
APPENDIX B

**AQUATIC ECOSYSTEM RATINGS FOR THE SIERRA NEVADA
AND THE LAKE TAHOE BASIN**

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Aquatic ecosystem ratings for the Sierra Nevada and the Lake Tahoe Basin, based on the system of Moyle (1996). Ratings for the Sacramento-San Joaquin Province and the Great Basin Province are from Moyle (1996). "Rating" is based on the sum of the ratings on the three criteria. "Confidence" reflects the reliability of the rating: H = high, M = moderate, L = low.

Sacramento-San Joaquin Province (selected ecosystems common to the Lake Tahoe Basin and the Sac-San Joaquin Province)

Ecosystem	Rarity	Disturbance	Protection	Status/ Score	Rating	Confidence
<i>Lentic ecosystems</i>						
Mountain pond	5	5	5	15	secure	M
Alpine lake w/o native fish	5	3	5	13	secure	H
Sphagnum bog	2	3	4	9	sp. concern	M
Fen	3	4	3	10	sp. concern	L
<i>Lotic ecosystems</i>						
Alpine snowmelt stream	5	5	5	15	secure	H
Cnfr forest snowmelt stream	5	4	5	14	secure	H
Alpine stream	5	3	5	13	secure	M
Forest stream	4	3	3	10	sp. concern	H
Spring	5	3	5	13	secure	M
Meadow stream	5	2	3	10	sp. concern	H
Trout headwater stream	5	5	4	14	secure	H
Stream with trout	4	4	4	12	secure	H
Mainstem river	2	1	1	4	threatened	H

Great Basin Province (selected ecosystems common to the Lake Tahoe Basin and the Great Basin)						
Ecosystem	Rarity	Disturbance	Protection	Status/ Score	Rating	Confidence
<i>Lentic ecosystems</i>						
Mountain pond	5	5	5	15	secure	M
Alpine lake w/o native fish	5	3	5	13	secure	H
Fen	3	3	3	9	sp. concern	M
Sphagnum bog	1	4	4	9	sp. concern	M
Alpine lake w/ native fish	3	3	2	8	sp. concern	M
<i>Lotic ecosystems</i>						
Alpine snowmelt stream	5	5	5	15	secure	H
Cnfr forest snowmelt stream	5	4	5	14	secure	H
Alpine stream	5	3	5	13	secure	H
Spring	4	3	3	10	sp. concern	M
Forest stream	5	3	5	13	secure	H
Meadow stream	5	2	3	10	sp. concern	H
Trout headwater stream	4	3	4	11	sp. concern	M
Stream with trout	4	3	2	9	sp. concern	M
Mainstem river	5	3	2	10	sp. concern	M

Lake Tahoe Basin-North

Ecosystem	Rarity	Disturbance	Protection	Status/ Score	Rating	Confidence
<i>Lentic ecosystems</i>						
Mountain pond	3	2	2	7	threatened	L
Alpine lake w/o native fish	3	2	2	7	threatened	L
Fen	2	2	2	6	threatened	L
Sphagnum bog	1	2	2	5	threatened	L
Alpine lake w/ native fish	0	-	-	-	N/A	-
Lake Tahoe	1	3	3	7	threatened	H
Marsh	0	-	-	-	N/A	-
Wet meadow	3	3	3	9	sp. concern	M
<i>Lotic ecosystems</i>						
Alpine snowmelt stream	0	-	-	-	N/A	-
Cnfr forest snowmelt stream	5	3	4	12	secure	M
Alpine stream	0	-	-	-	N/A	-
Spring	3	2	2	7	threatened	M
Forest stream	3	2	3	8	sp. concern	M
Meadow stream	3	3	4	10	sp. concern	H
Trout headwater stream	5	3	3	11	sp. concern	H
Stream with trout	4	3	3	10	sp. concern	H
Mainstem river	0	-	-	-	N/A	-

Lake Tahoe Basin- South

Ecosystem	Rarity	Disturbance	Protection	Status/ Score	Rating	Confidence
<i>Lentic ecosystems</i>						
Mountain pond	4	3	4	11	sp. concern	M
Alpine lake w/o native fish	3	2	2	7	threatened	H
Fen	1	2	2	5	threatened	L
Sphagnum bog	2	3	4	9	sp. concern	H
Alpine lake w/ native fish	0	-	-	-	N/A	-
Lake Tahoe	1	3	3	7	threatened	H
Marsh	1	1	3	5	threatened	H
Wet meadow	4	3	3	10	sp. concern	M
<i>Lotic ecosystems</i>						
Alpine snowmelt stream	4	4	4	12	secure	H
Cnfr forest snowmelt stream	4	4	4	12	secure	H
Alpine stream	4	4	4	12	secure	H
Spring	4	3	3	10	sp. concern	M
Forest stream	3	3	2	8	sp. concern	M
Meadow stream	2	3	2	7	threatened	H
Trout headwater stream	5	2	4	11	sp. concern	M
Stream with trout	4	2	4	10	sp. concern	M
Mainstem river	1	1	1	3	imperiled	H

Lake Tahoe Basin- East

Ecosystem	Rarity	Disturbance	Protection	Status/ Score	Rating	Confidence
<i>Lentic ecosystems</i>						
Mountain pond	2	1	2	5	threatened	L
Alpine lake w/o native fish	2	1	2	5	threatened	L
Fen	1	1	2	4	threatened	L
Sphagnum bog	1	1	2	4	threatened	L
Alpine lake w/ native fish	0	-	-	-	N/A	-
Lake Tahoe	1	3	3	7	threatened	H
Marsh	0	-	-	-	N/A	-
Wet meadow	4	3	3	10	sp. concern	M
<i>Lotic ecosystems</i>						
Alpine snowmelt stream	4	2	4	10	sp. concern	L
Cnfr forest snowmelt stream	4	2	4	10	sp. concern	M
Alpine stream	2	1	4	7	threatened	M
Spring	3	2	2	7	threatened	H
Forest stream	3	2	2	7	threatened	H
Meadow stream	1	1	2	4	threatened	H
Trout headwater stream	5	3	3	11	sp. concern	M
Stream with trout	4	3	3	10	sp. concern	H
Mainstem river	0	-	-	-	N/A	-

Lake Tahoe Basin- West

Ecosystem	Rarity	Disturbance	Protection	Status/ Score	Rating	Confidence
<i>Lentic ecosystems</i>						
Mountain pond	4	5	5	14	secure	M
Alpine lake w/o native fish	5	4	5	14	secure	H
Fen	1	3	4	8	sp. concern	L
Sphagnum bog	1	3	5	9	sp. concern	L
Alpine lake w/ native fish	1	2	4	7	threatened	H
Lake Tahoe	1	3	3	7	threatened	H
Marsh	1	2	3	6	threatened	H
Wet meadow	4	3	4	11	sp. concern	M
<i>Lotic ecosystems</i>						
Alpine snowmelt stream	5	5	5	15	secure	H
Cnfr forest snowmelt stream	4	5	5	14	secure	H
Alpine stream	4	5	5	14	secure	H
Spring	4	4	5	13	secure	M
Forest stream	3	4	4	11	secure	M
Meadow stream	1	3	5	9	sp. concern	L
Trout headwater stream	5	4	4	13	secure	H
Stream with trout	4	2	4	10	sp. concern	M
Mainstem river	-	-	-	-	N/A	-

Lake Tahoe Basin-Entire

Ecosystem	Rarity	Disturbance	Protection	Status/ Score	Rating
<i>Lentic ecosystems</i>					
Mountain pond	3.3	2.8	3.3	9.3	sp. concern
Alpine lake w/o native fish	3.3	2.3	2.8	8.4	sp. concern
Fen	1.3	2.0	2.5	5.8	threatened
Sphagnum bog	1.3	2.3	3.3	6.9	threatened
Alpine lake w/ native fish	0.3	2.0	4.0	6.3	threatened
Lake Tahoe	1.0	3.0	3.0	7.0	threatened
Marsh	0.5	1.5	3.0	5.0	threatened
Wet meadow	3.8	3.0	3.3	10.1	sp. concern
<i>Lotic ecosystems</i>					
Alpine snowmelt stream	3.3	3.7	4.3	11.3	secure
Cnfr forest snowmelt stream	4.3	3.5	4.3	12.1	secure
Alpine stream	2.5	3.7	4.3	10.5	sp. concern
Spring	3.5	2.8	3.0	9.3	sp. concern
Forest stream	3.0	2.8	2.8	8.6	sp. concern
Meadow stream	1.8	2.5	3.3	7.6	threatened
Trout headwater stream	5.0	3.0	3.5	11.5	secure
Stream with trout	4.0	2.5	3.5	10.0	sp. concern
Mainstem river	0.3	1.0	1.0	2.3	imperiled
