State of California

The Resources Agency

## MEMORANDUM

To: Unit Waterfowl File

Date: 12-18-98

Subject: Waterfowl survey flights of Mono Lake, 10-20-99 and 11-20-98

The subject flights were conducted from the DFG Sacramento hanger at the Executive Airport. Conditions for both flights were ideal; light breezes, clear skies, and no people seen on the lake to disturb the birds, although there were people at County Ponds and DeChambeau ponds at the time of the November flight.

The 10-20 survey was flown by pilot Bob Morgan and Ron Thomas as single observer. The 11-20 flight used a second experienced observer, Tim Caldwell (DFG, Spenceville Wildlife Area). We found the second observer to be a real benefit in spotting and counting birds efficiently; especially providing for improved species identification where larger numbers were found. Future surveys should include the second observer as standard procedure.

Duck numbers observed, by area and by species (where possible), were as follows:

10-20-98 SURVEY (Begin 11:05)

AREA	MAL. SHOV. 7	TEAL GAD. PIN.	RUD.	TOTAL
Lee Vining Delta	15			15
West Shore				0
County Park	250 mixed speci	es		250
Mill Creek	25			25
Wilson	100 mixed specie	es including a high % tea	ıl	100
Black Point	75 mixed species	s in new lagoons		75

AREA	MAL.	SHOV.	TEAL	GAD.	PIN.	RUD.	TOTAL
Lee Vining Delta	3						3
West Shore	300		200				500
County Park							0
Mill Cr.	70	50	50			20	190
Wilson	175	150	50			25	400
Black Poin (inc. new lagoons N			50			130	180
County Ponds		1 hunter pres	sent				0
DeCham. Ponds		10-15 people	e present				0
N. Shore Tufa	75	(7 snow ge	eese)				75
N. Shore lagoons	196		20			163	379
Warm Sp. marsh & lagoon	575		200				775
Simon Sp. marsh & lagoon	212		150			25 (-250 un	ident.) 637
S. Tufa Area					(-2	250 inident.)	250

## 11-20-98 SURVEY (Begin 10:30)

Rush Cr. Delta

Transects of the lake were then flown to survey open water species, especially ruddies. In fact, only ruddies were found out on the lake, and a total of 546 were counted. We believe this to be a minimum number as we made an effort to avoid double counting by widely spacing the transects. The transects were flown at ~.4 mile intervals at ~100 ft. above the lake surface, at ~100 knots.

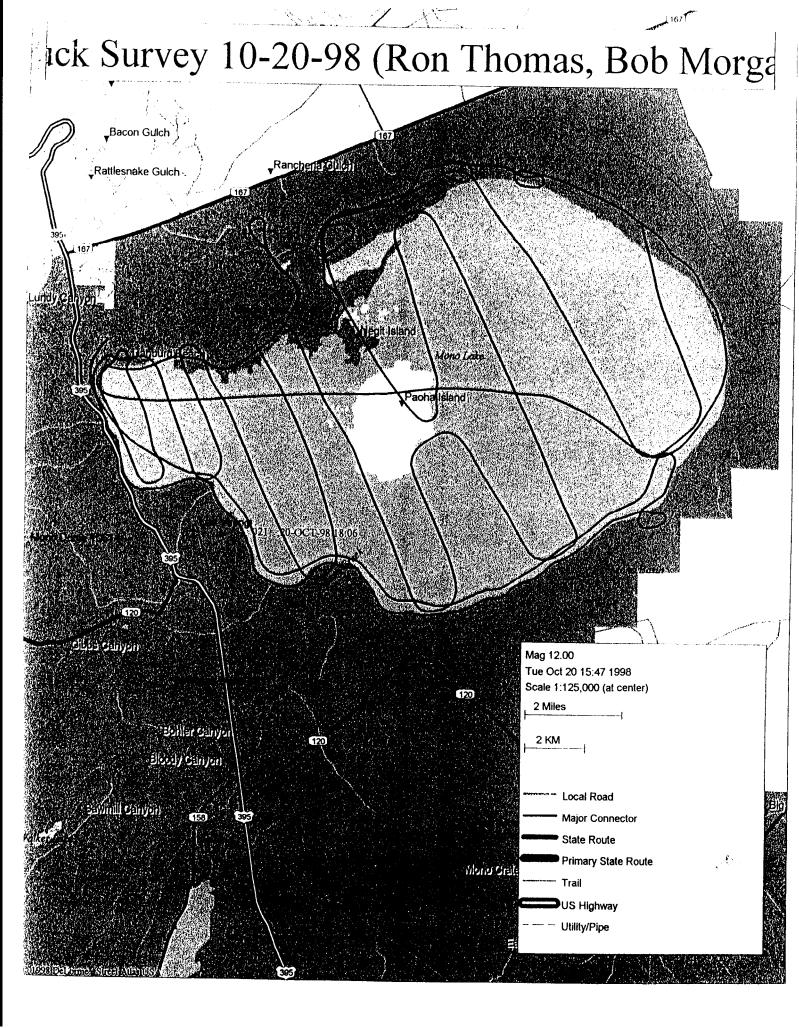
Lake transects					546 ruddies			546
	MAL.	SHOV.	TEAL	GAD.	PIN.	RUD.	UNID.	TOTAL
Totals	1668	200	720	0	0	909	500	3817

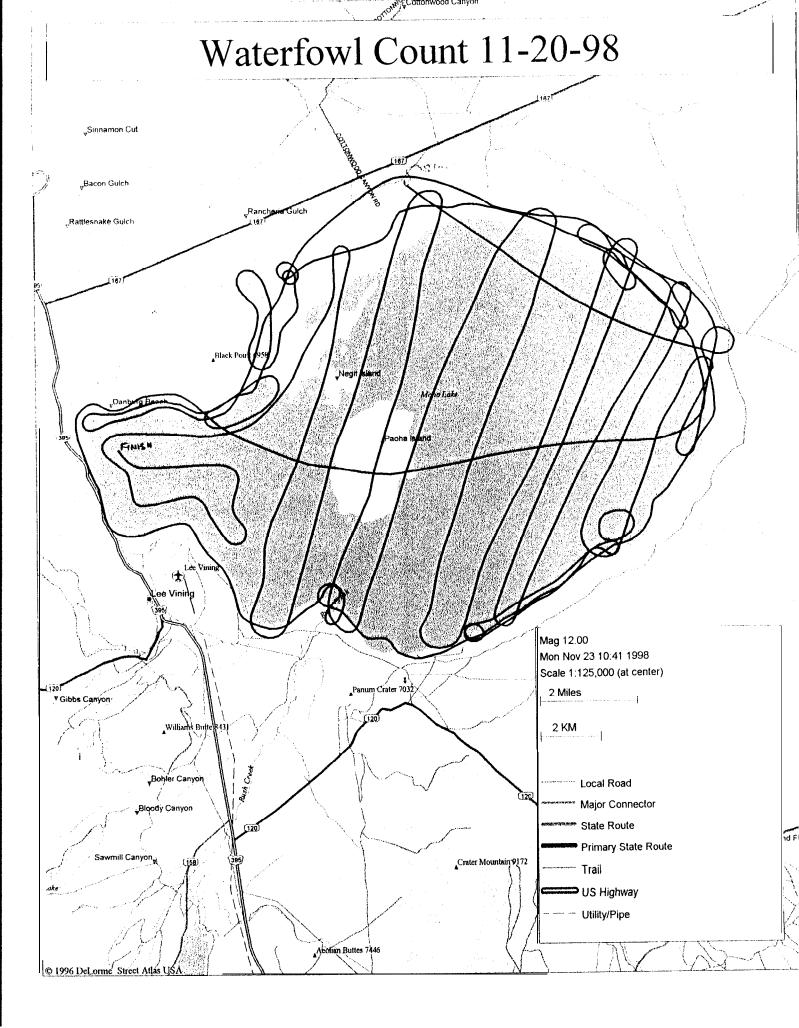
AREA	MAL.	SHOV.	TEAL	GAD.	PIN.	RUD.	TOTAL
County Ponds							0
DeCham. Ponds	(	Coots only					0
N. Shore Tufa	10	10	10	10	10		50
N. Shore Lagoons	10	075 mixed spec	cies				1075
Warm Sp. (Marsh & lagoon)		25 (+200	mixed sp	ecies)			225
Simon Sp. marsh & lagoon	:	150 mixed spe	ecies				150
S. Tufa area	100	50 mixed	species			25	175
Rush Cr. Delta							0

An additional 150-200 ruddies (minimum estimate) were scattered on the eastern l/3 of the open lake surface.

	MAL.	SHOV.	TEAL	GAD.	PIN.	RUD.	
Totals	150	35	10	10	10	225	2375

Because of the difficulty of counting ruddies on the open lake, we decided to try GPS directed transects to survey the eastern portion of the lake in November where we have observed most ruddies. (GPS mapping of the survey flight routes are included with this report.) Due to difficulties relating to factors of light angle, visibility, and fatigue, we are planning to try circular transects in the future; such survey routes will be oriented at increasing distances from the lake shore. Additionally, this tactic may prove more efficient than line transects because numbers of ruddies appear to diminish with increasing distance from shore.





11-20-98 - Mono Duch diglif Begin Secto Exec ~0920 Calm Chan 1030 Begin Shonetine Til /120 Degin Transacts E. side & point 1 n : 4 Mile Lake glassy - 3801.43 118544 n : 00' (norsect 2 - 10 ml  $35 = 35 \pm 45$   $30 = 25 \pm 35$   $5 = 18 \pm 20$ 6 10+37 7 7 8. 9. 120 (a, b, m, m, 10) (a, b, m, 10) (a,35+15 10 Circular 10-16 End Transact @ 12:28 Givenlar Still glassy Note: Circular Transects may be prederred i see map