MAP 1 TABLE MANAGEMENT ACTIONS FOR THE 91 LAKES

Note: This "Map 1 Table" combines information from tables 4 and 5 in the "Alternatives" chapter of this *Draft Mountain Lakes Fishery Management Plan / Environmental Impact Statement.*

This table presents a standard set of fishery management actions for implementation under alternatives B and C. Note that management actions under alternative A would not change from current management, and management actions under alternative D only involve discontinuing stocking and removing all fish. The standard management actions in this table are broken down into classes 1-4, based on the Technical Advisory Committee's current understanding of the presence, reproductive status, and density of fish in the lakes. These standard management actions would require periodic monitoring and evaluation to facilitate adaptive management.

For a lake that is currently fishless:

1 The lake would remain fishless.

For a lake with high densities of reproducing fish, apply one of the following management actions:

- 2A Remove all reproducing fish. Monitor the recovery of native organisms and keep the lake fishless.
- Remove all reproducing fish. Monitor lake conditions and use the results to determine whether or not to restock the lake with nonreproducing fish. If the lake is restocked and monitoring results indicate fish are causing major adverse impacts, then fish densities would be reduced by changing stocking densities, stocking cycles or the species of stocked fish. If these management changes do not work, then discontinue stocking (see "Appendix F: Proposed Mountain Lakes Fishery Monitoring Plan" for more information on adaptive management).
- Remove all reproducing fish. Implement a resting period (that is, keep the lake fishless for a period of time) to foster recovery of native organisms. The duration of the resting period will be determined on a lake-by-lake basis based upon monitoring results. If monitoring results indicate favorable recovery of native organisms, then restock the lake with low densities of nonreproducing fish and monitor lake conditions. If monitoring results indicate fish are causing major adverse impacts, then reduce stocking densities, stocking cycles, or the species of stocked fish. If these management changes do not work, then discontinue stocking (see "Appendix F: Draft Monitoring Plan for the Mountain Lakes Fishery Management Plan" for more information on adaptive management).

For a lake with low densities of reproducing fish, apply one of the following management actions:

- 3A Remove all reproducing fish. Monitor the recovery of native organisms, and keep the lake fishless.
- 3B Evaluate the reproductive status of fish and the status of indicator taxa. If fish density is high enough that impacts on indicator taxa may be major, apply prescription 2A, 2B, or 2C. If fish densities and impacts to indicator taxa are low, maintain the low fish densities. If monitoring data indicate fish are causing major adverse impacts, then completely remove fish (see "Appendix F: Proposed Mountain Lakes Fishery Monitoring Plan" for more information on adaptive management).
- 3C For lakes with extremely low densities of fish, augment the population with supplemental stocking and monitor indicator taxa. If monitoring results indicate fish are causing major adverse impacts, then stop stocking and remove all fish (see "Appendix F: Proposed Mountain Lakes Fishery Monitoring Plan" for more information on adaptive management).

For a lake that has been stocked and does not contain a reproducing population of fish, apply one of the following management actions:

- 4A Discontinue stocking. Monitor the recovery of native organisms.
- 4B Lack of data for decision-making. Discontinue stocking and monitor lake conditions. If the lake is restocked and monitoring results indicate fish are causing major adverse impacts, then discontinue stocking (see "Appendix F: Proposed Mountain Lakes Fishery Monitoring Plan" for more information on adaptive management).
- 4C Continue stocking with low densities of fish expected not to reproduce in the lake. If monitoring results indicate fish are causing major adverse impacts, then reduce stocking densities, stocking cycles or the species of stocked fish. If these management changes do not work, then discontinue stocking (see "Appendix F: Proposed Mountain Lakes Fishery Monitoring Plan" for more information on adaptive management).



Map 1 Table (CONTINUED)

Note: The shaded rows indicate lakes that are in Ross Lake and Lake Chelan National Recreation Areas; the other lakes are in the national park portion of the North Cascades Complex.

Lake Name	NPS Lake Code	Current Condition of Lake (as represented under Alternative A)	Management Action			
			Alternative B	Alternative C	Alternative D	
Azure	MP-09-01	Fishless	1	1	1	
Battalion	MLY-02-01	High density reproducing fish	2B	2B	2A	
Bear	MC-12-1	High density reproducing fish	2C	2A	2A	
Berdeen	M-08-01	High density reproducing fish	2C	2A	2A	
Berdeen, Lower	M-07-01	High density reproducing fish	2A	2A	2A	
Berdeen, Upper	M-09-01	High density reproducing fish	2A	2A	2A	
Blum (Largest/Middle, No. 3)	M-11-01	High density reproducing fish	2B	2A	2A	
Blum (Lower/West, No. 4)	LS-07-01	High density reproducing fish	2C	2A	2A	
Blum (Small/North, No. 2)	MC-01-01	Fishless	1	1	1	
Blum (Vista/Northwest,						
No. 1)	MC-02-01	Fishless	1	1	1	
Bouck, Lower	DD-04-01	High density reproducing fish	2C	2C	2A	
Bouck, Upper	DD-05-01	Stocked with nonreproducing fish	4A	4A	4A	
Bowan	MR-12-01	Stocked with nonreproducing fish	4A	4A	4A	
Coon	MM-10-01	Stocked with nonreproducing fish	4C	4C	4A	
Copper ^a	MC-06-01	Stocked with nonreproducing fish	4B	4A	4A	
Dagger	MR-04-01	High density reproducing fish	2B	2A	2A	
Dee Dee, Upper	MR-15-01	High density reproducing fish	2B	2A	2A	
Dee Dee/ Tamarack, Lower	MR-15-02	Stocked with nonreproducing fish	4A	4A	4A	
Despair, Lower	M-14-01	Fishless	1	1	1	
Despair, Upper	M-13-01	Fishless	1	1	1	
Diobsud No. 1	LS-01-01	High density reproducing fish	2A	2A	2A	
Diobsud No. 2, Lower	LS-02-01	High density reproducing fish	2B	2A	2A	
Diobsud No. 3, Upper	LS-03-01	Stocked with nonreproducing fish	4A	4A	4A	
Doubtful	CP-01-01	High density reproducing fish	2C	2A	2A	
Doug's Tarn	M-21-01	High density reproducing fish	2C	2A	2A	
East, Lower	MC-14-02	Fishless	1	1	1	
East, Upper	MC-14-01	Fishless	1	1	1	
Firn	MP-02-01	Low density reproducing fish	3B	3A	3A	
Green	M-04-01	High density reproducing fish	2B	2A	2A	
Green Bench	LS-04-01	Fishless	1	1	1	
Hanging	MC-08-01	High density reproducing fish	2A ^b	2A ^b	2A ^b	
Hidden	SB-01-01	Low density reproducing fish	3C	3A	3A	
Hidden Lake Tarn	EP-14-01	Stocked with nonreproducing fish	4A	4A	4A	
Hi-Yu	M-01-01	Stocked with nonreproducing fish	4B	4A	4A	
Hozomeen	HM-02-01	High density reproducing fish	2A	2A	2A	
Ipsoot	LS-06-01	Low density reproducing fish	3B	3A	3A	
Jeanita	DD-01-01	Low density reproducing fish	3B	3A	3A	
Kettling	MR-05-01	High density reproducing fish	2A	2A	2A	
Kwahnesum	MC-07-01	Stocked with nonreproducing fish	4A	4A	4A	
McAlester	MR-10-01	High density reproducing fish	2B	2B	2A	
Middle, Lower	MC-16-02	Fishless	1	1	1	
Middle, Upper	MC-16-01	Fishless	1	1	1	
Monogram	M-23-01	High density reproducing fish	2C	2A	2A	
Monogram Tarn	M-23-11	Stocked with nonreproducing fish	4A	4A	4A	
Nert	M-05-01	Stocked with nonreproducing fish	4A	4A	4A	
Noisy Creek, Upper	LS-14-01	Fishless	1	1	1	



Map 1 Table (CONTINUED)

Lake Name	NPS Lake Code	Current Condition of Lake (as represented under Alternative A)	Management Action		
			Alternative B	Alternative C	Alternative D
No Name	PM-01-01	Stocked with nonreproducing fish	4C	4A	4A
Panther Potholes, Lower	RD-05-02	Stocked with nonreproducing fish	4A	4A	4A
Panther Potholes, Upper	RD-05-01	Fishless	1	1	1
Pegasus	EP-10-01	Fishless	1	1	1
Pond SE of Kettling Lakes	MR-09-01	Stocked with nonreproducing fish	4C	4C	4A
Quill, Lower	M-24-02	Stocked with nonreproducing fish	4B	4A	4A
Quill, Upper	M-24-01	Stocked with nonreproducing fish	4B	4A	4A
Rainbow	MR-14-01	High density reproducing fish	2C	2C	2A
Rainbow, Upper (North)	MR-13-01	Fishless	1	1	1
Rainbow, Upper (South)	MR-13-02	Stocked with nonreproducing fish	4A	4A	4A
Rainbow, Upper (West)	MM-11-01	Stocked with nonreproducing fish	4A	4A	4A
Redoubt	MC-11-01	Fishless	1	1	1
Reveille, Lower	MC-21-02	Fishless	1	1	1
Reveille, Upper	MC-21-01	Fishless	1	1	1
Ridley	HM-03-01	Stocked with nonreproducing fish	4C	4C	4A
Sky	EP-13-01	Fishless	1	1	1
Skymo	PM-03-01	High density reproducing fish	2C	2A	2A
Sourdough	PM-12-01	High density reproducing fish	2B	2A	2A
Sourpuss	ML-01-01	Fishless	1	1	1
Stiletto	MR-01-01	Stocked with nonreproducing fish	4B	4A	4A
Stout	EP-09-02	Low density reproducing fish	3B	3A	3A
		<u> </u>	3B	3A 3A	3A
Stout, Lower	EP-09-01	Low density reproducing fish			
Sweet Pea	ML-02-01	Stocked with nonreproducing fish	4C	4A	4A
Talus Tarn	M-06-01	Fishless	1	1	1
Tapto, Lower	MC-17-03	Fishless	1	1	1
Tapto, Middle	MC-17-02	Fishless	1	1	1
Tapto, Upper	MC-17-01	Fishless	1	1	1
Tapto, West	MC-17-04	Fishless	1	1	1
Thornton, Lower	M-20-01	Low density reproducing fish	3C	3A	3A
Thornton, Middle	M-19-01	Stocked with nonreproducing fish	4C	4A	4A
Thunder	RD-02-01	Fishless	1	1	1
Tiny	MC-15-01	Fishless	1	1	1
Torment	ML-03-01	Stocked with nonreproducing fish	4A	4A	4A
Trapper	GM-01-01	Low density reproducing fish	3B	3A	3A
Triplet, Lower	SM-02-01	High density reproducing fish	2C	2C	2A
Triplet, Upper	SM-02-02	High density reproducing fish	2A	2A	2A
Triumph	M-17-01	Stocked with nonreproducing fish	4C	4A	4A
Unnamed	FP-01-01	Fishless	1	1	1
Unnamed	MR-11-01	Stocked with nonreproducing fish	4C	4C	4A
Unnamed	MR-16-01	Low density reproducing fish	3B	3B	3A
Vulcan	ML-04-01	Fishless	1	1	1
Wilcox/Lillie, Upper	EP-06-01	High density reproducing fish	2A	2A	2A
Wilcox/Sandie, Lower	EP-05-01	High density reproducing fish	2C	2A	2A
Wild	MC-27-01	Fishless	1	1	1
Willow	HM-04-01	Stocked with nonreproducing fish	4C	4C	4A

Notes:

- a. In August 2004, a large fish kill was observed in Copper Lake, possibly due to disease. Further surveys are needed to confirm that the lake is fishless.
- b. Remove all reproducing fish pending agreement with British Columbia.

