

State of California
Department of Fish and Wildlife

Memorandum

Date: 7/27/2018

To: Sarah Mussulman
Senior Environmental Scientist
Department of Fish and Wildlife
North Central Region

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

Subject: Gillnet Survey and Visual Encounter Survey at Dardanelles Lake, El Dorado County

Dardanelles Lake, El Dorado County, is within the Lake Tahoe basin and is part of the Upper Truckee Lahontan Cutthroat Trout Restoration Expansion Area. In 2012, the USDA Forest Service, Lake Tahoe Basin Management Unit began non-native brook trout removal at Dardanelles Lake using gill nets and backpack electrofishers. A total of 453 brook trout were removed and no fish have been caught in Dardanelles Lake since the 2013/2014 winter gill net set. With brook trout eradicated from the lake, Lahontan cutthroat trout can be introduced.

To introduce Lahontan cutthroat trout to Dardanelles Lake, CDFW will aurally plant the lake with fingerling-sized trout annually until such time a self-sustaining population is established. CDFW is required to evaluate potential impacts or conflicts to existing management prior to stocking fish. The Pre-Stocking Evaluation must rely upon data that is no older than five years old. As a result, CDFW conducted a gill net survey and visual encounter survey to collect information on the current fish, amphibian, and reptile populations at Dardanelles Lake to be used in a CDFW Pre-Stocking Evaluation.

On June 11, 2018 at 18:15, Mitch Lockhart, CDFW Environmental Scientist, and two CDFW scientific aides set a five panel, monofilament gill net at Dardanelles Lake. The net was pulled the following morning on June 12, 2018 at 8:50. No fish were captured during the gill net survey, confirming the LTBMU conclusion that Dardanelles Lake is currently fishless.

On June 28, 2018, Mitch Lockhart and one seasonal aid conducted a visual encounter survey at Dardanelles Lake from 12:00 to 13:45 looking for diurnal amphibians and reptiles. The survey included the perimeter of the lake, 200 meters of the inlet stream, and 200 meters of the outlet stream. During the survey, approximately 330 Pacific tree frog (*Pseudacris regilla*) larvae and three adult mountain garter snakes (*Thamnophis elegans*) were observed near the outlet. The inlet stream was dry and the outlet stream was intermittent and drying. No fish were seen during the duration of the survey.

Because of the fishless condition at Dardanelles Lake and the absence of special status species, Dardanelles Lake may be included in the aerial stocking program to receive Lahontan cutthroat trout fingerlings without unduly influencing other species or ecosystem functions.



Upper shoreline view of Dardanelles Lake (6/12/2018).



Google Earth image of Dardanelles Lake (retrieved 8/6/2018).

AMPHIBIAN AND REPTILE SURVEY DATA SHEET - 2017

Site ID: 14460	Date: Jun 29 2018	SKY: <input checked="" type="radio"/> Clear <input type="radio"/> Partly Cloudy <input type="radio"/> Mostly Over-Cloudy <input type="radio"/> Rain <input type="radio"/> Snow <input type="radio"/> Smoke	WIND: <input type="radio"/> Calm <input checked="" type="radio"/> Light <input type="radio"/> Moderate <input type="radio"/> Strong
Topo Name: (1:24,000)	County: El Dorado	Elevation: 7,750 m (ft)	If not surveyed, provide reason: <input checked="" type="checkbox"/> Lake <input type="checkbox"/> Unmapped pond <input type="checkbox"/> Marsh/meadow <input type="checkbox"/> Spring seep <input type="checkbox"/> Stream (Skip to "STREAMS" below) <input type="checkbox"/> Private Property <input type="checkbox"/> Frozen <input type="checkbox"/> Not Found <input type="checkbox"/> No Access
Surveyors: M Lockhart S Harris TKASH A Lopez		Water Type:	
Lake Name: (from map) Dardanelles LK	East UTM:	North UTM:	UTM Zone:
Color: <input checked="" type="radio"/> Clear <input type="radio"/> Stained	Water (.5 m from shore, Temp 10cm deep):	C or F	Air (1 m above water):
Turbidity: <input checked="" type="radio"/> Clear <input type="radio"/> Cloudy			
Survey START time: 1200	Survey END time: 1345	Total survey duration (min): 200	HERPS SEEN? <input checked="" type="radio"/> YES <input type="radio"/> NO
			FISH SEEN? <input checked="" type="radio"/> YES <input type="radio"/> NO

*FOR LAKES/PONDS/MEADOWS: ALSO SURVEY FIRST 200 m OF ALL INLETS AND OUTLETS. RECORD DATA SEPARATELY IN THE "STREAMS" SECTION BELOW.

Species	# adults	# subadults	# metamorphs	# larvae	# egg m.	# swabs	Survey Method
HYRE	0	0	0	330	0	0	Visual Trapped Aural Hand Collected Amp Net Incidental
Calling? <input checked="" type="radio"/> Y <input type="radio"/> N							
THEL	3	0	0	0	0	0	Visual Trapped Aural Hand Collected Amp Net Incidental
Calling? <input checked="" type="radio"/> Y <input type="radio"/> N							
							Visual Trapped Aural Hand Collected Amp Net Incidental
Calling? <input type="radio"/> Y <input checked="" type="radio"/> N							
							Visual Trapped Aural Hand Collected Amp Net Incidental
Calling? <input type="radio"/> Y <input checked="" type="radio"/> N							

STREAM

<input checked="" type="radio"/> Inlet <input checked="" type="radio"/> Outlet (circle one) # 4	Stream Type: <input type="radio"/> Perennial <input checked="" type="radio"/> Ephemeral	Stream Currently Dry? <input checked="" type="radio"/> Y <input type="radio"/> N	Intermittent? <input type="radio"/> Y <input checked="" type="radio"/> N
Start E UTM: _____ N UTM: _____	End E UTM: _____ N UTM: _____	Color: <input type="radio"/> Clear <input type="radio"/> Stained <input checked="" type="radio"/> NA	Turbidity: <input type="radio"/> Clear <input type="radio"/> Cloudy <input checked="" type="radio"/> NA
Start Time: _____ End Time: _____ Duration (min): _____	Water Temp: _____ Air Temp: _____	Herps Present? <input checked="" type="radio"/> YES <input type="radio"/> NO	
<input checked="" type="radio"/> Inlet <input checked="" type="radio"/> Outlet (circle one) # 4	Stream Type: <input type="radio"/> Perennial <input checked="" type="radio"/> Ephemeral	Stream Currently Dry? <input type="radio"/> Y <input checked="" type="radio"/> N	Intermittent? <input type="radio"/> Y <input checked="" type="radio"/> N
Start E UTM: _____ N UTM: _____	End E UTM: _____ N UTM: _____	Color: <input type="radio"/> Clear <input checked="" type="radio"/> Stained <input type="radio"/> NA	Turbidity: <input checked="" type="radio"/> Clear <input type="radio"/> Cloudy <input type="radio"/> NA
Start Time: _____ End Time: _____ Duration (min): _____	Water Temp: _____ Air Temp: _____	Herps Present? <input checked="" type="radio"/> YES <input type="radio"/> NO	
<input type="radio"/> Inlet <input type="radio"/> Outlet (circle one) # _____	Stream Type: <input type="radio"/> Perennial <input type="radio"/> Ephemeral	Stream Currently Dry? <input type="radio"/> Y <input type="radio"/> N	Intermittent? <input type="radio"/> Y <input type="radio"/> N
Start E UTM: _____ N UTM: _____	End E UTM: _____ N UTM: _____	Color: <input type="radio"/> Clear <input type="radio"/> Stained <input type="radio"/> NA	Turbidity: <input type="radio"/> Clear <input type="radio"/> Cloudy <input type="radio"/> NA
Start Time: _____ End Time: _____ Duration (min): _____	Water Temp: _____ Air Temp: _____	Herps Present? <input type="radio"/> YES <input type="radio"/> NO	
<input type="radio"/> Inlet <input type="radio"/> Outlet (circle one) # _____	Stream Type: <input type="radio"/> Perennial <input type="radio"/> Ephemeral	Stream Currently Dry? <input type="radio"/> Y <input type="radio"/> N	Intermittent? <input type="radio"/> Y <input type="radio"/> N
Start E UTM: _____ N UTM: _____	End E UTM: _____ N UTM: _____	Color: <input type="radio"/> Clear <input type="radio"/> Stained <input type="radio"/> NA	Turbidity: <input type="radio"/> Clear <input type="radio"/> Cloudy <input type="radio"/> NA
Start Time: _____ End Time: _____ Duration (min): _____	Water Temp: _____ Air Temp: _____	Herps Present? <input type="radio"/> YES <input type="radio"/> NO	

Species	In/Outlet #	# adults	# subadults	# metamorphs	larvae	# egg m.	# swabs	Survey Method
HYRE	(circle one) # IN	0	0	0	30	0	0	Visual Trapped Aural Hand Collected Amp Net Incidental
Calling? <input checked="" type="radio"/> Y <input type="radio"/> N	OUT							
	(circle one) # IN							Visual Trapped Aural Hand Collected Amp Net Incidental
Calling? <input type="radio"/> Y <input checked="" type="radio"/> N	OUT							
	(circle one) # IN							Visual Trapped Aural Hand Collected Amp Net Incidental
Calling? <input type="radio"/> Y <input checked="" type="radio"/> N	OUT							
	(circle one) # IN							Visual Trapped Aural Hand Collected Amp Net Incidental
Calling? <input type="radio"/> Y <input checked="" type="radio"/> N	OUT							

Amphibians: S. Long-toed Salamander (AMMA); Yosemite Toad (ANCA, frmly BUCA); Sierran Treefrog (HYSI, frmly PSRE or HYRE); Sierra Nevada Yellow-legged Frog (RASI)
 Amph. less common in HML: CA Toad (ANBO, frmly BUBO); Bullfrog (RACT); Cascades Frog (RACA); CA Red-legged Frog (RADR); Sierra Newt (TASI, frmly TATO)
 Reptiles: Sierra Gartersnake (THCO); Mountain Gartersnake (THEL); Valley Gartersnake (THSI); Western-Pond Turtle (EMMA, frmly CLMA)

PLEASE Return to: Isaac Chellman, California Department of Fish and Wildlife, (916) 358-4038; 1701 Nimbus Rd., Rancho Cordova, CA 95670

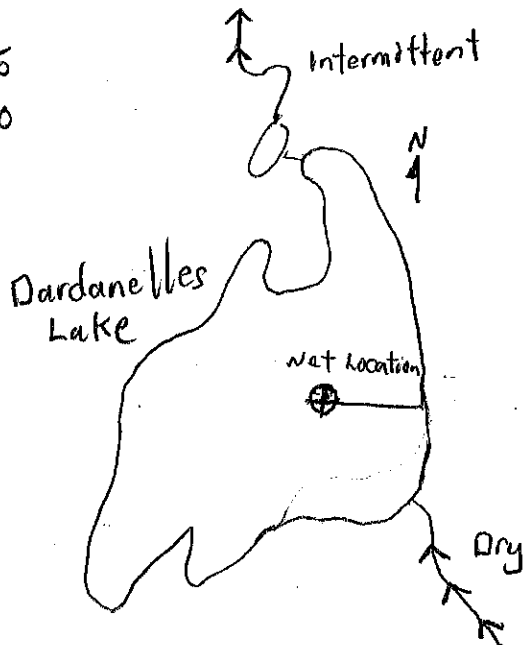
Field review _____ Copied _____ Entered _____ Proofed _____	Herp Data Sheet, pg. 1 of 2						
PHOTOS	Photo Number	Camera	Time	Date (yyyy-mm-dd)	UTM E	UTM N	Comments

Overview						
Herps						
Other						

SITE SKETCH:

Net Set 6.11.18 18:15
 Net Pull 6.12.18 08:50

No Fish



NOTES:

Amphibians: S. Long-toed Salamander (AMMA); Yosemite Toad (ANCA, family BUCA); Sierran Treefrog (HYSI, family PSRE or HYRE); Sierra Nevada Yellow-legged Frog (RASI)
 Amph. less common in HML: CA Toad (ANBO, family BUBO); Bullfrog (RACT); Cascades Frog (RACA); CA Red-legged Frog (RADR); Sierra Newt (TASI, family TATO)
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Field review _____ Copied _____ Entered _____ Proofed _____