling? Y N							Visual	Trapped				
							Aural	Hand Collected				
							Amp Net	Incidental				
Calling? Y N							Visual	Trapped				
							Aural	Hand Collected				
							Amp Net	Incidental				
FISH SPECIES (circle species seen, if known): BK (brook trout), BN (brown trout), CT (cutthroat trout), GT (golden trout), RT (rainbow trout) HYBRID (e.g., GT x RT), OTHER (e.g., minnows)												
Amphibians: S. Long-toed Salamander (AMMA); Yosemite Toad (ANCA, fmlly BUCA); Sierra Treefrog (HYSI, fmlly PSRE or HYRE); Sierra Nevada Yellow-legged Frog (RASI)												
Amph. less common in HML: CA Toad (ANBO, fmlly BUBO); Bullfrog (RACT); Cascades Frog (RACA); CA Red-legged Frog (RADR); Sierra Newt (TASI, fmlly TATO)												
Reptiles: Sierra Gartersnake (THCO); Mountain Gartersnake (THEL); Valley Gartersnake (THSI); Western Pond Turtle (EMMA, fmlly CLMA)												

PHOTOS	Photo Number	Camera	Time	Date (yyyy-mm-dd)	UTM E	UTM N	Comments
Overview	1459	LVC		2019-08-20			From NW boulders facing SE
Herps							
Other	1657	LVC					Inlet Start
	1656	LVC					Inlet End
	1509	LVC					Outlet Start
	1534	LVC					Outlet End

SITE SKETCH:	NOTES: Fingerting forage fish and redside present. Inlet and outlet both currently dry, but geomorphology suggests streambed during times of high flow.
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PLEASE Return to: Isaac Chelman, California Department of Fish and Wildlife, (916) 358-4038; 1701 Nimbus Rd., Rancho Cordova, CA 95670

Field review	Copied	Entered	Proofed
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Figure 5. VES data sheet from a survey conducted on Aug. 20, 2019, at Cody Lake, El Dorado County.

STREAM									
Inlet/Outlet (circle one) # <u>1</u>		Stream Type: Perennial Ephemeral		Stream Currently Dry? <u>Y</u> N		Intermittent? Y N			
Start UTM E: <u>0748278</u>		UTM N: <u>4293882</u>		End UTM E: <u>0748281</u>		UTM N: <u>4293868</u>		Color: Clear Stained NA	
Start Time:		End Time:		Duration (min):		Water Temp:		Air Temp:	
Fish present? <u>Y</u> <u>N</u>		Barrier 1) Photo #'s:		UTM E:		UTM N:		Description:	
Herps present? <u>Y</u> <u>N</u>		Barrier 2) Photo #'s:		UTM E:		UTM N:		Description:	
Spawning evidence? <u>Y</u> <u>N</u>		Barrier 3) Photo #'s:		UTM E:		UTM N:		Description:	
Spawning / Redds / Fry / None									
Inlet/Outlet (circle one) # <u>1</u>		Stream Type: Perennial Ephemeral		Stream Currently Dry? <u>Y</u> N		Intermittent? Y N			
Start UTM E: <u>0748275</u>		UTM N: <u>4294129</u>		End UTM E: <u>0748286</u>		UTM N: <u>4294162</u>		Color: Clear Stained NA	
Start Time:		End Time:		Duration (min):		Water Temp:		Air Temp:	
Fish present? <u>Y</u> <u>N</u>		Barrier 1) Photo #'s:		UTM E:		UTM N:		Description:	
Herps present? <u>Y</u> <u>N</u>		Barrier 2) Photo #'s:		UTM E:		UTM N:		Description:	
Spawning evidence? <u>Y</u> <u>N</u>		Barrier 3) Photo #'s:		UTM E:		UTM N:		Description:	
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Inlet/Outlet (circle one) #		Stream Type: Perennial Ephemeral		Stream Currently Dry? Y N		Intermittent? Y N			
Start UTM E:		UTM N:		End UTM E:		UTM N:		Color: Clear Stained NA	
Start Time:		End Time:		Duration (min):		Water Temp:		Air Temp:	
Fish present? <u>Y</u> <u>N</u>		Barrier 1) Photo #'s:		UTM E:		UTM N:		Description:	
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Inlet/Outlet (circle one) #		Stream Type: Perennial Ephemeral		Stream Currently Dry? Y N		Intermittent? Y N			
Start UTM E:		UTM N:		End UTM E:		UTM N:		Color: Clear Stained NA	
Start Time:		End Time:		Duration (min):		Water Temp:		Air Temp:	
Fish present? <u>Y</u> <u>N</u>		Barrier 1) Photo #'s:		UTM E:		UTM N:		Description:	
Herps present? <u>Y</u> <u>N</u>		Barrier 2) Photo #'s:		UTM E:		UTM N:		Description:	
Spawning evidence? <u>Y</u> <u>N</u>		Barrier 3) Photo #'s:		UTM E:		UTM N:		Description:	
Spawning / Redds / Fry / None									
HERP SPECIES	In/Outlet #	# adults	#subadults	#metamorphs	larvae	#egg m.	#swabs	Survey Method	
	(circle one) #							Visual	Trapped
	IN							Aural	Hand Collected
Calling? Y N	OUT							Amp Net	Incidental
	(circle one) #							Visual	Trapped
	IN							Aural	Hand Collected
Calling? Y N	OUT							Amp Net	Incidental
	(circle one) #							Visual	Trapped
	IN							Aural	Hand Collected
Calling? Y N	OUT							Amp Net	Incidental
	(circle one) #							Visual	Trapped
	IN							Aural	Hand Collected
Calling? Y N	OUT							Amp Net	Incidental

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Herp Data Sheet, pg. 2 of 2

Figure 5, Con't. VES data sheet from a survey conducted Aug. 20, 2019, at Cody Lake, El Dorado County.