

TABLES

TABLES

1. INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN	T1
2. OCCURRENCES OF ICB MOLLUSK SOSC ON FEDERAL AND STATE LANDS	T9
3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR MOLLUSK SOSC	T21
EXPLANATION OF TABLES 4-10	T31
4. IDAHO MOLLUSK SPECIES OF SPECIAL CONCERN	T32
5. MONTANA MOLLUSK SPECIES OF SPECIAL CONCERN	T35
6. NEVADA MOLLUSK SPECIES OF SPECIAL CONCERN	T36
7. OREGON MOLLUSK SPECIES OF SPECIAL CONCERN	T37
8. UTAH MOLLUSK SPECIES OF SPECIAL CONCERN	T40
9. WASHINGTON MOLLUSK SPECIES OF SPECIAL CONCERN	T41
10. WYOMING MOLLUSK SPECIES OF SPECIAL CONCERN	T43
EXPLANATION OF TABLES 11-28	T44
11. COLUMBIA GORGE MOLLUSK SPECIES OF SPECIAL CONCERN	T45
12. LOWER COLUMBIA RIVER MOLLUSK SPECIES OF SPECIAL CONCERN	T45
13. DESCHUTES RIVER DRAINAGE MOLLUSK SPECIES OF SPECIAL CONCERN	T46
14. UPPER KLAMATH LAKE DRAINAGE MOLLUSK SOSC	T47
15. OREGON INTERIOR BASINS MOLLUSK SPECIES OF SPECIAL CONCERN	T47
16. BLUE MOUNTAINS MOLLUSK SPECIES OF SPECIAL CONCERN	T48
17. WASHINGTON EASTERN CASCADES MOLLUSK SOSC	T48
18. N. WASHINGTON, N. IDAHO, & NW MONTANA MOLLUSK SOSC	T48
19. LOWER SALMON RIVER, IDAHO MOLLUSK SPECIES OF SPECIAL CONCERN	T49
20. HELLS CANYON MOLLUSK SPECIES OF SPECIAL CONCERN	T50
21. MIDDLE SNAKE RIVER, IDAHO MOLLUSK SPECIES OF SPECIAL CONCERN	T50
22. SE IDAHO MOLLUSK SPECIES OF SPECIAL CONCERN	T51

TABLES (cont.)

23. CLEARWATER DRAINAGE, IDAHO TERRESTRIAL MOLLUSK SOSC	T52
24. N. WASHINGTON-IDAHO PANHANDLE TERRESTRIAL MOLLUSK SOSC	T52
25. BITTERROOT & FLATHEAD DRAINAGES, MONTANA MOLLUSK SOSC	T53
26. CLARK FORK DRAINAGE, MONTANA MOLLUSK SOSC	T53
27. MISSION MOUNTAINS, MONTANA MOLLUSK SOSC	T54
28. JACKSON LAKE, WYOMING FRESHWATER MOLLUSK SOSC	T54

TABLE 1. INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN.

TAXON SCIENTIFIC NAME	COMMON NAME	CURRENT FEDERAL STATUS	SUGGESTED FEDERAL STATUS
SENSITIVE SPECIES			
Land Snails			
<i>Allogona (Allogona) lombardii</i> Smith, 1943	Selway forestsnail	none	Threatened
<i>Allogona (Allogona) ptychophora solida</i> Vanatta, 1924	dry land forestsnail	none	Threatened
<i>Anguispira nimapuna</i> Baker, 1932	Nimapuna disc	none	Threatened
<i>Cryptomastix (Bupigona)</i> n. sp. 1	Deep Creek oregonian	none	Endangered
<i>Cryptomastix (Bupigona)</i> n. sp. 2	Kinney Creek oregonian	none	Endangered
<i>Cryptomastix (Bupigona) populi</i> (Vanatta, 1924)	poplar oregonian	none	Threatened
<i>Cryptomastix (Cryptomastix) harfordiana</i> (Binney, 1878)	Salmon oregonian	none	Endangered
<i>Cryptomastix (Cryptomastix) hendersoni</i> (Pilsbry, 1928)*	Columbia Gorge oregonian	none	Endangered
<i>Cryptomastix (Cryptomastix) magnidentata</i> (Pilsbry, 1940)	Mission Creek oregonian	C2 candidate	Endangered
<i>Cryptomastix (Cryptomastix) mullani blandi</i> (Hemphill, 1892)	Bland oregonian	none	Endangered
<i>Cryptomastix (Cryptomastix) mullani clappi</i> (Hemphill, 1897)	River of No Return oregonian	none	Endangered
<i>Cryptomastix (Cryptomastix) mullani latilabris</i> (Pilsbry, 1940)	wide-lipped oregonian	none	Endangered
<i>Cryptomastix (Cryptomastix) mullani tuckeri</i> (Pilsbry & Henderson, 1930)	scaled oregonian	none	Endangered
<i>Cryptomastix (Cryptomastix)</i> n. sp. 1	Lochsa oregonian	none	Endangered
<i>Cryptomastix (Cryptomastix)</i> n. sp. 2	Hells Canyon oregonian	none	Endangered
<i>Cryptomastix (Cryptomastix)</i> n. sp. 3	disc oregonian	none	Endangered
<i>Cryptomastix (Cryptomastix)</i> n. sp. 4	Juniper Springs oregonian	none	Endangered
<i>Cryptomastix (Cryptomastix) sanburni</i> (Binney, 1886)	Kingston oregonian	none	Endangered
<i>Discus brunsoni</i> Berry, 1955	Mission Range disc	none	Endangered
<i>Discus marmorensis</i> Baker, 1932	marbled disc	C2 candidate	Endangered
<i>Megomphix lutarius</i> Baker, 1932	Umatilla megomphix	none	Endangered
<i>Monadenia (Monadenia) fidelis minor</i> (Binney, 1885)*	Dalles sideband	C2 candidate	Endangered
<i>Monadenia (Monadenia) fidelis</i> n. subsp. 1	Deschutes sideband	none	Endangered
<i>Monadenia (Monadenia)</i> n. sp. 1	Modoc Rim sideband	none	Endangered
<i>Ogaridiscus subrupicola</i> (Dall, 1877)	southern tightcoil	none	Threatened
<i>Oreohelix alpina</i> (Elrod, 1901)	alpine mountainsnail	none	Threatened
<i>Oreohelix amariradix</i> Pilsbry, 1934	Bitterroot mountainsnail	none	Endangered
<i>Oreohelix carinifera</i> Pilsbry, 1912	keeled mountainsnail	none	Endangered

TABLE 1. INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	COMMONNAME	CURRENT FEDERAL STATUS	SUGGESTED FEDERAL STATUS
SENSITIVE SPECIES			
Land Snails			
<i>Oreohelix elrodi</i> (Pilsbry, 1900)	carinate mountainsnail	none	Endangered
<i>Oreohelix hammeri</i> Fairbanks, 1984	Mt. Sampson mountainsnail	none	Endangered
<i>Oreohelix haydeni hesperia</i> Pilsbry, 1939	western mountainsnail	none	Endangered
<i>Oreohelix haydeni perplexa</i> Pilsbry, 1939	enigmatic mountainsnail	none	Endangered
<i>Oreohelix idahoensis baileyi</i> (Bartsch, 1916)	Seven Devils mountainsnail	none	Endangered
<i>Oreohelix idahoensis idahoensis</i> (Newcomb, 1866)	costate mountainsnail	none	Threatened
<i>Oreohelix intersum</i> (Hemphill, 1890)	deep slide mountainsnail	none	Endangered
<i>Oreohelix junii</i> Pilsbry, 1934	Grand Coulee mountainsnail	none	Threatened
<i>Oreohelix</i> n. sp. 1•	Chelan mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 2	Yakima mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 3	Bearmouth mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 4	Drummond mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 5	Brunson mountainsnail	none	Threatened
<i>Oreohelix</i> n. sp. 6	Kintla Lake mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 7	Kitchen Creek mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 8	Squaw Creek mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 9	Bluebird Canyon mountainsnail	none	none
<i>Oreohelix</i> n. sp. 10	Missoula mountainsnail	none	Threatened
<i>Oreohelix</i> n. sp. 11	subcarinate mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 12	hackberry mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 13	Rapid River mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 14	limestone mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 15	speckled mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 16	rugose mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 17	bicarinate mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 18	Limestone Point mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 19	Shingle Creek mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 20	Sheep Gulch mountainsnail	none	Endangered

TABLE 1. INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	COMMON NAME	CURRENT FEDERAL STATUS	SUGGESTED FEDERAL STATUS
SENSITIVE SPECIES			
Land Snails			
<i>Oreohelix</i> n. sp. 21	Box Canyon mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 22	Slate Creek mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 23	Lucile mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 24	Wet Gulch mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 25	Stites mountainsnail	none	Threatened
<i>Oreohelix</i> n. sp. 26	Sam Hill mountainsnail	none	Threatened
<i>Oreohelix</i> n. sp. 27	Pass Creek mountainsnail	none	none
<i>Oreohelix</i> n. sp. 28	quartzite mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 29	Hells Canyon mountainsnail	none	Threatened
<i>Oreohelix</i> n. sp. 30	Pittsburg Landing mountainsnail	none	Endangered
<i>Oreohelix</i> n. sp. 31	Byrne Resort mountainsnail	none	Endangered
<i>Oreohelix strigosa delicata</i> Pilsbry, 1934	Blue mountainsnail	none	Endangered
<i>Oreohelix strigosa goniogyra</i> Pilsbry, 1934	striate mountainsnail	C2 candidate	Endangered
<i>Oreohelix strigosa</i> n. subsp. 1	Nez Perce mountainsnail	none	Threatened
<i>Oreohelix tenuistriata</i> Henderson & Daniels, 1916	thin-ribbed mountainsnail	none	Endangered
<i>Oreohelix variabilis</i> Henderson, 1929	variable mountainsnail	none	Endangered
<i>Oreohelix variabilis</i> n. subsp. 1	Deschutes mountainsnail	none	Endangered
<i>Oreohelix vortex</i> Berry, 1932	whorled mountainsnail	C2 candidate	Threatened
<i>Oreohelix waltoni</i> Solem, 1975	lava rock mountainsnail	C2 candidate	Endangered
<i>Pristiloma (Pristinopsis) arcticum? crateris</i> Pilsbry, 1946•	Crater Lake tightcoil	none	Threatened
<i>Pristiloma (Pristinopsis) idahoense</i> (Pilsbry, 1902)	thinlip tightcoil	none	Threatened
<i>Pristiloma (Priscovitrea?) wascoense</i> (Hemphill, 1911)	shiny tightcoil	none	Threatened
<i>Vespericola columbiana depressa</i> (Pilsbry & Henderson, 1936)	Dalles hesperian	none	Endangered
<i>Vespericola</i> n. sp. 1	Oak Springs hesperian	none	Endangered
<i>Vespericola sierranus</i> (Berry, 1921)	Siskiyou hesperian	none	Threatened
Slugs			
<i>Hemphillia camelus</i> Pilsbry & Vanatta, 1897	pale jumping-slug	none	Threatened

TABLE 1. INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	COMMON NAME	CURRENT FEDERAL STATUS	SUGGESTED FEDERAL STATUS
SENSITIVE SPECIES			
Slugs			
<i>Hemphillia danielsi</i> Vanatta, 1914	marbled jumping-slug	none	Threatened
<i>Hemphillia malonei</i> Pilsbry, 1917•	Malone jumping-slug	none	Endangered
<i>Magnipelta mycophaga</i> Pilsbry, 1953	spotted slug	none	Endangered
<i>Prophysaon humile</i> Cockerell, 1890	smoky taildropper	none	Threatened
<i>Udosarx lyrata</i> Webb, 1959	lyre mantleslug	none	Threatened
<i>Udosarx lyrata russelli</i> Webb, 1980	Russell mantleslug	none	Threatened
Freshwater Snails			
<i>Amnicola</i> n. sp. 1	Washington duskysnail	none	Endangered
<i>Fisherola nuttalli</i> (Haldeman, 1843)	shortface lanx	C3 candidate	Threatened
<i>Fluminicola fuscus</i> (Haldeman, 1841)	Columbia pebblesnail	C2 candidate	Endangered
<i>Fluminicola minutissimus</i> Pilsbry, 1907	pixie pebblesnail	none	Endangered
<i>Fluminicola</i> n. sp. 1•	Klamath pebblesnail	none	Endangered
<i>Fluminicola</i> n. sp. 2•	tall pebblesnail	none	Endangered
<i>Fluminicola</i> n. sp. 3•	Klamath Rim pebblesnail	none	Endangered
<i>Fluminicola</i> n. sp. 4	Metolius pebblesnail	none	Endangered
<i>Fluminicola</i> n. sp. 5	Tuscan pebblesnail	none	Endangered
<i>Fluminicola</i> n. sp. 6	Malheur pebblesnail	none	Endangered
<i>Fluminicola</i> n. sp. 7	Tiger Lily pebblesnail	none	Threatened
<i>Fluminicola</i> n. sp. 8	Lost River pebblesnail	none	Endangered
<i>Fluminicola</i> n. sp. 9	Wood River pebblesnail	none	Endangered
<i>Fluminicola turbiniformis</i> (Tryon, 1865)	turban pebblesnail	none	Endangered
<i>Helisoma (Carinifex) newberryi newberryi</i> (Lea, 1858)	Great Basin rams-horn	none	Endangered
<i>Helisoma (Carinifex) newberryi jacksonensis</i> (Henderson, 1932)	Jackson rams-horn	C2 candidate	Endangered
<i>Juga (Juga) hemphilli dallesensis</i> (Henderson, 1935)	Dalles juga	none	Endangered
<i>Juga (Juga) hemphilli hemphilli</i> (Henderson, 1935)	barren juga	none	Endangered
<i>Juga (Juga) hemphilli maupinensis</i> (Henderson, 1935)	Deschutes juga	none	Endangered
<i>Juga (Juga) hemphilli</i> n. subsp. 1	Indian Ford juga	none	Endangered

TABLE 1. INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	COMMON NAME	CURRENT FEDERAL STATUS	SUGGESTED FEDERAL STATUS
SENSITIVE SPECIES			
Freshwater Snails			
<i>Juga (Juga) n. sp. 1</i>	brown juga	none	Endangered
<i>Juga (Juga) n. sp. 2</i>	three-band juga	none	Endangered
<i>Juga (Oreobasis) bulbosa</i> (Gould, 1847)	bulb juga	none	Endangered
<i>Juga (Oreobasis) n. sp. 1</i>	one-band juga	none	Threatened
<i>Juga (Oreobasis) n. sp. 2*</i>	basalt juga	none	Threatened
<i>Juga (Oreobasis) n. sp. 3</i>	purple juga	none	Endangered
<i>Juga (Oreobasis) n. sp. 4</i>	Crooked River juga	none	Endangered
<i>Juga (Oreobasis) n. sp. 5</i>	Blue Mountains juga	none	Endangered
<i>Lanx alta</i> (Tryon, 1865)	highcap lanx	none	Endangered
<i>Lanx klamathensis</i> Hannibal, 1912	scale lanx	none	Endangered
<i>Lanx n. sp. 1</i>	Banbury Springs lanx	Endangered	Endangered
<i>Lyogyrus n. sp. 1*</i>	Columbia duskysnail	none	Endangered
<i>Lyogyrus n. sp. 2*</i>	masked duskysnail	none	Endangered
<i>Lyogyrus n. sp. 3</i>	Klamath duskysnail	none	Endangered
<i>Lyogyrus n. sp. 4</i>	nodose duskysnail	none	Endangered
<i>Lyogyrus n. sp. 5</i>	mare's egg duskysnail	none	Endangered
<i>Lyogyrus n. sp. 6</i>	Snake duskysnail	none	Endangered
<i>Lyogyrus n. sp. 7</i>	Blue Mountains duskysnail	none	Endangered
<i>Physa (Haitia) natricina</i> Taylor, 1988	Snake River physa	Endangered	Endangered
<i>Physa (Physa) megalochlamys</i> Taylor, 1988	large-mantle physa	none	Threatened
<i>Physella (Petrophysa) n. sp. 1</i>	Owyhee wet-rock physa	none	Endangered
<i>Physella (Physella) columbiana</i> (Hemphill, 1890)	rotund physa	none	Endangered
<i>Planorbella (Pierosoma) oregonensis</i> (Tryon, 1865)	lamb rams-horn	none	Endangered
<i>Pyrgulopsis archimedis</i> Berry, 1947	Archimedes pyrg	none	Endangered
<i>Pyrgulopsis bruneauensis</i> Hershler, 1990	Bruneau hot springsnail	none*	Endangered
<i>Pyrgulopsis hendersoni</i> (Pilsbry, 1933)	Harney Lake springsnail	none	Endangered
<i>Pyrgulopsis idahoensis</i> (Pilsbry, 1933)	Idaho springsnail	Endangered	Endangered
<i>Pyrgulopsis intermedia</i> (Tryon, 1865)	Crooked Creek springsnail	none	Endangered

TABLE 1. INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	COMMON NAME	CURRENT FEDERAL STATUS	SUGGESTED FEDERAL STATUS
SENSITIVE SPECIES			
Freshwater Snails			
<i>Pyrgulopsis</i> n. sp. 1	Klamath Lake springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 2	Big Spring springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 3	Lake Abert springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 4	Owyhee hot springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 5	Malheur springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 6	Columbia springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 7	Benson springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 8	Indian Hot springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 9	Birch Creek springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 10	Rock Creek springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 11	Pauline springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 12	Bannock Range springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 13	Brush Creek springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 14	Teton River springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 15	Blackfoot springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 16	Warm Springs springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 17	Wilson Flat springsnail	none	Endangered
<i>Pyrgulopsis</i> n. sp. 18	Jim Sage springsnail	none	Endangered
<i>Pyrgulopsis robusta</i> (Walker, 1908)	Jackson Lake springsnail	C2 candidate	Endangered
<i>Stagnicola (Stagnicola) elrodi</i> (Baker & Henderson, 1933)	Flathead pondsnail	none	Endangered
<i>Stagnicola (Stagnicola) elrodiana</i> Baker, 1935	largemouth pondsnail	none	Endangered
<i>Stagnicola (Stagnicola) hinkleyi</i> (Baker, 1906)	rustic pondsnail	none	Threatened
<i>Stagnicola (Stagnicola) idahoensis</i> (Henderson, 1931)	shortspire pondsnail	none	Threatened
<i>Taylorconcha serpenticola</i> Hershler et al., 1994	Bliss Rapids springsnail	Endangered	Threatened
<i>Valvata</i> n. sp. 1	Salmon valvata	none	Endangered
<i>Valvata utahensis</i> Call, 1884	desert valvata	Endangered	Endangered
<i>Vorticifex effusus dalli</i> (Baker, 1945)	Dall rams-horn	none	Endangered
<i>Vorticifex effusus diagonalis</i> (Henderson, 1929)	lined rams-horn	none	Endangered

TABLE 1. INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	COMMON NAME	CURRENT FEDERAL STATUS	SUGGESTED FEDERAL STATUS
SENSITIVE SPECIES			
Freshwater Snails			
<i>Vorticifex klamathensis klamathensis</i> (Baker, 1945)	Klamath rams-horn	none	Endangered
<i>Vorticifex klamathensis sinitsini</i> (Baker, 1945)•	Sinitsin rams-horn	none	Endangered
<i>Vorticifex neritoides</i> (Hemphill in Baker, 1945)	nerite rams-horn	none	Endangered
Freshwater Bivalves			
<i>Anodonta californiensis</i> Lea, 1852	California floater	C2 candidate	Threatened
<i>Anodonta wahlametensis</i> Lea, 1838	Willamette floater	none	Endangered
<i>Margaritifera</i> n. sp. Taylor, 1988	Pahsimeroi pearlshell	none	Endangered
<i>Pisidium</i> n. sp. 1	Modoc Plateau peaclam	none	Endangered
<i>Pisidium (Cyclocalyx) ultramontanum</i> Prime, 1865	montane peaclam	C2 candidate	Endangered
WATCH LIST			
Land Snails			
<i>Cryptomastix (Cryptomastix) devia</i> (Gould, 1846)•	Puget oregonian	none	?
<i>Oreohelix jugalis</i> (Hemphill, 1890)	boulder pile mountainsnail	C2 candidate	none
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)	humped coin	none	none
<i>Radiodiscus (Radiodomus) abietum</i> Baker, 1930	fir pinwheel	none	none
Slugs			
<i>Zacoleus idahoensis</i> Pilsbry, 1903	sheathed slug	none	none
Freshwater Snails			
<i>Fluminicola</i> n. sp. 10	vagrant pebblesnail [in part]	none	none
<i>Fluminicola</i> n. sp. 11	[no common name(s)]	none	none
<i>Lyogyrus greggi</i> Pilsbry, 1935	Rocky Mountain duskysnail	none	none

TABLE 1. INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN (cont.)

TAXON SCIENTIFIC NAME	COMMON NAME	CURRENT FEDERAL STATUS	SUGGESTED FEDERAL STATUS
Freshwater Snails			
<i>Pristinicola hemphilli</i> (Pilsbry, 1907)	pristine springsnail	none	none
<i>Promenetus exacuus megas</i> (Dall, 1905)	prairie sprite	none	none
<i>Stagnicola (Hinkleyia) montanensis</i> (Baker, 1913)	mountain marshsnail	none	none
<i>Valvata tricarinata</i> (Say, 1817)	three ridge valvata	none	none
Freshwater Bivalves			
<i>Gonidea angulata</i> (Lea, 1838)	western ridgemussel	none	none
<i>Margaritifera falcata</i> (Gould, 1850)	western pearlshell	none	none
EXTRALIMITAL TAXA WHICH MAY OCCUR IN THE ASSESSMENT AREA			
<i>Acroloxus coloradensis</i> (Henderson, 1939)	Rocky Mountain caplsheil	C2 candidate	Endangered
<i>Fluminicola modoci</i> Hannibal, 1912	Modoc pebblesnail	none	Endangered
<i>Oreohelix strigbsa berryi</i> (Pilsbry, 1915)	Big Snowy mountainsnail	none	Endangered
<i>Oreohelix yavapai mariae</i> Bartsch, 1916	Gallatin mountainsnail	none	Endangered

- = formerly listed as Endangered, but action stayed by court decision; currently being relisted as **Endangered**.
- = listed as ROD species (see ROD, 1994).

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS.

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
SENSITIVE SPECIES	
Land snails	
<i>Allogona</i> (A.) <i>lombardii</i> Smith, 1943	Clearwater National Forest; Nez Perce National Forest; Lochsa Wild & Scenic River
<i>Allogona</i> (A.) <i>ptychophora solida</i> Vanatta, 1924	Hells Canyon NRA; BLM-Cottonwood; Nez Perce National Forest; Nez Perce Reservation
<i>Anguispira nimapuna</i> Baker, 1932	Clearwater National Forest; Nez Perce National Forest; Lochsa Wild & Scenic River; Nez Perce Reservation
<i>Cryptomastix</i> (B.) n. sp. 1	Payette National Forest
<i>Cryptomastix</i> (B.) n. sp. 2	Payette National Forest; ?BLM
<i>Cryptomastix</i> (B.) <i>populi</i> (Vanatta, 1924)	BLM-Cottonwood; Nez Perce National Forest; Hells Canyon NRA
<i>Cryptomastix</i> (C.) <i>harfordiana</i> (Binney, 1878)	BLM-Cottonwood; Nez Perce National Forest
<i>Cryptomastix</i> (C.) <i>hendersoni</i> (Pilsbry, 1928)	Columbia Gorge NSA; State of Oregon
<i>Cryptomastix</i> (C.) <i>magnidentata</i> (Pilsbry, 1940)	Nez Perce Reservation; ?State of Idaho
<i>Cryptomastix</i> (C.) <i>mullani blandi</i> (Hemphill, 1892)	?Panhandle National Forests; ?Coeur d'Alene Reservation
<i>Cryptomastix</i> (C.) <i>mullani clappi</i> (Hemphill, 1897)	Payette National Forest; Nez Perce National Forest; BLM
<i>Cryptomastix</i> (C.) <i>mullani latilabris</i> (Pilsbry, 1940)	Nez Perce National Forest; BLM
<i>Cryptomastix</i> (C.) <i>mullani tuckeri</i> (P. & H., 1930)	Clearwater National Forest; Clearwater Wild & Scenic River
<i>Cryptomastix</i> (C.) n. sp. 1	Clearwater National Forest; Lochsa Wild & Scenic River
<i>Cryptomastix</i> (C.) n. sp. 2	Hells Canyon NRA
<i>Cryptomastix</i> (C.) n. sp. 3	Hells Canyon NRA
<i>Cryptomastix</i> (C.) n. sp. 4	Hanford Reservation (DOE)
<i>Cryptomastix</i> (C.) <i>sanburni</i> (Binney, 1886)	?Panhandle National Forests; ?Coeur d'Alene Reservation
<i>Discus brunsoni</i> Berry, 1955	Flathead Indian Reservation, Mission Mountains Tribal Wilderness; ?Flathead National Forest
<i>Discus marmorensis</i> Baker, 1932	Nez Perce National Forest; BLM

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
SENSITIVE SPECIES	
Land snails	
<i>Megomphix lutarius</i> Baker, 1932	Umatilla National Forest; ? Wallowa-Whitman National Forest
<i>Monadenia (M.) fide/is minor</i> (Binney, 1885)	Columbia Gorge NSA; State of Oregon?; State of Washington
<i>Monadenia (M.) fide/is</i> n. subsp. 1	BLM-Prineville; Deschutes Wild & Scenic River; ?Warm Springs Confederation Reservation
<i>Monadenia (M.)</i> n. sp. 1	Winema National Forest
<i>Ogaridiscus subrupicola</i> (Dall, 1877)	?Umatilla National Forest; ?Wallowa-Whitman National Forest
<i>Oreohelix alpina</i> (Elrod, 1901)	Flathead Indian Reservation, Mission Mountains Tribal Wilderness; ? Flathead National Forest
<i>Oreohelix amariradix</i> Pilsbry, 1934	?Lolo National Forest; ?Bitterroot National Forest
<i>Oreohelix carinifera</i> Pilsbry, 1912	?Lolo National Forest; ? Deerlodge National Forest; ?State of Montana
<i>Oreohelix elrodi</i> (Pilsbry, 1900)	Flathead Indian Reservation, Mission Mountains Tribal Wilderness; Flathead National Forest
<i>Oreohelix hammeri</i> Fairbanks, 1984	Nez Perce National Forest
<i>Oreohelix haydeni hesperia</i> Pilsbry, 1939	Nez Perce National Forest; BLM
<i>Oreohelix haydeni perplexa</i> Pilsbry, 1939	
<i>Oreohelix idahoensis baileyi</i> (Bartsch, 1916)	? Payette National Forest; ?Nez Perce National Forest; ?BLM; ?Hells Canyon NRA
<i>Oreohelix idahoensis idahoensis</i> (Newcomb, 1866)	BLM
<i>Oreohelix intersum</i> (Hemphill, 1890)	BLM; ?State of Idaho
<i>Oreohelix junii</i> Pilsbry, 1934	Wenatchee National Forest; Okanogan National Forest; BLM; ?Bureau of Reclamation
<i>Oreohelix</i> n. sp. 1	Wenatchee National Forest
<i>Oreohelix</i> n. sp. 2	Wenatchee National Forest; BLM
<i>Oreohelix</i> n. sp. 3	?Lolo National Forest; ?State of Montana
<i>Oreohelix</i> n. sp. 4	?Lolo National Forest; ? BLM; ?State of Montana

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
SENSITIVE SPECIES	
Land snails	
<i>Oreohelix</i> n. sp. 5	Lolo National Forest
<i>Oreohelix</i> n. sp. 6	BLM; Glacier National Park
<i>Oreohelix</i> n. sp. 7	?Lolo National Forest; ?Bitterroot National Forest
<i>Oreohelix</i> n. sp. 8	Nez Perce National Forest; BLM
<i>Oreohelix</i> n. sp. 9	Challis National Forest
<i>Oreohelix</i> n. sp. 10	
<i>Oreohelix</i> n. sp. 11	Flathead Indian Reservation, Mission Mountains Tribal Wilderness; ?Flathead National Forest
<i>Oreohelix</i> n. sp. 12	Nez Perce National Forest
<i>Oreohelix</i> n. sp. 13	Nez Perce National Forest
<i>Oreohelix</i> n. sp. 14	Nez Perce National Forest
<i>Oreohelix</i> n. sp. 15	Payette National Forest; ?Nez Perce National Forest; BLM
<i>Oreohelix</i> n. sp. 16	Payette National Forest; ?BLM
<i>Oreohelix</i> n. sp. 17	Payette National Forest; BLM
<i>Oreohelix</i> n. sp. 18	?Hells Canyon NRA; ?BLM-Cottonwood; ?Nez Perce National Forest; ?Wallowa-Whitman National Forest
<i>Oreohelix</i> n. sp. 19	Nez Perce National Forest; State of Idaho
<i>Oreohelix</i> n. sp. 20	Nez Perce National Forest; ?State of Idaho; ?BLM
<i>Oreohelix</i> n. sp. 21	BLM
<i>Oreohelix</i> n. sp. 22	Nez Perce National Forest; ?BLM
<i>Oreohelix</i> n. sp. 23	BLM
<i>Oreohelix</i> n. sp. 24	
<i>Oreohelix</i> n. sp. 25	Clearwater National Forest; Nez Perce National Forest; BLM; Nez Perce Reservation

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
SENSITIVE SPECIES	
Land snails	
<i>Oreohelix</i> n. sp. 26	Columbia River Gorge NSA
<i>Oreohelix</i> n. sp. 27	Challis National Forest
<i>Oreohelix</i> n. sp. 28	?Caribou National Forest
<i>Oreohelix</i> n. sp. 29	Hells Canyon NRA; BLM-Cottonwood; Nez Perce National Forest; Wallowa-Whitman National Forest
<i>Oreohelix</i> n. sp. 30	Nez Perce National Forest
<i>Oreohelix</i> n. sp. 31	
<i>Oreohelix strigosa delicata</i> Pilsbry, 1934	?Umatilla National Forest; ?Wallowa-Whitman National Forest
<i>Oreohelix strigosa goniogyra</i> Pilsbry, 1934	Nez Perce National Forest; BLM-Cottonwood
<i>Oreohelix strigosa</i> n. subsp. 1	Nez Perce National Forest; ?Payette National Forest
<i>Oreohelix tenuistriata</i> Henderson & Daniels, 1916	
<i>Oreohelix variabilis</i> Henderson, 1929	Columbia Gorge NSA; Deschutes Wild & Scenic River; BLM?; ?State of Oregon
<i>Oreohelix variabilis</i> n. subsp.	Deschutes Wild & Scenic River; BLM-Prineville; ?State of Oregon
<i>Oreohelix vortex</i> Berry, 1932	BLM-Cottonwood
<i>Oreohelix waltoni</i> Solem, 1975	BLM-Cottonwood
<i>Pristiloma (Pristinopsis) arcticum? cra teris</i> P., 1946	Crater Lake National Park
<i>Pristiloma (Pristinopsis) idahoense</i> (Pilsbry, 1902)	Payette National Forest; Nez Perce National Forest; Clearwater National Forest; Idaho Panhandle National Forests; ?Coeur d'Alene Reservation
<i>Pristiloma (Priscovitrea?) wascoense</i> (Hemphill, 1911)	?Payette National Forest; ?Nez Perce National Forest
<i>Vespericola columbiana depressa</i> (Pilsbry & Henderson, 1936)	Columbia Gorge NSA; Deschutes Wild & Scenic River; BLM-Prineville; ?State of Oregon; ?State of Washington
<i>Vespericola</i> n. sp. 1	

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
SENSITIVE SPECIES	
Land snails	
<i>Vespericola sierranus</i> (Berry, 1921)	Winema National Forest ; BLM-Medford
Slugs	
<i>Hemphillia came/us</i> Pilsbry & Vanatta, 1897	Clearwater National Forest; Nez Perce National Forest; ?BLM; ?Nez Perce Reservation; St. Joe National Forest
<i>Hemphillia danielsi</i> Vanatta, 1914	Bitterroot National Forest
<i>Hemphillia malonei</i> Pilsbry, 1917	Mt. Hood National Forest; Clatsop State Forest (State of Oregon); Columbia Gorge NSA
<i>Magnipelta mycophaga</i> Pilsbry, 1953	Lolo National Forest; Clearwater National Forest; ? Idaho Panhandle National Forests; Flathead National Forest; ?Bitterroot National Forest; Colville National Forest; ?Kaniksu National Forest
<i>Prophysaon humile</i> Cockerell, 1890	Clearwater National Forest; St. Joe National Forest; Panhandle National Forests; ?Coeur d'Alene Reservation; ?Bitterroot National Forest; ?Lolo National Forest
<i>Udosarx lyrata lyrata</i> Webb, 1959	Clearwater National Forest; Lolo National Forest
<i>Udosarx lyrata russelli</i> Webb, 1980	?Lolo National Forest
Freshwater Snails	
<i>Amnicola</i> n. sp. 1	?Okanogan National Forest; ?Wenatchee National Forest; ?Colville National Forest; ?Panhandle National Forest; ?Flathead National Forest; ?Kaniksu National Forest
<i>Fisherola nuttalli</i> (Haldeman, 1843)	Columbia Gorge NSA; Deschutes Wild & Scenic River; Lower John Day Wild & Scenic River; ?Okanogan National Forest; Bureau of Reclamation; Hanford Reservation (DOE); U. S. Army Corps of Engineers; Hells Canyon NRA; Bonneville Power Authority

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
SENSITIVE SPECIES	
Freshwater Snails	
<i>Fluminicola fuscus</i> (Haldeman, 1841)	Columbia Gorge NSA; ? Okanogan National Forest; Bureau of Reclamation; Hanford Reservation (DOE); U. S. Army Corps of Engineers; Hells Canyon NRA; Bonneville Power Authority
<i>Fluminicola minutissimus</i> Pilsbry, 1907	Payette National Forest
<i>Fluminicola</i> n. sp. 1	Winema National Forest; Rogue River National Forest; Upper Klamath Lake National Wildlife Refuge
<i>Fluminicola</i> n. sp. 2	Winema National Forest; Upper Klamath Lake National Wildlife Refuge
<i>Fluminicola</i> n. sp. 3	BLM-Medford
<i>Fluminicola</i> n. sp. 4	Deschutes National Forest
<i>Fluminicola</i> n. sp. 5	Deschutes Wild & Scenic River; BLM-Prineville
<i>Fluminicola</i> n. sp. 6	BLM: ?Malheur National Wildlife Refuae
<i>Fluminicola</i> n. sp. 7	Winema National Forest; BLM; Upper Klamath Lake National Wildlife Refuge
<i>Fluminicola</i> n. sp. 8	?BLM-Klamath Falls
<i>Fluminicola</i> n. sp. 9	Winema National Forest; State of Oregon
<i>Fluminicola turbiniformis</i> (Tryon, 1865)	BLM
<i>Helisoma (C.) newberryi newberryi</i> (Lea, 1858)	Winema National Forest; Lassen National Forest; Upper Klamath Lake National Wildlife Refuge
<i>Helisoma (C.) newberryi jacksonensis</i> (Henderson, 1932)	Grand Teton National Park; Bureau of Reclamation
<i>Juga (J.) hemphilli dallesensis</i> (Henderson, 1935)	Columbia Gorge NSA; Gifford Pinchot National Forest; Mt. Hood National Forest
<i>Juga (J.) hemphilli hemphilli</i> (Henderson, 1935)	Columbia Gorge NSA; ? Gifford Pinchot National Forest; Mt. Hood National Forest
<i>Juga (J.) hemphilli maupinensis</i> (Henderson, 1935)	Deschutes Wild & Scenic River; BLM-Prineville
<i>Juga (J.) hemphilli</i> n. subsp. 1	Deschutes National Forest

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
SENSITIVE SPECIES	
Freshwater Snails	
<i>Juga</i> (J.) n. sp. 1	Columbia Gorge NSA; ?Gifford Pinchot National Forest; Mt. Hood National Forest
<i>Juga</i> (J.) n. sp. 2	Columbia Gorge NSA
<i>Juga</i> (O.) <i>bulbosa</i> (Gould, 1847)	Deschutes Wild & Scenic River; BLM-Prineville
<i>Juga</i> (O.) n. sp. 1	Columbia Gorge NSA; Gifford Pinchot National Forest
<i>Juga</i> (O.) n. sp. 2	Columbia Gorge NSA; Mt. Hood National Forest
<i>Juga</i> (O.) n. sp. 3	State of Orean
<i>Juga</i> (O.) n. sp. 4	Deschutes Wild & Scenic River; BLM-Prineville
<i>Juga</i> (O.) n. sp. 5	Malheur National Forest
<i>Lanx alta</i> (Tryon, 1865)	Winema National Forest
<i>Lanx klamathensis</i> Hannibal, 1912	Winema National Forest; Upper Klamath Lake National Wildlife Refuge
<i>Lanx</i> n. sp. 1	BLM (Idaho)
<i>Lyogyfus</i> n. sp. 1	Columbia Gorge NRA; State of Washington; State of Oregon; Gifford Pinchot National Forest; Mt. Hood National Forest
<i>Lyogyrus</i> n. sp. 2	Wenatchee National Forest; ?Okanogan National Forest; ?Colville National Forest; ?Panhandle National Forests; ?Kaniksu National Forest; ?Flathead National Forest
<i>Lyogyfus</i> n. sp. 3	Bureau of Reclamation
<i>Lyogyrus</i> n. sp. 4	Bureau of Reclamation
<i>Lyogyrus</i> n. sp. 5	Winema National Forest; Upper Klamath Lake National Wildlife Refuge
<i>Lyogyrus</i> n. sp. 6	Caribou National Forest; ?BLM
<i>Lyogyfus</i> n. sp. 7	Malheur National Forest
<i>Physa</i> (H.) <i>natricina</i> Taylor, 1988	
<i>Physella</i> (Petrophysa) n. sp. 1	BLM (Oregon)

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
SENSITIVE SPECIES	
Freshwater Snails	
<i>Physa</i> (P.) <i>megalochlamys</i> Taylor, 1988	BLM (Oregon); National Bison Range (Montana); Yellowstone National Park; Harney-Malheur National Wildlife Refuge
<i>Physella</i> (P.) <i>columbiana</i> (Hemphill, 1890)	Bureau of Reclamation; Bonneville Power Authority; U. S. Army Corps of Engineers
<i>Planorbella</i> (P.) <i>oregonensis</i> (Tryon, 1865)	
<i>Pyrgulopsis archimedis</i> Berry, 1947	Bureau of Reclamation; ?Upper Klamath Lake National Wildlife Refuge
<i>Pyrgulopsis bruneauensis</i> Hershler, 1990	BLM (Idaho)
<i>Pyrgulopsis hendersoni</i> (Pilsbry, 1933)	BLM (Oregon); Harney-Malheur National Wildlife Refuge
<i>Pyrgulopsis idahoensis</i> (Pilsbry, 1933)	
<i>Pyrgulopsis intermedia</i> (Tryon, 1865)	BLM (Oregon); ?Harney-Malheur National Wildlife Refuge
<i>Pyrgulopsis</i> n. sp. 1	Bureau of Reclamation
<i>Pyrgulopsis</i> n. sp. 2	
<i>Pyrgulopsis</i> n. sp. 3	?BLM (Oregon)
<i>Pyrgulopsis</i> n. sp. 4	BLM (Oregon)
<i>Pyrgulopsis</i> n. sp. 5	BLM (Oregon)
<i>Pyrgulopsis</i> n. sp. 6	Bureau of Reclamation; Bonneville Power Authority; U. S. Army Corps of Engineers
<i>Pyrgulopsis</i> n. sp. 7	?BLM (Idaho); ?Sawtooth National Forest
<i>Pyrgulopsis</i> n. sp. 8	
<i>Pyrgulopsis</i> n. sp. 9	BLM (Idaho); State of Idaho; ID Dept. of Fish & Game
<i>Pyrgulopsis</i> n. sp. 10	BLM (Idaho)
<i>Pyrgulopsis</i> n. sp. 11	State of Idaho; ?Ft. Hall Reservation
<i>Pyrgulopsis</i> n. sp. 12	?Caribou National Forest; ?BLM (Idaho)
<i>Pyrgulopsis</i> n. sp. 13	?Caribou National Forest; ?State of Idaho

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
SENSITIVE SPECIES	
Freshwater Snails	
<i>Pyrgulopsis</i> n. sp. 14	?Targhee National Forest
<i>Pyrgulopsis</i> n. sp. 15	?BLM (Idaho)
<i>Pyrgulopsis</i> n. sp. 16	Targhee National Forest
<i>Pyrgulopsis</i> n. sp. 17	?BLM (Idaho); ?Bureau of Reclamation
<i>Pyrgulopsis</i> n. sp. 18	BLM (Idaho); State of Idaho
<i>Pyrgulopsis robusta</i> (Walker, 1908)	Grand Teton National Park; ?Targhee National Forest; ?BLM (Wyoming)
<i>Stagnicola</i> (S.) <i>elrodi</i> (Baker & Henderson, 1933)	Flathead Indian Reservation
<i>Stagnicola</i> (S.) <i>elrodiana</i> Baker, 1935	Flathead Indian Reservation, Mission Mts. Tribal Wilderness; ? Flathead National Forest
<i>Stagnicola</i> (S.) <i>hinkleyi</i> (Baker, 1906)	BLM (Idaho); State of Idaho; U. S. Fish & Wildlife Service; ID Dept. of Fish & Game; Bureau of Reclamation
<i>Stagnicola</i> (S.) <i>idahoensis</i> (Henderson, 1931)	?BLM; ?Payette National Forest; ? Nez Perce National Forest
<i>Taylorconcha serpenticola</i> Hershler et al., 1994	BLM (Idaho); State of Idaho; U. S. Fish & Wildlife Service; ID Dept. of Fish & Game; Bureau of Reclamation
<i>Valvata</i> n. sp. 1	Nez Perce National Forest; BLM (Idaho)
<i>Valvata utahensis</i> Call, 1884	BLM (Idaho); State of Idaho; U. S. Fish & Wildlife Service; ID Dept. of Fish & Game; Bureau of Reclamation
<i>Vorticifex effusus da/i</i> (Baker, 1945)	Bureau of Reclamation; ? Upper Klamath Lake National Wildlife Refuge
<i>Vorticifex effusus diagonalis</i> (Henderson, 1929)	Crater Lake National Park; Bureau of Reclamation; Winema National Forest; State of Oregon
<i>Vorticifex klamathensis klamathensis</i> (Baker, 1945)	Bureau of Reclamation; ? Upper Klamath Lake National Wildlife Refuge; ?Winema National Forest
<i>Vorticifex klamathensis sinitsini</i> (Baker, 1945)	? Upper Klamath Lake National Wildlife Refuge; ?Winema National Forest

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON	SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
SENSITIVE SPECIES		
Freshwater Snails		
	<i>Vorticifex neritoides</i> (Hemphill in Baker, 1945)	Columbia Gorge NSA; Bureau of Reclamation; U. S. Army Corps of Engineers; Hells Canyon NRA; Bonneville Power Authority
Freshwater Bivalves		
	<i>Anodonta californiensis</i> Lea, 1852	Columbia Gorge NSA; Bureau of Reclamation; U. S. Army Corps of Engineers; Hells Canyon NRA; Bonneville Power Authority; ?Wenatchee National Forest; ? Okanogan National Forest. ?Colville National Forest. ?Panhandle National Forests; other National Forests in SE ID, OR; BLM (Oregon); BLM (Idaho); BLM (Nevada)
	<i>Anodonta wahlametensis</i> Lea, 1838	Columbia Gorge NSA; Bureau of Reclamation; U. S. Army Corps of Engineers; Hells Canyon NRA; Bonneville Power Authority
	<i>Margaritifera</i> n. sp. Taylor, 1988	BLM (Idaho)
	<i>Pisidium</i> n. sp. 1	Winema National Forest; Lassen National Forest; BLM (Oregon); Shasta-Trinity National Forest
	<i>Pisidium</i> (C.) <i>ultramontanum</i> Prime, 1865	Winema National Forest; Lassen National Forest; BLM (Oregon)
WATCH LIST		
Land Snails		
	<i>Cryptomastix</i> (C.) <i>devia</i> (Gould, 1846)	?State of Washington; ?National Forests in the Washington Cascades
	<i>Oreohelix jugalis</i> (Hemphill, 1890)	BLM-Prineville

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
WATCH LIST	
Land Snails	
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)	Idaho Panhandle National Forests; Clearwater National Forest; Nez Perce National Forest; Nez Perce Reservation; Umatilla National Forest; ?Wallowa-Whitman National Forest; ?Kaniksu National Forest; Bitterroot National Forest; Lolo National Forest
<i>Radiodiscus (R.) abietum</i> Baker, 1930	Payette National Forest; Nez Perce National Forest; Clearwater National Forest; Panhandle National Forests; Flathead Indian Reservation, Mission Mts. Tribal Wilderness
Slugs	
<i>Zacoleus idahoensis</i> Pilsbry, 1903	Idaho Panhandle National Forests; Clearwater National Forest; Nez Perce National Forest; Kaniksu National Forest; Bitterroot National Forest; Lolo National Forest
Freshwater Snails	
<i>Fluminicola</i> n. sp. 10	National Forests and BLM lands in southern and eastern Idaho; northern an eastern Utah; and western Wyoming
<i>Fluminicola</i> n. sp. 11	National Forests and BLM lands in eastern Washington, eastern Oregon; northern Idaho
<i>Lyogyrus greggi</i> Pilsbry, 1935	National Forests and BLM lands in western Montana; SE Idaho; and northern Utah; Yellowstone National Park; Grand Teton National Park
<i>Pristinicola hemphilli</i> (Pilsbry, 1907)	BLM lands and National Forests in eastern Washington; eastern Oregon; and western Idaho, including Umatilla National Forest; BLM-Baker; Nez Perce National Forest; . Payette National Forest; Hells Canyon NRA; BLM-Cottonwood; BLM-Prineville; Deschutes National Forest; Deschutes Wild & Scenic River; Columbia Gorge NSA; State of Oregon; State of Washington

TABLE 2. OCCURRENCES OF INTERIOR COLUMBIA BASIN MOLLUSK SPECIES OF SPECIAL CONCERN ON FEDERAL AND STATE LANDS (cont.).

TAXON SCIENTIFIC NAME	NAME OF GOVERNMENT ENTITY OR TRACT WITH OCCURRENCES
Freshwater Snails	
<i>Promenetus exacuus megas</i> (Dall, 1905)	National Forests from the eastern Cascades Washington to Flathead National Forest, Montana
<i>Stagnicola (H.) montanensis</i> (Baker, 1913)	Scattered sites throughout the assessment area, generally at higher elevations
<i>Valvata tricarinata</i> (Say, 1817)	Flathead Reservation; Flathead National Forest; ?Colville National Forest
Freshwater Bivalves	
<i>Gonidea angulata</i> (Lea, 1838)	Scattered sites throughout the assessment area, mostly in larger streams
<i>Margaritifera falcata</i> (Gould, 1850)	Scattered sites throughout the assessment area, mostly in permanent streams
EXTRALIMITAL TAXA WHICH MAY OCCUR IN THE PLANNING AREA	
<i>Acroloxus coloradensis</i> (Henderson, 1939)	Glacier National Park
<i>Fluminicola modoci</i> Hannibal, 1912	BLM-Lakeview
<i>Oreohelix strigosa berryi</i> Pilsbry, 1915)	Yellowstone National Park; National Forests in SW Montana
<i>Oreohelix yavapai mariae</i> Bartsch, 1916	Gallatin National Forest

TABLE 3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR SPECIES OF SPECIAL CONCERN.

TAXON SCIENTIFIC NAME	OCCURRENCE							SUGGESTED STATUS						
	WA	OR	ID	MT	WY	NV	UT	WA	OR	ID	MT	WY	NV	UT
SENSITIVE SPECIES														
Land Snails														
<i>Allogona (A.) lombardii</i> Smith, 1943										T				
<i>Allogona (A.) ptychophora solida</i> Vanatta, 1924								T	E	T				
<i>Anguispira nimapuna</i> Baker, 1932										T				
<i>Cryptomastix (B.)</i> n. sp. 1										E				
<i>Cryptomastix (B.)</i> n. sp. 2										E				
<i>Cryptomastix (B.) populi</i> (Vanatta, 1924)								T	T	T				
<i>Cryptomastix (C.) harfordiana</i> (Binney, 1878)										E				
<i>Cryptomastix (C.) hendersoni</i> (Pilsbry, 1928)								E	E					
<i>Cryptomastix (C.) magnidentata</i> (Pilsbry, 1940)										E				
<i>Cryptomastix (C.) mullani blandi</i> (Hemphill, 1892)										E				
<i>Cryptomastix (C.) mullani clappi</i> (Hemphill, 1897)										E				
<i>Cryptomastix (C.) mullani latilabris</i> (Pilsbry, 1940)										E				
<i>Cryptomastix (C.) mullani tuckeri</i> (P. & H., 1930)										E				
<i>Cryptomastix (C.)</i> n. sp. 1										E				
<i>Cryptomastix (C.)</i> n. sp. 2								E	?	E				
<i>Cryptomastix (C.)</i> n. sp. 3								E	E	E				
<i>Cryptomastix (C.)</i> n. sp. 4								E						
<i>Cryptomastix (C.) sanburni</i> (Binney, 1886)										E				
<i>Discus brunsoni</i> Berry, 1955											E			
<i>Discus marmorensis</i> Baker, 1932										E				
<i>Megomphix lutarius</i> Baker, 1932								E	E					
<i>Monadenia (M.) fidelis minor</i> (Binney, 1885)								E	E					

TABLE 3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	OCCURRENCE							SUGGESTED STATUS						
	WA	OR	ID	MT	WY	NV	UT	WA	OR	ID	MT	WY	NV	UT
SENSITIVE SPECIES														
Land Snails														
<i>Monadenia (M.) fidelis</i> n. subsp. 1									E					
<i>Monadenia (Monadenia)</i> n. sp. 1									E					
<i>Ogaridiscus subrupicola</i> (Dall, 1877)									T	T				T
<i>Oreohelix alpina</i> (Elrod, 1901)											T			
<i>Oreohelix amariradix</i> Pilsbry, 1934											E			
<i>Oreohelix carinifera</i> Pilsbry, 1912											E			
<i>Oreohelix elrodi</i> (Pilsbry, 1900)											E			
<i>Oreohelix hammeri</i> Fairbanks, 1984										E				
<i>Oreohelix haydeni hesperia</i> Pilsbry, 1939										E				
<i>Oreohelix haydeni perplexa</i> Pilsbry, 1939										E				
<i>Oreohelix idahoensis baileyi</i> (Bartsch, 1916)										E				
<i>Oreohelix idahoensis idahoensis</i> (Newcomb, 1866)										T				
<i>Oreohelix intersum</i> (Hemphill, 1890)										E				
<i>Oreohelix junii</i> Pilsbry, 1934								T						
<i>Oreohelix</i> n. sp. 1								E						
<i>Oreohelix</i> n. sp. 2								E						
<i>Oreohelix</i> n. sp. 3											E			
<i>Oreohelix</i> n. sp. 4											E			
<i>Oreohelix</i> n. sp. 5											T			
<i>Oreohelix</i> n. sp. 6											E			
<i>Oreohelix</i> n. sp. 7											E			
<i>Oreohelix</i> n. sp. 8										E				

TABLE 3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	OCCURRENCE							SUGGESTED STATUS						
	WA	OR	ID	MT	WY	NV	UT	WA	OR	ID	MT	WY	NV	UT
SENSITIVE SPECIES														
Land Snails														
<i>Oreohelix</i> n. sp. 9										N				
<i>Oreohelix</i> n. sp. 10											T			
<i>Oreohelix</i> n. sp. 11											E			
<i>Oreohelix</i> n. sp. 12										E				
<i>Oreohelix</i> n. sp. 13										E				
<i>Oreohelix</i> n. sp. 14										E				
<i>Oreohelix</i> n. sp. 15										E				
<i>Oreohelix</i> n. sp. 16										E				
<i>Oreohelix</i> n. sp. 17										E				
<i>Oreohelix</i> n. sp. 18								E	?	E				
<i>Oreohelix</i> n. sp. 19										E				
<i>Oreohelix</i> n. sp. 20										E				
<i>Oreohelix</i> n. sp. 21										E				
<i>Oreohelix</i> n. sp. 22										E				
<i>Oreohelix</i> n. sp. 23										E				
<i>Oreohelix</i> n. sp. 24										E				
<i>Oreohelix</i> n. sp. 25										T				
<i>Oreohelix</i> n. sp. 26								T						
<i>Oreohelix</i> n. sp. 27										N				
<i>Oreohelix</i> n. sp. 28										E				
<i>Oreohelix</i> n. sp. 29								T	T	T				
<i>Oreohelix</i> n. sp. 30										E				

TABLE 3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	OCCURRENCE							SUGGESTED STATUS						
	WA	OR	ID	MT	WY	NV	UT	WA	OR	ID	MT	WY	NV	UT
SENSITIVE SPECIES														
Land Snails														
<i>Oreohelix</i> n. sp. 31											E			
<i>Oreohelix strigosa delicata</i> Pilsbry, 1934								E	E					
<i>Oreohelix strigosa goniogyra</i> Pilsbry, 1934										E				
<i>Oreohelix strigosa</i> n. subsp. 1										T				
<i>Oreohelix tenuistriata</i> Henderson & Daniels, 1916										E				
<i>Oreohelix variabilis</i> Henderson, 1929									E					
<i>Oreohelix variabilis</i> n. subsp									E					
<i>Oreohelix vortex</i> Berry, 1932										T				
<i>Oreohelix waltoni</i> Solem, 1975										E				
<i>Pristiloma (Pristinopsis) arcticum? crateris</i> Pilsbry, 1946									T					
<i>Pristiloma (Pristinopsis) idahoense</i> (Pilsbry, 1902)										T				
<i>Pristiloma (Priscovitrea?) wascoense</i> (Hemphill, 1911)								T	T	T				
<i>Vespericola columbiana depressa</i> (P. & H., 1936)								E	E					
<i>Vespericola</i> n. sp. 1									E					
<i>Vespericola sierranus</i> (Berry, 1921)									T					
Slugs														
<i>Hemphillia camelus</i> Pilsbry & Vanatta, 1897										T				
<i>Hemphillia danielsi</i> Vanatta, 1914											T			
<i>Hemphillia malonei</i> Pilsbry, 1917								N	E					
<i>Magnipelta mycophaga</i> Pilsbry, 1953								E		E	E			
<i>Prophysaon humile</i> Cockerell, 1890										T				

TABLE 3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	OCCURRENCE							SUGGESTED STATUS						
	WA	OR	ID	MT	WY	NV	UT	WA	OR	ID	MT	WY	NV	UT
SENSITIVE SPECIES														
Slugs														
<i>Udosarx lyrata lyrata</i> Webb, 1959										T	T			
<i>Udosarx lyrata russelli</i> Webb, 1980											T			
Freshwater Snails														
<i>Amnicola</i> n. sp. 1								E		N	E			
<i>Fisherola nuttalli</i> (Haldeman, 1843)								T	T	E	E			
<i>Fluminicola fuscus</i> (Haldeman, 1841)								E	E	E	N			
<i>Fluminicola minutissimus</i> Pilsbry, 1907										E				
<i>Fluminicola</i> n. sp. 1									E					
<i>Fluminicola</i> n. sp. 2									E					
<i>Fluminicola</i> n. sp. 3									E					
<i>Fluminicola</i> n. sp. 4									E					
<i>Fluminicola</i> n. sp. 5									E					
<i>Fluminicola</i> n. sp. 6									E					
<i>Fluminicola</i> n. sp. 7									T					
<i>Fluminicola</i> n. sp. 8									E					
<i>Fluminicola</i> n. sp. 9									E					
<i>Fluminicola turbiniformis</i> (Tryon, 1865)									E				E	
<i>Helisoma</i> (C.) <i>newberryi newberryi</i> (Lea, 1858)									E					
<i>Helisoma</i> (C.) <i>newberryi jacksonensis</i> (H., 1932)												E		
<i>Juga</i> (J.) <i>hemphilli dallesensis</i> (Henderson, 1935)								E	E					

TABLE 3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	OCCURRENCE							SUGGESTED STATUS						
	WA	OR	ID	MT	WY	NV	UT	WA	OR	ID	MT	WY	NV	UT
SENSITIVE SPECIES														
Freshwater Snails														
<i>Juga (J.) hemphilli hemphilli</i> (Henderson, 1935)								E	E					
<i>Juga (J.) hemphilli maupinensis</i> (Henderson, 1935)									E					
<i>Juga (J.) hemphilli</i> n. subsp. 1									E					
<i>Juga (J.)</i> n. sp. 1								E	E					
<i>Juga (J.)</i> n. sp. 2								E	E					
<i>Juga (O.) bulbosa</i> (Gould, 1847)									E					
<i>Juga (O.)</i> n. sp. 1								T						
<i>Juga (O.)</i> n. sp. 2									T					
<i>Juga (O.)</i> n. sp. 3									E					
<i>Juga (O.)</i> n. sp. 4									E					
<i>Juga (O.)</i> n. sp. 5									E					
<i>Lanx alta</i> (Tryon, 1865)									E					
<i>Lanx klamathensis</i> Hannibal, 1912									E					
<i>Lanx</i> n. sp. 1										E				
<i>Lyogyrus</i> n. sp. 1								E	E					
<i>Lyogyrus</i> n. sp. 2								E						
<i>Lyogyrus</i> n. sp. 3									E					
<i>Lyogyrus</i> n. sp. 4									E					
<i>Lyogyrus</i> n. sp. 5									E					
<i>Lyogyrus</i> n. sp. 6										E				
<i>Lyogyrus</i> n. sp. 7									E					
<i>Physa (H.) natricina</i> Taylor, 1988										E				

TABLE 3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	OCCURRENCE							SUGGESTED STATUS						
	WA	OR	ID	MT	WY	NV	UT	WA	OR	ID	MT	WY	NV	UT
SENSITIVE SPECIES														
Freshwater Snails														
<i>Physa (P.) megalochlamys</i> Taylor, 1988									T	E	T	T		T
<i>Physella (Petrophysa)</i> n. sp. 1									E					
<i>Physella (P.) columbiana</i> (Hemphill, 1890)								E	E					
<i>Planorbella (P.) oregonensis</i> Tryon, 1865									E					
<i>Pyrgulopsis archimedis</i> Berry, 1947									E					
<i>Pyrgulopsis bruneauensis</i> Hershler, 1990										E				
<i>Pyrgulopsis hendersoni</i> (Pilsbry, 1933)									E					
<i>Pyrgulopsis idahoensis</i> (Pilsbry, 1933)										E				
<i>Pyrgulopsis intermedia</i> (Tryon, 1865)									E					
<i>Pyrgulopsis</i> n. sp. 1									E					
<i>Pyrgulopsis</i> n. sp. 2									E					
<i>Pyrgulopsis</i> n. sp. 3									E					
<i>Pyrgulopsis</i> n. sp. 4									E					
<i>Pyrgulopsis</i> n. sp. 5									E					
<i>Pyrgulopsis</i> n. sp. 6								E	E					
<i>Pyrgulopsis</i> n. sp. 7										E				
<i>Pyrgulopsis</i> n. sp. 8										E				
<i>Pyrgulopsis</i> n. sp. 9										E				
<i>Pyrgulopsis</i> n. sp. 10										E				
<i>Pyrgulopsis</i> n. sp. 11										E				
<i>Pyrgulopsis</i> n. sp. 12										E				
<i>Pyrgulopsis</i> n. sp. 13										E				

TABLE 3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	OCCURRENCE							SUGGESTED STATUS						
	WA	OR	ID	MT	WY	NV	UT	WA	OR	ID	MT	WY	NV	UT
SENSITIVE SPECIES														
Freshwater Snails														
<i>Pyrgulopsis</i> n. sp. 14										E				
<i>Pyrgulopsis</i> n. sp. 15										E				
<i>Pyrgulopsis</i> n. sp. 16										E				
<i>Pyrgulopsis</i> n. sp. 17										E				
<i>Pyrgulopsis</i> n. sp. 18										E				
<i>Pyrgulopsis robusta</i> (Walker, 1908)												E		
<i>Stagnicola</i> (S.) <i>elrodi</i> (Baker & Henderson, 1933)											E			
<i>Stagnicola</i> (S.) <i>elrodiana</i> Baker, 1935											E			
<i>Stagnicola</i> (S.) <i>hinkleyi</i> (Baker, 1906)									T	T		T	N	
<i>Stagnicola</i> (S.) <i>idahoensis</i> (Henderson, 1931)										T				
<i>Taylorconcha serpenticola</i> Hershler <i>et al.</i> , 1994										T				
<i>Valvata</i> n. sp. 1										E				
<i>Valvata utahensis</i> Call, 1884										E				E
<i>Vorticifex effusus dalli</i> (Baker, 1945)									E					
<i>Vorticifex effusus diagonalis</i> (Henderson, 1929)									E					
<i>Vorticifex klamathensis klamathensis</i> (Baker, 1945)									E					
<i>Vorticifex klamathensis sinitsini</i> (Baker, 1945)									E					
<i>Vorticifex neritoides</i> (Hemphill in Baker, 1945)								E	E					
Freshwater Bivalves														
<i>Anodonta californiensis</i> Lea, 1852								T	T	T		T	T	T
<i>Anodonta wahlametensis</i> Lea, 1838								E	E					

TABLE 3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	OCCURRENCE							SUGGESTED STATUS						
	WA	OR	ID	MT	WY	NV	UT	WA	OR	ID	MT	WY	NV	UT
WATCH LIST														
Freshwater Bivalves														
<i>Margaritifera</i> n. sp. Taylor, 1988										E				
<i>Pisidium</i> (C.) <i>ultramontanum</i> Prime, 1865									E					
Land Snails														
<i>Cryptomastix</i> (<i>Cryptomastix</i>) <i>devia</i> (Gould, 1846)								[E]	[E]					
<i>Oreohelix jugalis</i> (Hemphill, 1890)										T?				
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)								N	N	N	N			
<i>Radiodiscus</i> (R.) <i>abietum</i> Baker, 1930								N	N	N	N			
Slugs														
<i>Zacoleus idahoensis</i> Pilsbry, 1903										N	N			
Freshwater Snails														
<i>Fluminicola</i> n. sp. 10									?	?	?			
<i>Fluminicola</i> n. sp. 11								?	?	?				
<i>Lyogyrus greggi</i> Pilsbry, 1935										?	?	?		
<i>Pristinicola hemphilli</i> (Pilsbry, 1907)								N	N	T				
<i>Promenetus exacuus megas</i> (Dall, 1905)								N		N	N			
<i>Stagnicola</i> (H.) <i>montanensis</i> (Baker, 1913)										N	N	N	N	N
<i>Valvata tricarinata</i> (Say, 1817)								N		N	N			

TABLE 3. STATE OCCURRENCE AND SUGGESTED STATE STATUS FOR SPECIES OF SPECIAL CONCERN (cont.).

TAXON SCIENTIFIC NAME	OCCURRENCE							SUGGESTED STATUS						
	WA	OR	ID	MT	WY	NV	UT	WA	OR	ID	MT	WY	NV	UT
WATCH LIST														
Freshwater Bivalves														
<i>Gonidea angulata</i> (Lea, 1838)								N	N	N				
<i>Margaritifera falcata</i> (Gould, 1850)								N	N	N	N	N	N	N
EXTRALIMITAL TAXA WHICH MAY OCCUR IN THE PLANNING AREA														
<i>Acroloxus coloradensis</i> (Henderson, 1939)											[E]			
<i>Fluminicola modoci</i> Hannibal, 1912									[E]					
<i>Oreohelix strigosa berryi</i> Pilsbry, 1915)											[E]	[E]		
<i>Oreohelix yavapai mariae</i> Bartsch, 1916												[E]		

EXPLANATION:

 = occurs in state

E = suggested State Endangered

 = occurs outside assessment area

T = suggested State Threatened

 = possible occurrence

N = no special status recommended currently

[] = status outside assessment area

? = insufficient information for recommendation

EXPLANATION OF TABLES 4-10

Bold Text = critically sensitive **taxon**

Normal Text = sensitive **taxon**, but not **critically**

[†] = Federally listed **taxon**

[·] = Federal candidate

[°] = formerly Federally listed species

 = definitely occurs in State

 = possibly occurs in State

TABLE 4. IDAHO MOLLUSK SPECIES OF SPECIAL CONCERN.

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
IDAHO [Total 101]				
<i>Amnicola</i> n. sp. 1				
<i>Allogona</i> (A.) <i>lombardii</i> Smith, 1943				
<i>Allogona</i> (A.) <i>ptychophora solida</i> Vanatta, 1924				
<i>Anguispira</i> <i>nimapuna</i> Baker, 1932				
<i>Anodonta</i> <i>californiensis</i> Lea, 1852*				
<i>Cryptomastix</i> (C.) <i>harfordiana</i> (Binney, 1878)				
<i>Cryptomastix</i> (B.) n. sp. 1				
<i>Cryptomastix</i> (O.) n. sp. 2				
<i>Crvotomastix</i> (B.) <i>populi</i> (Vanatta, 1924)				
<i>Cryptomastix</i> (C.) <i>magnidentata</i> (Pilsbry, 1940)*				
<i>Cryptomastix</i> (C.) <i>mullani blandi</i> (Hemphill, 1892)				
<i>Crvotomastix</i> (C.) <i>mullani clappi</i> (Hemphill, 1897)				
<i>Cryptomastix</i> (C.) <i>mullani latilabris</i> (Pilsbry, 1940)				
<i>Cryptomastix</i> (C.) <i>mullani tuckeri</i> (Pilsbry & Henderson, 1930)				
<i>Cryptomastix</i> (C.) n. sp. 1				
<i>Cryptomastix</i> (C.) n. sp. 2				
<i>Cryptomastix</i> (C.) n. sp. 3				
<i>Cryptomastix</i> (C.) <i>sanburni</i> (Binney, 1886)				
<i>Discus</i> <i>marmorensis</i> Baker, 1932*				
<i>Fisherola</i> <i>nuttalli</i> (Haldeman, 1841)*				
<i>Fluminicola</i> <i>fuscus</i> (Haldeman, 1841)*				
<i>Fluminicola</i> <i>minutissimus</i> Pilsbry, 1907				
<i>Fluminicola</i> n. sp. 10				
<i>Fluminicola</i> n. sp. 11				
<i>Gonidea</i> <i>angulata</i> (Lea, 1838)				
<i>Hemphillia</i> <i>camelus</i> Pilsbry & Vanatta, 1897				
<i>Lanx</i> n. sp. 1*				
<i>Lyogyrus</i> <i>greggi</i> Pilsbry, 1935				
<i>Lyogyrus</i> n. sp. 6				
<i>Magnipelta</i> <i>mycophaga</i> Pilsbry, 1953				
<i>Margaritifera</i> <i>falcata</i> (Gould, 1850)				
<i>Margaritifera</i> n. sp. Taylor, 1988				
<i>Ogaridiscus</i> <i>subrupicola</i> (Dall, 1877)				
<i>Oreohelix</i> <i>hammeri</i> Fairbanks, 1984				
<i>Oreohelix</i> <i>haydeni hesperia</i> Pilsbry, 1939				
<i>Oreohelix</i> <i>haydeni perplexa</i> Pilsbry, 1939				
<i>Oreohelix</i> <i>idahoensis baileyi</i> (Bartsch, 1916)				
<i>Oreohelix</i> <i>idahoensis idahoensis</i> (Newcomb, 1866)*				
<i>Oreohelix</i> <i>intersum</i> (Hemphill, 1890)				
<i>Oreohelix</i> <i>jugal</i> (Hemphill, 1890)*				

TABLE 4. IDAHO MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
IDAHO				
<i>Oreohelix</i> n. sp. 8				
<i>Oreohelix</i> n. sp. 9				
<i>Oreohelix</i> n. sp. 12				
<i>Oreohelix</i> n. sp. 13				
<i>Oreohelix</i> n. sp. 14				
<i>Oreohelix</i> n. sp. 15				
<i>Oreohelix</i> n. sp. 16				
<i>Oreohelix</i> n. sp. 17				
<i>Oreohelix</i> n. sp. 18				
<i>Oreohelix</i> n. sp. 19				
<i>Oreohelix</i> n. sp. 20				
<i>Oreohelix</i> n. sp. 21				
<i>Oreohelix</i> n. sp. 22				
<i>Oreohelix</i> n. sp. 23				
<i>Oreohelix</i> n. sp. 24				
<i>Oreohelix</i> n. sp. 25				
<i>Oreohelix</i> n. sp. 27				
<i>Oreohelix</i> n. sp. 28				
<i>Oreohelix</i> n. sp. 29				
<i>Oreohelix</i> n. sp. 30				
<i>Oreohelix strigosa goniogyra</i> Pilsbry, 1934*				
<i>Oreohelix strigosa</i> n. subsp. 1				
<i>Oreohelix tenuistriata</i> Henderson & Daniels, 1916				
<i>Oreohelix vortex</i> Berry, 1932*				
<i>Oreohelix waltoni</i> Solem, 1975*				
<i>Physa</i> (H.) <i>natricina</i> Taylor, 1988*				
<i>Physa</i> (P.) <i>megalochlamys</i> Taylor, 1988				
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)				
<i>Pristiloma</i> (<i>Priscovitrea</i> ?) <i>wascoense</i> (Hemp hill, 1911)				
<i>Pristiloma</i> (<i>Pristinopsis</i>) <i>idahoense</i> (Pilsbry, 1902)				
<i>Pristinicola hemphilli</i> (Pilsbry, 1907)				
<i>Promenetus exacuus megas</i> (Dall, 1905)				
<i>Prophysaon humile</i> Cockerell, 1890				
<i>Pyrgulopsis bruneauensis</i> Hershler, 1990*				
<i>Pyrgulopsis idahoensis</i> (Pilsbry, 1933)*				
<i>Pyrgulopsis</i> n. sp. 7				
<i>Pyrgulopsis</i> n. sp. 8				
<i>Pyrgulopsis</i> n. sp. 9				
<i>Pyrgulopsis</i> n. sp. 10				
<i>Pyrgulopsis</i> n. sp. 11				

TABLE 4. IDAHO MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
IDAHO				
<i>Pvraulopsis</i> n. sp. 12				
<i>Pyrgulopsis</i> n. sp. 13				
<i>Pyrgulopsis</i> n. sp. 14				
<i>Pyrgulopsis</i> n. sp. 15				
<i>Pvraulopsis</i> n. sp. 16				
<i>Pyrgulopsis</i> n. sp. 17				
<i>Pyrgulopsis</i> n. sp. 18				
<i>Radiodiscus</i> (R.) <i>abietum</i> Baker, 1930				
<i>Stagnicola</i> (H.) <i>montanensis</i> (Baker, 1913)				
<i>Stagnicola</i> (S.) <i>hinkleyi</i> (Baker, 1906)				
<i>Stagnicola</i> <i>idahoensis</i> (Henderson, 1931)				
<i>Taylorconcha</i> <i>serpenticola</i> Hershler et al., 1994*				
<i>Udosarx</i> <i>lyrata</i> <i>lyrata</i> Webb, 1959				
<i>Valvata</i> n. sp. 1				
<i>Valvata</i> <i>tricarinata</i> (Say, 1817)				
<i>Valvata</i> <i>utahensis</i> Call, 1884*				
<i>Zacoleus</i> <i>idahoensis</i> Pilsbry, 1903				
NUMBER OF FEDERALLY LISTED OR CANDIDATE SPECIES:	7	1	7	-
TOTAL CRITICALLY SENSITIVE:	27	2	51	4
TOTAL SENSITIVE, BUT NOT CRITICALLY:	7	2	3	1
TOTAL NUMBER OF SPECIES PER CATEGORY:	34	4	54	5

TABLE 5. MONTANA MOLLUSK SPECIES OF SPECIAL CONCERN.

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
MONTANA [Total 32]				
<i>Amnicola</i> n. sp. 1				
<i>Discus brunsoni</i> Berry, 1955				
<i>Fisherola nuttalli</i> (Haldeman, 1841)*				
<i>Fluminicola fucus</i> (Haldeman, 1841)*				
<i>Fluminicola</i> n. sp. 10				
<i>Hemphillia danielsi</i> Vanatta, 1914				
<i>Lyogyrus greggi</i> Pilsbry, 1935				
<i>Magnipelta mycophaga</i> Pilsbry, 1953				
<i>Margaritifera falcata</i> (Gould, 1850)				
<i>Oreohelix alpina</i> (Elrod, 1901)				
<i>Oreohelix amariradix</i> Pilsbry, 1934				
<i>Oreohelix carinifera</i> Pilsbry, 1912				
<i>Oreohelix elrodi</i> (Pilsbry, 1900)				
<i>Oreohelix</i> n. sp. 3				
<i>Oreohelix</i> n. sp. 4				
<i>Oreohelix</i> n. sp. 5				
<i>Oreohelix</i> n. sp. 6				
<i>Oreohelix</i> n. sp. 7				
<i>Oreohelix</i> n. sp. 10				
<i>Oreohelix</i> n. sp. 11				
<i>Oreohelix</i> n. sp. 31				
<i>Physa</i> (P.) <i>megalochlamys</i> Taylor, 1988				
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)				
<i>Promenetus exacuus megas</i> (Dall, 1905)				
<i>Radiodiscus</i> (R.) <i>abietum</i> Baker, 1930				
<i>Stagnicola</i> (H.) <i>montanensis</i> (Baker, 1913)				
<i>Stagnicola</i> (S.) <i>elrodi</i> (Baker & Henderson, 1933)				
<i>Stagnicola</i> (S.) <i>elrodiana</i> Baker, 1935				
<i>Udosarx lyrata lyrata</i> Webb, 1959				
<i>Udosarx lyrata russelli</i> Webb, 1980				
<i>Valvata tricarinata</i> (Say, 1817)				
<i>Zacoleus idahoensis</i> Pilsbry, 1903				
NUMBER OF FEDERALLY LISTED OR CANDIDATE SPECIES:	2	-	-	-
TOTAL CRITICALLY SENSITIVE:	6	-	13	4
TOTAL SENSITIVE, BUT NOT CRITICALLY:	5	1	2	1
TOTAL NUMBER OF SPECIES PER CATEGORY:	11	1	15	5

TABLE 6. NEVADA MOLLUSK SPECIES OF SPECIAL CONCERN.

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
NEVADA [Total 4]				
<i>Anodonta californiensis</i> Lea, 1852*				
<i>Fluminicola turbiniformis</i> (Tryon, 1865)				
<i>Margaritifera falcata</i> (Gould, 1850)				
<i>Stagnicola (H.) montanensis</i> (Baker, 1913)				
NUMBER OF FEDERALLY LISTED OR CANDIDATE SPECIES:	-	1	-	-
TOTAL CRITICALLY SENSITIVE:	1	1	-	-
TOTAL SENSITIVE, BUT NOT CRITICALLY:	1	1	-	-
TOTAL NUMBER OF SPECIES PER CATEGORY:	2	2	-	-

TABLE 6. OREGON MOLLUSK SPECIES OF SPECIAL CONCERN.

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
OREGON [Total 79]				
<i>Allogona</i> (A.) <i>ptychophora</i> <i>solida</i> Vanatta, 1924				
<i>Anodonta californiensis</i> Lea, 1852*				
<i>Anodonta wahlametensis</i> Lea, 1838				
<i>Cryptomastix</i> (B.) <i>populi</i> (Vanatta, 1924)				
<i>Cryptomastix</i> (C.) <i>devia</i> (Gould, 1846)				
<i>Cryptomastix</i> (C.) <i>hendersoni</i> (Pilsbry, 1928)				
<i>Cryptomastix</i> (C.) n. sp. 2				
<i>Cryptomastix</i> (C.) n. sp. 3				
<i>Fisherola nuttalli</i> (Haldeman, 1841)*				
<i>Fluminicola</i> <i>fuscus</i> (Haldeman, 1841)*				
<i>Fluminicola</i> n. sp. 1				
<i>Fluminicola</i> n. sp. 2				
<i>Fluminicola</i> n. sp. 3				
<i>Fluminicola</i> n. sp. 4				
<i>Fluminicola</i> n. sp. 5				
<i>Fluminicola</i> n. sp. 6				
<i>Fluminicola</i> n. sp. 7				
<i>Fluminicola</i> n. sp. 8				
<i>Fluminicola</i> n. sp. 9				
<i>Fluminicola</i> n. sp. 10				
<i>Fluminicola</i> n. sp. 11				
<i>Fluminicola turbiniformis</i> (Tryon, 1865)				
<i>Gonidea angulata</i> (Lea, 1838)				
<i>Helisoma</i> (C.) <i>newberryi newberryi</i> (Lea, 1858)				
<i>Hemphillia malonei</i> Pilsbry, 1917				
<i>Juga</i> (J.) <i>hemphilli dallesensis</i> (Henderson, 1935)				
<i>Juga</i> (J.) <i>hemphilli hemphilli</i> (Henderson, 1935)				
<i>Juga</i> (J.) <i>hemphilli maupinensis</i> (Henderson, 1935)				
<i>Juga</i> (J.) <i>hemphilli</i> n. sp. 1				
<i>Juga</i> (J.) n. sp. 1				
<i>Juga</i> (J.) n. sp. 2				
<i>Juga</i> (O.) <i>bulbosa</i> (Gould, 1847)				
<i>Juga</i> (O.) n. sp. 2				
<i>Juga</i> (O.) n. sp. 3				
<i>Juga</i> (O.) n. sp. 4				
<i>Juga</i> (O.) n. sp. 5				
<i>Lanx alta</i> (Tryon, 1865)				
<i>Lanx klamathensis</i> Hannibal, 1912				
<i>Lyogyrus</i> n. sp. 1				
<i>Lyogyrus</i> n. sp. 3				

TABLE 6. OREGON MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
OREGON				
<i>Lyogyrus</i> n. sp. 4				
<i>Lyogyrus</i> n. sp. 5				
<i>Lyogyrus</i> n. sp. 7				
<i>Margaritifera falcata</i> (Gould, 1850)				
<i>Megomphix lutarius</i> Baker, 1932				
<i>Monadenia</i> (M.) <i>fidelis minor</i> (Binney, 1885)*				
<i>Monadenia</i> (M.) <i>fidelis</i> n. subsp. 1				
<i>Monadenia</i> (M.) n. sp. 1				
<i>Ogaridiscus subrupicola</i> (Dall, 1877)				
<i>Oreohelix</i> n. sp. 18				
<i>Oreohelix</i> n. sp. 29				
<i>Oreohelix strigosa delicata</i> Pilsbry, 1934				
<i>Oreohelix variabilis</i> Henderson, 1929				
<i>Oreohelix variabilis</i> n. subsp. 1				
<i>Physa</i> (P.) <i>megalochlamys</i> Taylor, 1988				
<i>Physella</i> (C.) n. sp. 1				
<i>Physella</i> (P.) <i>columbiana</i> (Hemphill, 1890)				
<i>Pisidium</i> n. sp. 1				
<i>Pisidium</i> (C.) <i>ultramontanum</i> Prime, 1865*				
<i>Planorbella</i> (P.) <i>oregonensis</i> (Tryon, 1865)				
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)				
<i>Pristiloma</i> (Priscovitrea?) <i>wascoense</i> (Hemphill, 1911)				
<i>Pristiloma</i> (Pristinopsis) <i>arcticum? crateris</i> Pilsbry, 1946				
<i>Pristinicola hemphilli</i> (Pilsbry, 1907)				
<i>Pyrgulopsis archimedis</i> Berry, 1947				
<i>Pyrgulopsis hendersoni</i> (Pilsbry, 1933)				
<i>Pyrgulopsis intermedia</i> (Tryon, 1865)				
<i>Pyrgulopsis</i> n. sp. 1				
<i>Pyrgulopsis</i> n. sp. 2				
<i>Pyrgulopsis</i> n. sp. 3				
<i>Pyrgulopsis</i> n. sp. 4				
<i>Pyrgulopsis</i> n. sp. 5				
<i>Pyrgulopsis</i> n. sp. 6				
<i>Vespericola columbiana depressa</i> (Pilsbry & Henderson, 1936)				
<i>Vespericola</i> n. sp. 1				
<i>Vorticifex effusus dalli</i> (Baker, 1945)				
<i>Vorticifex effusus diagonalis</i> (Henderson, 1929)				
<i>Vorticifex klamathensis klamathensis</i> (Baker, 1945)				
<i>Vorticifex klamathensis sinitsini</i> (Baker, 1945)				

TABLE 6. OREGON MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
OREGON				
<i>Vorticifex neritoides</i> (Hemphill, 1890)				
NUMBER OF FEDERALLY LISTED OR CANDIDATE SPECIES:	2	2	1	-
TOTAL CRITICALLY SENSITIVE:	49	4	19	1
TOTAL SENSITIVE, BUT NOT CRITICALLY:	3	2	2	2
TOTAL NUMBER OF SPECIES, PER CATEGORY:	52	6	21	1

TABLE 8. UTAH MOLLUSK SPECIES OF SPECIAL CONCERN.

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
UTAH	[Total 5]			
<i>Anodonta californiensis</i> Lea, 1852*				
<i>Margaritifera falcata</i> (Gould, 1850)				
<i>Ogaridiscus subrupicola</i> (Dall, 1877)				
<i>Physa</i> (P.) <i>megalochlamys</i> Taylor, 1988				
<i>Stagnicola</i> (H.) <i>montanensis</i> (Baker, 1913)				
NUMBER OF FEDERALLY LISTED OR CANDIDATE SPECIES:	-	1	-	-
TOTAL CRITICALLY SENSITIVE:	1	1	1	-
TOTAL SENSITIVE, BUT NOT CRITICALLY:	1	1	-	-
TOTAL NUMBER OF SPECIES PER CATEGORY:	2	2	1	-

TABLE 9. WASHINGTON MOLLUSK SPECIES OF SPECIAL CONCERN.

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
WASHINGTON [Total 44]				
<i>Allogona (A.) ptychophora solida</i> Vanatta, 1924				
<i>Amnicola</i> n. sp. 1				
<i>Anodonta californiensis</i> Lea, 1852 ¹				
<i>Anodonta wahlametensis</i> Lea, 1838				
<i>Cryptomastix (B.) populi</i> (Vanatta, 1924)				
<i>Cryptomastix (C.) devia</i> (Gould, 1846)				
<i>Cryptomastix (C.) hendersoni</i> (Pilsbry, 1928)				
<i>Cryptomastix (C.)</i> n. sp. 2				
<i>Cryptomastix (C.)</i> n. sp. 3				
<i>Cryptomastix (C.)</i> n. sp. 4				
<i>Fisherola nuttallii</i> (Haldeman, 1841)*				
<i>Fluminicola fuscus</i> (Haldeman, 1841)*				
<i>Fluminicola</i> n. sp. 11				
<i>Gonidea angulata</i> (Lea, 1838)				
<i>Hemphillia malonei</i> Pilsbry, 1917				
<i>Juga (J.) hemphilli dallesensis</i> (Henderson, 1935)				
<i>Juga (J.) hemphilli hemphilli</i> (Henderson, 1935)				
<i>Juga (J.)</i> n. sp. 1				
<i>Juga (J.)</i> n. sp. 2				
<i>Juga (O.)</i> n. sp. 1				
<i>Lyogyrus</i> n. sp. 1				
<i>Lyogyrus</i> n. sp. 2				
<i>Magnipelta mycophaga</i> Pilsbry, 1953				
<i>Margaritifera falcata</i> (Gould, 1850)				
<i>Megomphix lutarius</i> Baker, 1932				
<i>Monadenia (M.) fidelis minor</i> (Rinney, 1885)*				
<i>Oreohelix junii</i> Pilsbry, 1934				
<i>Oreohelix</i> n. sp. 1				
<i>Oreohelix</i> n. sp. 2				
<i>Oreohelix</i> n. sp. 18				
<i>Oreohelix</i> n. sp. 26				
<i>Oreohelix</i> n. sp. 29				
<i>Oreohelix strigosa delicata</i> Pilsbry, 1934				
<i>Physella (P.) columbiana</i> (Hemphill, 1890)				
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)				
<i>Pristiloma (Priscovitrea?) wascoense</i> (Hemphill, 1911)				
<i>Pristinicola hemphilli</i> (Pilsbry, 1907)				
<i>Promenetus exacuus megas</i> (Dall, 1905)				
<i>Pyrgulopsis</i> n. sp. 6				
<i>Radiodiscus (R.) abietum</i> Baker, 1930				

TABLE 9. WASHINGTON MOLLUSK SPECIES OF SPECIAL CONCERN (cont.).

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
WASHINGTON				
<i>Valvata tricarinata</i> (Say, 1817)				
<i>Vespericola columbiana depressa</i> (Pilsbry & Henderson, 1936)				
<i>Vespericola sierranus</i> (Berry, 1921)				
<i>Vorticifex neritoides</i> (Hemphill, 1890)				
NUMBER OF FEDERALLY LISTED OR CANDIDATE SPECIES:	2	1	1	-
TOTAL CRITICALLY SENSITIVE:	13	2	18	2
TOTAL SENSITIVE, BUT NOT CRITICALLY:	4	2	3	-
TOTAL NUMBER OF SPECIES PER CATEGORY:	17	4	21	2

TABLE 10. WYOMING MOLLUSK SPECIES OF SPECIAL CONCERN.

NAME	FRESHWATER		LAND	
	SNAIL	CLAM	SNAIL	SLUG
WYOMING	[Total 8]			
<i>Anodonta californiensis</i> Lea, 1852*				
<i>Helisoma (C.) newberryi jacksonensis</i> (Henderson, 1932)*				
<i>Lyogyrus greggi</i> Pilsbry, 1935				
<i>Margaritifera falcata</i> (Gould, 1850)				
<i>Physa (P.) megalochlamys</i> Taylor, 1988				
<i>Pyrgulopsis robusta</i> (Walker, 1908)*				
<i>Stagnicola (H.) montanensis</i> (Baker, 1913)				
<i>Stagnicola (S.) hinkleyi</i> (Baker, 1906)				
NUMBER OF LISTED OR CANDIDATE:	2	1	-	-
TOTAL CRITICALLY SENSITIVE:	4	1	-	-
TOTAL SENSITIVE, BUT NOT CRITICALLY:	2	1	-	-
TOTAL NUMBER OF SPECIES:	6	2	-	-

EXPLANATION OF TABLES 1 I-28

x = sensitive species found only in single endemic cluster

x = sensitive species found in only two -three endemic clusters

regional = sensitive **species** found in more than three endemic clusters

For complete taxonomy, refer to Table 1.

TABLE 11. MOLLUSK SPECIES OF SPECIAL CONCERN, COLUMBIA GORGE, WASHINGTON & OREGON.

NAME	ENDEMIC STATUS
LAND	
<i>Cryptomastix (Cryptomastix) hendersoni</i> Pilsbry, 1928	x
<i>Hemphillia malonei</i> Pilsbry, 1917	x?
<i>Monadenia fidelis minor</i> (Binney, 1885)	x
<i>Oreohelix variabilis</i> Henderson, 1929	x
<i>Oreohelix</i> n. sp. 26	x
<i>Pristiloma (Priscovitrea?) wascoense</i> (Hemphill, 1911)	x
<i>Vespericola columbiana depressa</i> (Pilsbry & Henderson, 1936)	x
FRESHWATER	
<i>Juga (Juga) hemphilli hemphilli</i> (Henderson, 1935)	x
<i>Juga (Juga) hemphilli dallesensis</i> (Henderson, 1935)	x
<i>Juga (Juga)</i> n. sp. 1	x
<i>Juga (Juga)</i> n. sp. 2	x
<i>Juga (Oreobasis)</i> n. sp. 1	x
<i>Juga (Oreobasis)</i> n. sp. 2	x
<i>Lyogyrus</i> n. sp. 1	x

TABLE 12. MOLLUSK SPECIES OF SPECIAL CONCERN, LOWER COLUMBIA RIVER, WASHINGTON & OREGON.

NAME	ENDEMIC STATUS
FRESHWATER	
<i>Anodonta californiensis</i> Lea, 1852	regional
<i>Anodonta wahlametensis</i> Lea, 1838	x
<i>Fisherola nuttalli</i> (Haldeman, 1841)	regional
<i>Fluminicola fuscus</i> (Haldeman, 1843)	regional
<i>Fluminicola</i> n. sp. 11	x, regional
<i>Gonidea angulata</i> (Lea, 1838)	regional
<i>Margaritifera falcata</i> (Gould, 1850)	regional
<i>Physella (Physella) columbiana</i> (Hemphill, 1890)	x
<i>Pyrgulopsis</i> n. sp. 6	x
<i>Vorticifex neritoides</i> (Hemphill in Baker, 1945)	x

TABLE 13. MOLLUSK SPECIES OF SPECIAL CONCERN, DESCHUTES R. DRAINAGE, OREGON

NAME	ENDEMIC STATUS
LAND	
<i>Monadenia fidelis minor</i> (Binney, 1885)	x
<i>Monadenia fidelis</i> n. subsp. 1	x
<i>Oreohelix variabilis</i> Henderson, 1929	x
<i>Oreohelix variabilis</i> n. subsp. 1	x
<i>Vespericola columbiana depressa</i> (Pilsbry & Henderson, 1936)	x
<i>Vespericola</i> n. sp. 1	x
FRESHWATER	
<i>Anodonta californiensis</i> Lea, 1852	regional
<i>Fisherola nuttalli</i> (Haldeman, 1841)	regional
<i>Fluminicola</i> n. sp. 4	x
<i>Fluminicola</i> n. sp. 5	x
<i>Gonidea angulata</i> (Lea, 1838)	regional
<i>Juga (Juga) hemphilli</i> n. subsp. 1	x
<i>Juga (Juga) hemphilli maupinensis</i> (Henderson, 1935)	x
<i>Juga (Oreobasis) bulbosa</i> (Gould, 1847)	x
<i>Juga (Oreobasis)</i> n. sp. 2	regional
<i>Juga (Oreobasis)</i> n. sp. 4	x
<i>Margaritifera falcata</i> (Gould, 1850)	regional
<i>Pristinicola hemphilli</i> (Pilsbry, 1907)	regional

TABLE 14. MOLLUSK SPECIES OF SPECIAL CONCERN, UPPER KLAMATH LAKE DRAINAGE, OREGON.

NAME	ENDEMIC STATUS
LAND	
<i>Discus shimeki cockerelli</i> (Pilsbry, 1890)	regional
<i>Monadenia</i> n. sp. 1	x
<i>Vespericola sierranus</i> (Berry, 1921)	regional
FRESHWATER	
<i>Anodonta californiensis</i> Lea, 1852	regional
<i>Fluminicola</i> n. sp. 1	x
<i>Fluminicola</i> n. sp. 2	x
<i>Fluminicola</i> n. sp. 3	x
<i>Gonidea angulata</i> (Lea, 1838)	regional
<i>Helisoma</i> (<i>Carinifex</i>) <i>newberryi newberryi</i> (Lea, 1858)	x
<i>Lanx alta</i> (Tryon, 1865)	x
<i>Lanx klamathensis</i> Hannibal, 1912	x
<i>Lyogyrus</i> n. sp. 3	x
<i>Lyogyrus</i> n. sp. 4	x
<i>Lyogyrus</i> n. sp. 5	x
<i>Margaritifera falcata</i> (Gould, 1850)	regional
<i>Pisidium</i> n. sp. 1	x
<i>Pisidium</i> (<i>Cyclocalyx</i>) <i>ultramontanum</i> Prime, 1865	x
<i>Pyrgulopsis archimedis</i> Berry, 1947	x
<i>Pyrgulopsis</i> n. sp. 1	x
<i>Pyrgulopsis</i> n. sp. 2	x
<i>Stagnicola</i> (<i>Stagnicola</i>) <i>hinkleyi</i> (Baker, 1906)	regional
<i>Vorticifex effusus dalli</i> (Baker, 1945)	x
<i>Vorticifex effusus diagonalis</i> (Henderson, 1929)	x
<i>Vorticifex klamathensis klamathensis</i> (Baker, 1945)	x
<i>Vorticifex klamathensis sinitsini</i> (Baker, 1945)	x

TABLE 15. FRESHWATER MOLLUSK SPECIES OF SPECIAL CONCERN, OREGON INTERIOR BASINS.

NAME	LOCAL ENDEMIC
FRESHWATER	
<i>Andonta californiensis</i> Lea, 1852	regional
<i>Fluminicola turbiniformis</i> (Tryon, 1865)	x
<i>Gonidea angulata</i> (Lea, 1838)	regional
<i>Helisoma</i> (<i>Carinifex</i>) <i>newberryi newberryi</i> (Lea, 1858)	x
<i>Margaritifera falcata</i> (Gould, 1850)	regional
<i>Physella</i> (<i>Petrophysa</i>) n. sp. 1	x
<i>Planorbella</i> (<i>Pierosoma</i>) <i>oregonensis</i> (Tryon, 1865)	x
<i>Pyrgulopsis hendersoni</i> (Pilsbry, 1933)	x
<i>Pyrgulopsis intermedia</i> (Tryon, 1865)	x
<i>Pyrgulopsis</i> n. sp. 3	x
<i>Pyrgulopsis</i> n. sp. 4	x
<i>Pyrgulopsis</i> n. sp. 5	x

TABLE 16. MOLLUSK SPECIES OF SPECIAL CONCERN, BLUE MOUNTAINS, WASHINGTON & OREGON.

NAME	ENDEMIC STATUS
LAND	
<i>Megomphix leutarius</i> Baker, 1932	x
<i>Oreohelix strigosa delicata</i> Pilsbry, 1934	x
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)	regional
<i>Ogaridiscus subrupicola</i> (Dall, 1877)	x
<i>Pristiloma (Pristinopsis) idahoense</i> (Pilsbry, 1902)	x
<i>Radiodiscus (Radiodomus) abietum</i> Baker, 1930	regional
FRESHWATER	
<i>Anodonta californiensis</i> Lea, 1852	regional
<i>Fisherola nuttalli</i> (Haldeman, 1841)	regional
<i>Gonidea angulata</i> (Lea, 1838)	regional
<i>Juga (Oreobasis) n. sp. 5</i>	x
<i>Pristinicola hemphilli</i> (Pilsbry, 1907)	regional
<i>Lyogyrus n. sp. 7</i>	x
<i>Margaritifera falcata</i> (Gould, 1850)	regional

TABLE 17. TERRESTRIAL MOLLUSK SPECIES OF SPECIAL CONCERN, WASHINGTON EASTERN CASCADES.

NAME	ENDEMIC STATUS
LAND	
<i>Cryptomastix (Cryptomastix) n. sp. 4</i>	x
<i>Oreohelix junii</i> Pilsbry, 1934	x
<i>Oreohelix n. sp. 1</i>	x
<i>Oreohelix n. sp. 2</i>	x

TABLE 18. FRESHWATER MOLLUSK SPECIES OF SPECIAL CONCERN, NORTHERN WASHINGTON & NORTHERN IDAHO, NORTHWESTERN MONTANA.

NAME	ENDEMIC STATUS
FRESHWATER	
<i>Amnicola n. sp. 1</i>	x
<i>Anodonta californiensis</i> Lea, 1852	regional
<i>Fisherola nuttalli</i> (Haldeman, 1841)	regional
<i>Fluminicola fuscus</i> (Haldeman, 1843)	regional
<i>Lyogyfus n. sp. 2</i>	x
<i>Margaritifera falcata</i> (Gould, 1850)	regional
<i>Stagnicola (Hinkleyia) montanensis</i> (Baker, 1913)	regional
<i>Promenetus exacuus megas</i> (Dall, 1905)	regional
<i>Valvata tricarinata</i> (Say, 1817)	rare in West

TABLE 19. MOLLUSK SPECIES OF SPECIAL CONCERN, LOWER SALMON RIVER, IDAHO.

NAME	ENDEMIC STATUS
FRESHWATER	
<i>Anodonta californiensis</i> Lea, 1852	regional
<i>Fisherola nuttalli</i> (Haldeman, 1841)	regional
<i>Fluminicola fuscus</i> (Haldeman, 1843)	regional
<i>Gonidea angulata</i> (Lea, 1838)	regional
<i>Margaritifera falcata</i> (Gould, 1850)	regional
<i>Pristiloma hemphilli</i> (Pilsbry, 1907)	regional
<i>Stagnicola (Stagnicola) idahoensis</i> (Henderson, 1931)	x
LAND	
<i>Allogona lombardii</i> Smith, 1943	x
<i>Allogona ptychophora solida</i> Vanatta, 1924	x
<i>Cryptomastix (Cryptomastix) mullani latilabris</i> (Pilsbry, 1940)	x
<i>Cryptomastix (Cryptomastix) mullani clappi</i> (Hemphill, 1897)	x
<i>Cryptomastix (Cryptomastix) harfordiana</i> (Binney, 1878)	x
<i>Cryptomastix (Bupigona) populi</i> (Vanatta, 1924)	x
<i>Cryptomastix (Cryptomastix) n. sp. 3</i>	x
<i>Discus marmorensis</i> Baker, 1932	x
<i>Hemphillia camelus</i> Pilsbry & Vanatta, 1897	x
<i>Oreohelix haydeni hesperia</i> Pilsbry, 1940	x
<i>Oreohelix haydeni perplexa</i> Pilsbry, 1940	x
<i>Oreohelix hammeri</i> Fairbanks, 1984	x
<i>Oreohelix idahoensis idahoensis</i> (Newcomb, 1866)	x
<i>Oreohelix intersum</i> (Hemphill, 1890)	x
<i>Oreohelix jugalis</i> (Hemphill, 1890)	x
<i>Oreohelix n. sp. 8</i>	x
<i>Oreohelix n. sp. 12</i>	x
<i>Oreohelix n. sp. 13</i>	x
<i>Oreohelix n. sp. 14</i>	x
<i>Oreohelix n. sp. 19</i>	x
<i>Oreohelix n. sp. 20</i>	x
<i>Oreohelix n. sp. 21</i>	x
<i>Oreohelix n. sp. 22</i>	x
<i>Oreohelix n. sp. 23</i>	x
<i>Oreohelix n. sp. 24</i>	x
<i>Oreohelix n. sp. 25</i>	x
<i>Oreohelix vortex</i> Berry, 1932	x
<i>Oreohelix waltoni</i> Solem, 1975	x
<i>Oreohelix strigosa n. subsp. 1</i>	x
<i>Oreohelix strigosa goniogyra</i> Pilsbry, 1933	x
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)	regional

TABLE 20. MOLLUSK SPECIES OF SPECIAL CONCERN, HELLS CANYON, IDAHO-OREGON-WASHINGTON.

NAME	ENDEMIC STATUS
LAND	
<i>Allogona ptychophora solida</i> Vanatta, 1924	x
<i>Cryptomastix</i> (<i>Buphiogona</i>) n. sp. 1	x
<i>Cryptomastix</i> (<i>Buphiogona</i>) n. sp. 2	x
<i>Cryptomastix</i> (<i>Buphiogona</i>) <i>populi</i> (Vanatta, 1924)	x
<i>Cryptomastix</i> (<i>Cryptomastix</i>) n. sp. 2	x
<i>Cryptomastix</i> (<i>Cryptomastix</i>) n. sp. 3	x
<i>Oreohelix idahoensis baileyi</i> (Battsch, 1916)	x
<i>Oreohelix</i> n. sp. 16	x
<i>Oreohelix</i> n. sp. 17	x
<i>Oreohelix</i> n. sp. 18	x
<i>Oreohelix</i> n. sp. 29	x
<i>Oreohelix</i> n. sp. 30	
<i>Oreohelix strigosa</i> n. subsp. 1	x
FRESHWATER	
<i>Anodonta californiensis</i> Lea, 1852	regional
<i>Fisherola nuttalli</i> (Haldeman, 1841)	regional
<i>Fluminicola fuscus</i> (Haldeman, 1843)	regional
<i>Gonidea angulata</i> (Lea, 1838)	regional
<i>Margaritifera falcata</i> (Gould, 1850)	regional
<i>Pristinicola hemphilli</i> (Pilsbry, 1907)	regional

TABLE 21. MOLLUSK SPECIES OF SPECIAL CONCERN, MIDDLE SNAKE RIVER, IDAHO.

NAME	ENDEMIC STATUS
FRESHWATER	
<i>Fluminicola fuscus</i> (Haldeman, 1843)	regional
<i>Gonidea angulata</i> (Lea, 1838)	regional
<i>Margaritifera falcata</i> (Gould, 1850)	regional
<i>Lanx</i> n. sp. 1	x
<i>Physa</i> (<i>Haitia</i>) <i>natricina</i> (Taylor, 1988)	x
<i>Pyrgulopsis bruneauensis</i> (Hershler, 1990)	x
<i>Pyrgulopsis idahoensis</i> (Pilsbry, 1933)	x
<i>Stagnicola</i> (<i>Hinkleyia</i>) <i>montanensis</i> (Baker, 1913)	regional
<i>Stagnicola</i> (<i>Stagnicola</i>) <i>hinkleyi</i> (Baker, 1906)	regional
<i>Taylorconcha serpticola</i> Hershler et al., 1994	x
<i>Valvata utahensis</i> Call, 1884	x

TABLE 22. MOLLUSK SPECIES OF SPECIAL CONCERN, SE IDAHO.

NAME	ENDEMIC STATUS
LAND	
<i>Oreohelix hemphilli</i> (Newcomb, 1869)	X
<i>Oreohelix tenuistriata</i> Henderson & Daniels, 1916	X
<i>Oreohelix</i> n. sp. 9	X
<i>Oreohelix</i> n. sp. 27	X
FRESHWATER	
<i>Fluminicola</i> n. sp. 10	x, regional
<i>Gonidea angulata</i> (Lea, 1838)	regional
<i>Lyogyrus greggi</i> (Pilsbry, 1933)	regional
<i>Lyogyrus</i> n. sp. 6	X
<i>Margaritifera falcata</i> (Gould, 1850)	regional
<i>Margaritifera</i> n. sp. Taylor, 1988	X
<i>Pyrgulopsis</i> n. sp. 7	X
<i>Pyrgulopsis</i> n. sp. 8	X
<i>Pyrgulopsis</i> n. sp. 9	X
<i>Pyrgulopsis</i> n. sp. 10	X
<i>Pyrgulopsis</i> n. sp. 11	X
<i>Pyrgulopsis</i> n. sp. 12	X
<i>Pyrgulopsis</i> n. sp. 13	X
<i>Pyrgulopsis</i> n. sp. 14	X
<i>Pyrgulopsis</i> n. sp. 15	X
<i>Pyrgulopsis</i> n. sp. 16	X
<i>Pyrgulopsis</i> n. sp. 17	X
<i>Pyrgulopsis</i> n. sp. 18	X
<i>Stagnicola (Hinkleyia) montanensis</i> (Baker, 1913)	regional
<i>Stagnicola (Stagnicola) hinkleyi</i> (Baker, 1906)	regional
<i>Valvata ufahensis</i> Call, 1884	X

TABLE 23. TERRESTRIAL MOLLUSK SPECIES OF SPECIAL CONCERN, CLEARWATER DRAINAGE, IDAHO.

NAME	ENDEMIC STATUS
LAND	
<i>Allogona lombardii</i> Smith, 1943	x
<i>Allogona ptychophora solida</i> Vanatta, 1924	x
<i>Anguispira nimapuna</i> Baker, 1932	x
<i>Cryptomastix (Cryptomastix) magnidentata</i> (Pilsbry, 1940)	x
<i>Cryptomastix (C.) mullani tuckeri</i> (Pilsbry & Henderson, 1930)	x
<i>Cryptomastix (Cryptomastix)</i> n. sp. 1	x
<i>Hemphillia camelus</i> Pilsbry & Vanatta, 1897	x
<i>Oreohelix</i> n. sp. 25	x
<i>Oreohelix strigosa goniogyra</i> Pilsbry, 1933	x
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)	regional
<i>Pristiloma (Pristinopsis) idahoense</i> (Pilsbry, 1902)	x
<i>Radiodiscus (Radiodomus) abietum</i> Baker, 1930	regional
<i>Udosarx lyrata lyrata</i> Webb, 1959	x
<i>Zacoleus idoensis</i> Pilsbry, 1903	x

TABLE 24. N. WASHINGTON-IDAHO PANHANDLE TERRESTRIAL MOLLUSK SPECIES OF SPECIAL CONCERN.

NAME	ENDEMIC STATUS
LAND	
<i>Cryptomastix (Cryptomastix) mullani blandi</i> (Hemphill, 1892)	x
<i>Cryptomastix (Cryptomastix) sanburni</i> (Binney, 1886)	x
<i>Hemphillia camelus</i> Pilsbry & Vanatta, 1897	x
<i>Magnipelta mycophaga</i> Pilsbry, 1953	x
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)	regional
<i>Pristiloma (Pristinopsis) idahoense</i> (Pilsbry, 1902)	x
<i>Radiodiscus (Radiodomus) abietum</i> Baker, 1930	regional
<i>Udosarx lyrata lyrata</i> Webb, 1959	x
<i>Zacoleus idahoensis</i> Pilsbry, 1903	x

TABLE 25. MOLLUSK SPECIES OF SPECIAL CONCERN, BITTERROOT & FLATHEAD DRAINAGES, MONTANA.

NAME	ENDEMIC STATUS
LAND	
<i>Hemphillia danielsi</i> Vanatta, 1914	x
<i>Magnipelta mycophaga</i> Pilsbry, 1953	x
<i>Oreohelix amariradix</i> Pilsbry, 1902	x
<i>Polygyrella polygyrella</i> (Bland & Cooper, 1861)	regional
<i>Radiodiscus (Radiodomus) abietum</i> Baker, 1930	regional
FRESHWATER	
<i>Amnicola</i> n.sp. 1	x
<i>Promenetus exacuus megas</i> (Dall, 1905)	regional
<i>Stagnicola (Hinkleyia) montanensis</i> (Baker, 1913)	regional
<i>Stagnicola (Stagnicola) elrodi</i> (Baker & Henderson, 1933)	x
<i>Valvata tricarinata</i> (Say, 1817)	regional

TABLE 26. MOLLUSK SPECIES OF SPECIAL CONCERN, CLARK FORK DRAINAGE, MONTANA

NAME	ENDEMIC STATUS
LAND	
<i>Oreohelix amariradix</i> Pilsbry, 1934	x
<i>Oreohelix carinifera</i> Pilsbry, 1912	x
<i>Oreohelix</i> n. sp. 3	x
<i>Oreohelix</i> n. sp. 4	x
<i>Oreohelix</i> n. sp. 5	x
<i>Oreohelix</i> n. sp. 6	x
<i>Oreohelix</i> n. sp. 7	x
<i>Oreohelix</i> n. sp. 10	x
<i>Oreohelix</i> n. sp. 31	x
<i>Udosarx lyrata russelli</i> Webb, 1980	x
FRESHWATER	
<i>Promenetus exacuus megas</i> (Dall, 1905)	regional
<i>Stagnicola (Hinkleyia) montanensis</i> (Baker, 1913)	regional
<i>Stagnicola (Stagnicola) elrodi</i> (Baker & Henderson, 1933)	x

TABLE 27. MOLLUSK SPECIES OF SPECIAL CONCERN, MISSION MOUNTAINS, MONTANA.

NAME	ENDEMIC STATUS
LAND	
<i>Discus brunsoni</i> Berry, 1955	x
<i>Oreohelix alpina</i> (Elrod, 1901)	x
<i>Oreohelix elrodi</i> (Pilsbry, 1900)	x
<i>Oreohelix</i> n. sp. 11	x
<i>Radiodiscus (Radiodomus) abietum</i> Baker, 1930	regional
FRESHWATER	
<i>Stagnicola (Hinkleyia) montanensis</i> (Baker, 1913)	regional
<i>Stagnicola (Stagnicola) elrodiana</i> (Baker & Henderson, 1933)	x

TABLE 28. FRESHWATER MOLLUSK SPECIES OF SPECIAL CONCERN, JACKSON LAKE, WYOMING.

NAME	ENDEMIC STATUS
FRESHWATER	
<i>Anodonta californiensis</i> Lea, 1856	regional
<i>Helisoma (Carinifex) newberryi jacksonensis</i> (Henderson, 1932)	x
<i>Pyrgulopsis robusta</i> (Walker, 1908)	x
<i>Stagnicola (Hinkleyia) montanensis</i> (Baker, 1913)	regional
<i>Stagnicola (Stanicola) hinkleyi</i> (Baker, 1906)	regional

FIGURES

FIGURES

1. MAP OF ASSESSMENT AREA	F1
2. LAND MOLLUSK BIOGEOGRAPHY OF NORTH AMERICA	F3
3. FRESHWATER MUSSEL PROVINCES OF NORTH AMERICA	F5
4. MAP OF MODERN DRAINAGES IN THE ASSESSMENT AREA	F7
5. MAP OF MIOCENE DRAINAGES IN THE ASSESSMENT AREA	F9
6. MAP OF LATE PLIOCENE-EARLY PLEISTOCENE DRAINAGES	F11
7. REGIONS WITH SUBSTANTIAL TERRESTRIAL MOLLUSK ENDEMICITY	F13
8. REGIONS WITH SUBSTANTIAL FRESHWATER MOLLUSK ENDEMICITY	F15
9. DISTRIBUTION OF THE LAND SNAIL GENUS <i>OREOHELIX</i>	F17
10. DISTRIBUTION OF THE LAND SNAIL GENUS <i>CRYPTOMASTIX</i>	F19
11. DISTRIBUTION OF THE SLUG GENUS <i>HEMPHILLIA</i>	F21
12. DISTRIBUTION OF THE FRESHWATER SNAIL GENUS <i>PYRGULOPSIS</i>	F23
13. DISTRIBUTION OF THE FRESHWATER SNAIL GENUS <i>LYOGRUS</i>	F25
14. DISTRIBUTION OF THE LARGE SPECIES OF <i>FLUMINICOLA</i>	F27
15. DISTRIBUTION OF THE SMALL SPECIES OF <i>FLUMINICOLA</i>	F29
16. DISTRIBUTION OF <i>HELISOMA (CARINIFEX) NEWBERRYI</i>	F31
17. DISTRIBUTION OF THE SPHAERIID <i>PISIDIUM ULTRAMONTANUM</i>	F33

FIGURE 1. MAP OF ASSESSMENT AREA.

Black line marks Interior Columbia River Basin assessment area, including Columbia River drainage east of the Cascades crest, plus the Upper Klamath Lake Basin and Interior Oregon Basins (eastern Washington and Oregon). Forest Service and BLM lands **are** indicated by dark and light stipple respectively. Map from SIT (1994).

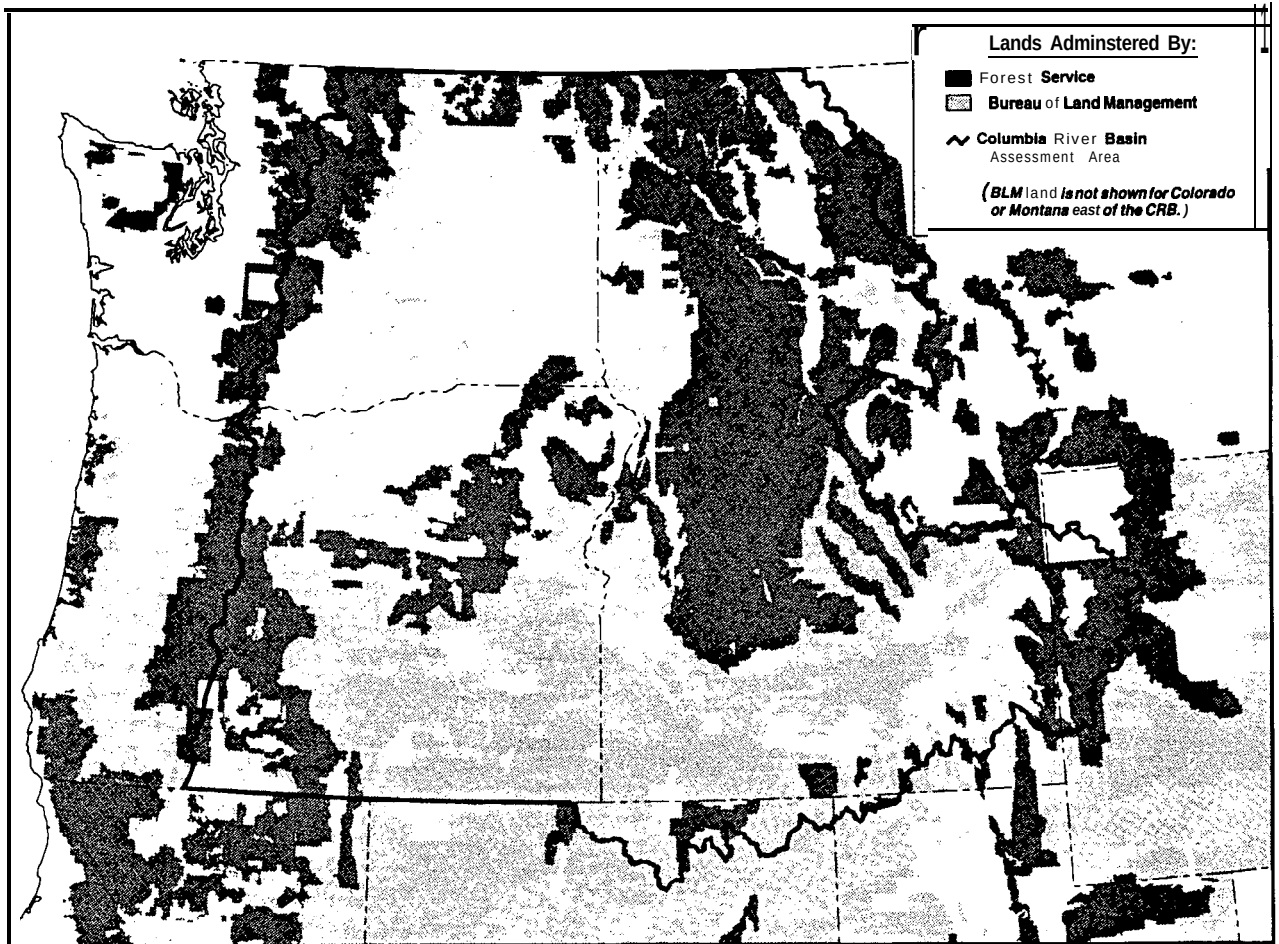


FIGURE 1. MAP OF ASSESSMENT AREA.

FIGURE 2. LAND MOLLUSK BIOGEOGRAPHY OF NORTH AMERICA.

Modified from Pilsbty (1948) and **Bequaert &** Miller (1973). For another version, see **Burch &** Pearce (1990).

- Regular Stipple-Eastern North American Division
- N** - Northern Province
 - I** - Interior Province
 - cu** - Cumberlandian Province
 - A** - Austroriparian Province
 - T** - Texan Province
- Irregular stipple- Western North American Division
- O** - Oregonian Province
 - W** - Washingtonian Province
 - Ca** - Californian Province
 - RM** - Rocky Mountain Province
 - S** - Southwestern Province

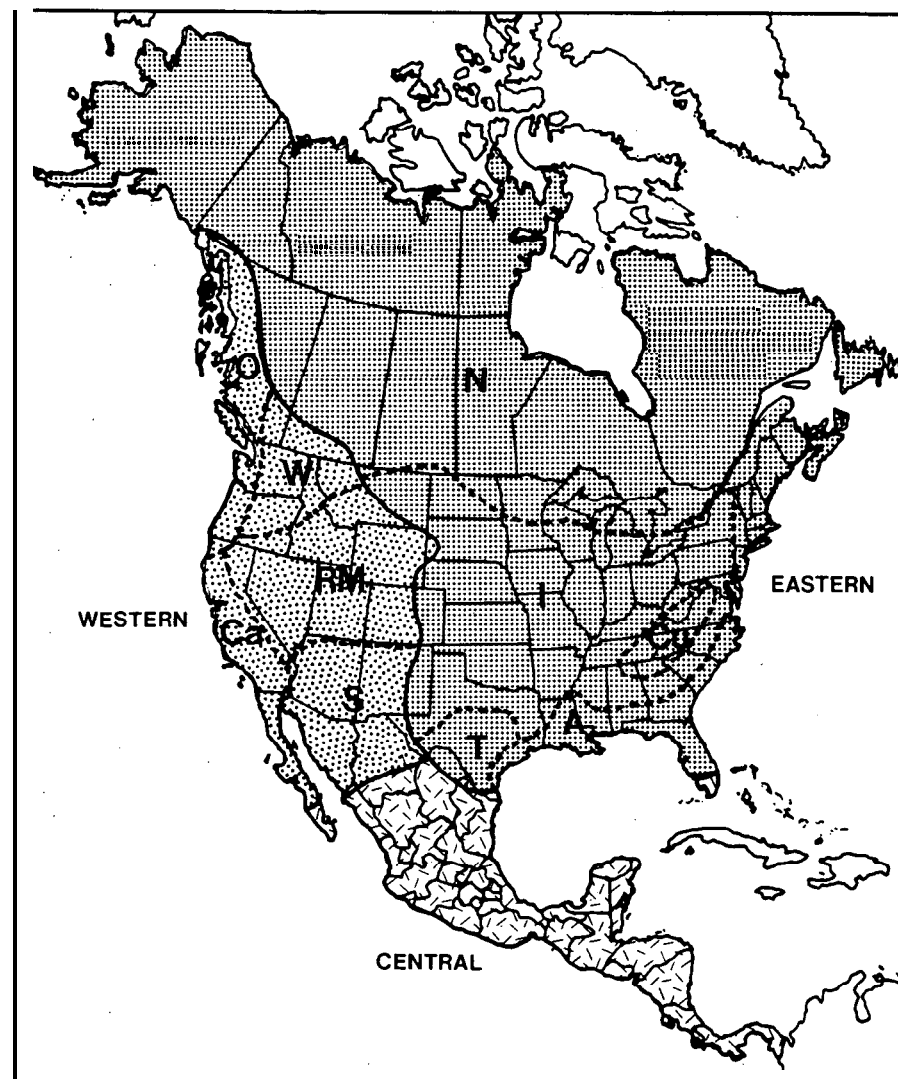


FIGURE 2. LAND MOLLUSK BIOGEOGRAPHY OF NORTH AMERICA.

FIGURE 3. FRESHWATER MUSSEL PROVINCES OF NORTH AMERICA.

Major freshwater mussel provinces in North America; modified slightly from Taylor (**1988b**), Van der Schalie & Van der Schalie (**1950**), and Johnson (1970, 1972). Note large area of western U.S. with no large freshwater mussels (stipple).

- P** - Pacific
- M** - Mississippian
- NA** - North Atlantic
- c** - Cumberlandian
- 0** - **Ozarkian**
- SA** - South Atlantic
- A** - Apalachicolan
- PF** - Peninsular Florida

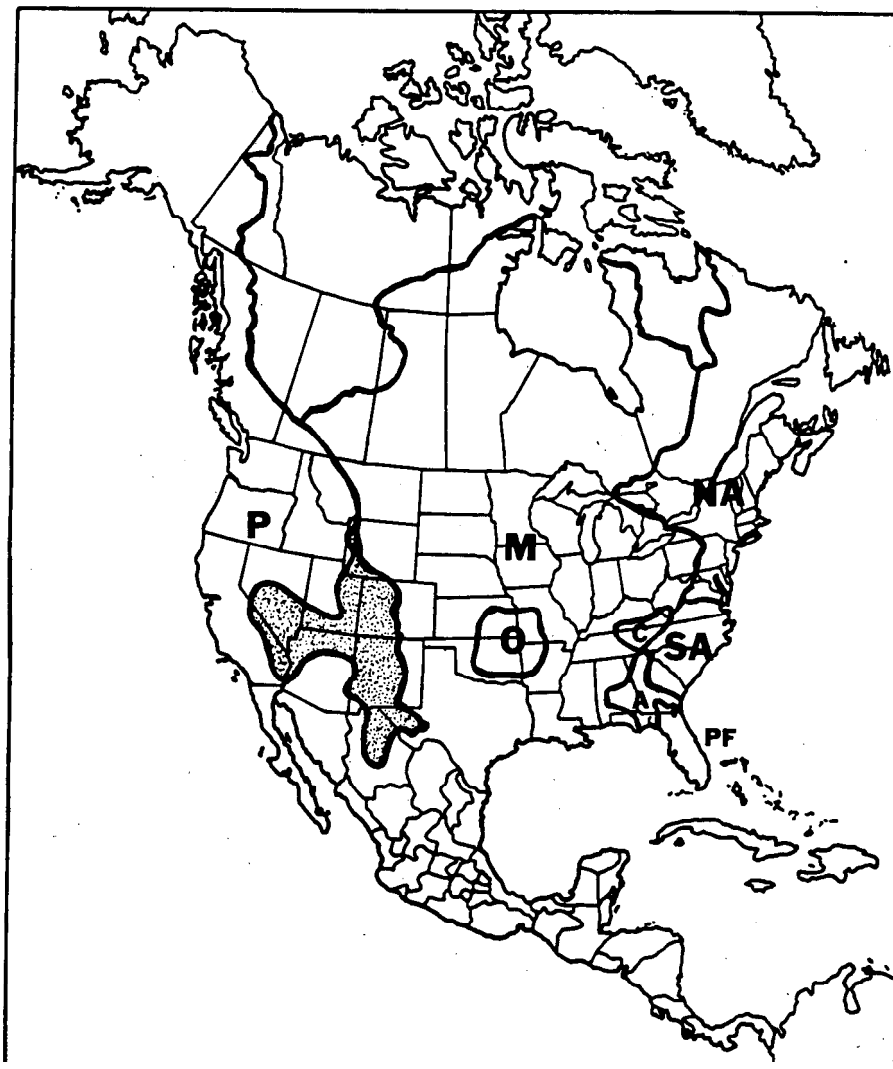


FIGURE 3. FRESHWATER MUSSEL PROVINCES OF NORTH AMERICA.

FIGURE 4. MAP OF MODERN DRAINAGES IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Modern drainage basins in part of the western U.S., including the assessment area. Major basins are named; current boundaries are indicated by red lines.

FIGURE 5. MAP OF MIOCENE DRAINAGES IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Blue **arrows** indicate major **former** drainage connections. Dashes delineate drainage corridors or basin boundaries, as far as currently known. Black bars indicate drainage divides now crossed by contemporary streams. Modified slightly from Taylor (**1985a**).

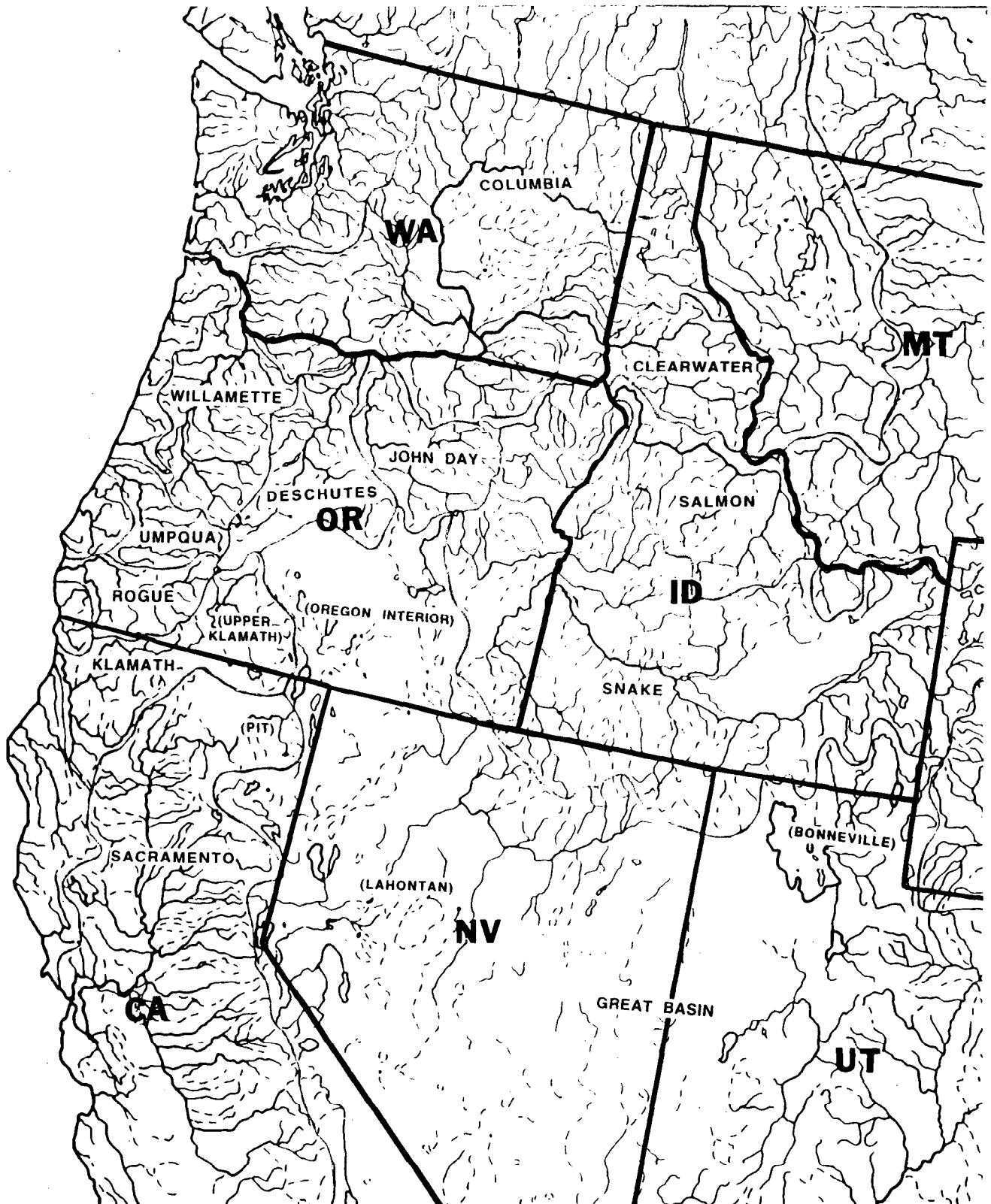


FIGURE 4. MAP OF MODERN DRAINAGES IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

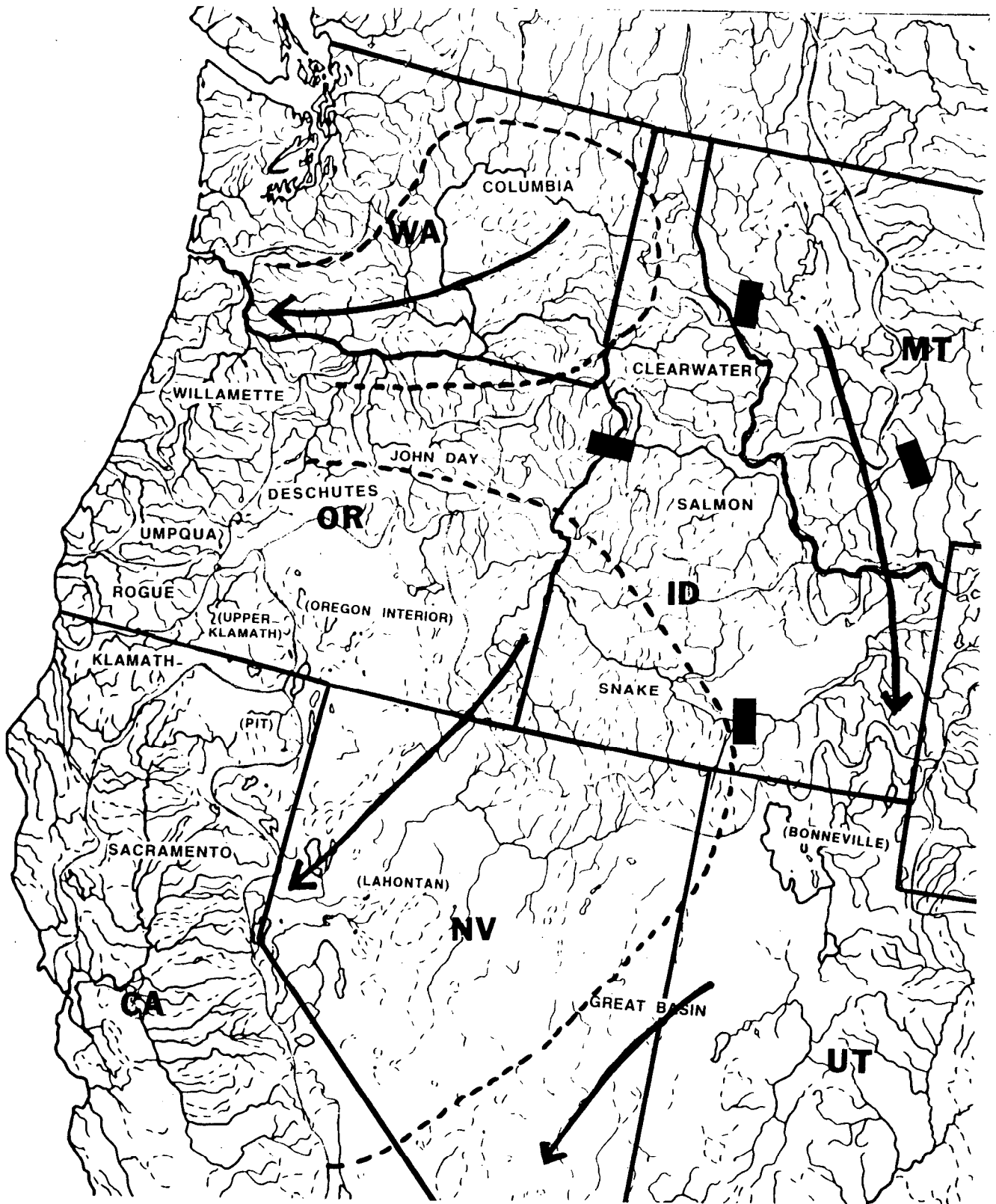


FIGURE 5. MAP OF MIOCENE DRAINAGES IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

FIGURE 6. MAP OF LATE PLIOCENE-EARLY PLEISTOCENE DRAINAGES IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Blue arrows indicate major former drainage connections. Dashes delineate drainage corridors or basin boundaries, as far as currently known. Black bars indicate drainage divides now crossed by contemporary streams. Modified slightly from-Taylor (1985a).

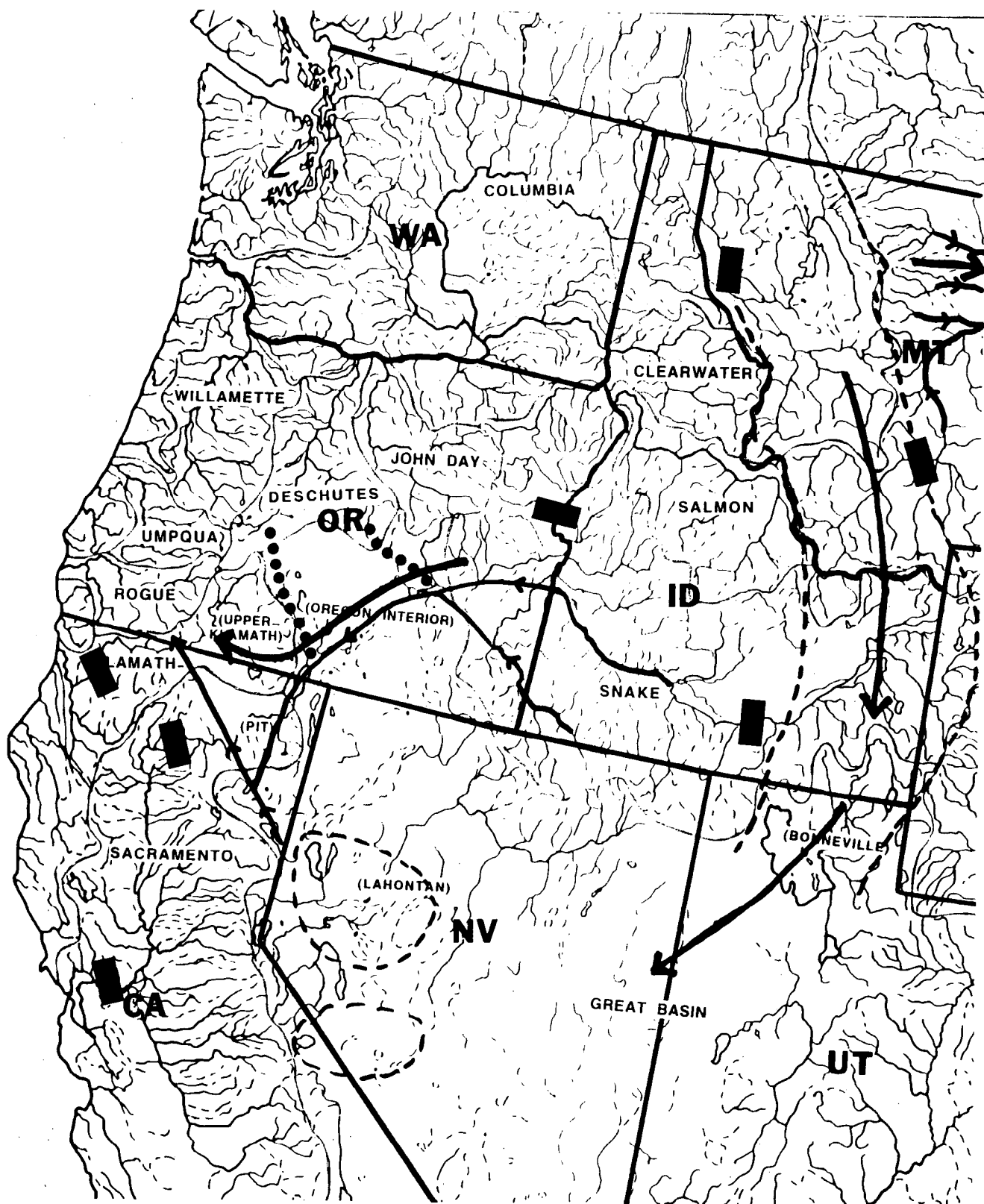


FIGURE 6. MAP OF LATE PLIOCENE-EARLY PLEISTOCENE DRAINAGES IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

FIGURE 7. REGIONS WITH SUBSTANTIAL TERRESTRIAL MOLLUSK ENDEMICITY IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Dark green areas are endemic regions within the assessment area. Mustard-colored areas are adjacent endemic regions.

Abbreviations for endemic regions:

- WC** - Washington eastern Cascades
- CG** - Columbia Gorge, Washington & Oregon
- LD** - Lower Deschutes River drainage, Oregon
- UK** - Upper Klamath Lake drainage, Oregon
- NW** - Northeastern Washington-Idaho Panhandle
- BM** - Blue Mountains, Washington and Oregon
- HC** - Hells Canyon, Idaho, Oregon, & Washington
- LS** - Lower Salmon River, Idaho
- CR** - Clearwater River drainage, Idaho
- BF** - Bitterroot and **Flathead** drainages, Montana
- CF** - Clark Fork drainage, Montana
- MM** - Mission Mountains and vicinity, Montana
- SI** - Southeastern Idaho (Snake River drainage)

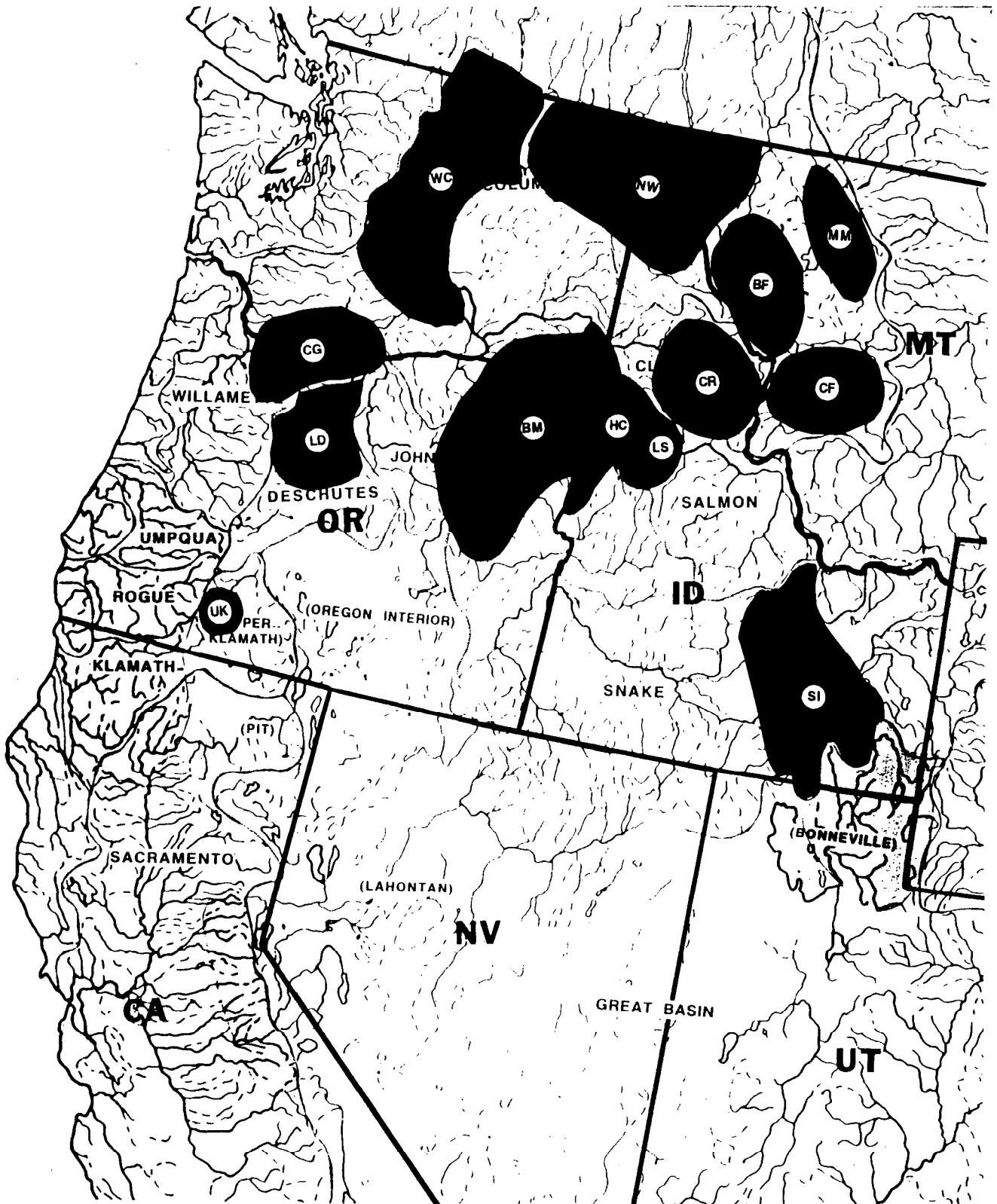


FIGURE 7. REGIONS WITH SUBSTANTIAL TERRESTRIAL MOLLUSK ENDEMICITY IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

FIGURE 8. REGIONS WITH SUBSTANTIAL FRESHWATER MOLLUSK ENDEMICITY IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Olive green areas **are** endemic regions within the assessment area. Mustard-colored areas are adjacent endemic regions.

Abbreviations for endemic regions:

- LC** - Lower Columbia River, Washington and Oregon
- CG** - Columbia Gorge, Washington & Oregon
- LD** - Lower Deschutes River drainage, Oregon
- UK** - Upper Klamath Lake drainage, Oregon
- OI** - Oregon Interior Basins
- BM** - Blue Mountains, Washington and Oregon
- NM** - Northern Washington, Northern Idaho, & Northwestern Montana
- MS** - Middle Snake River drainage, Idaho
- SI** - Southeastern Idaho (Snake River drainage)
- JL** - Jackson Lake, upper Snake River drainage, Wyoming

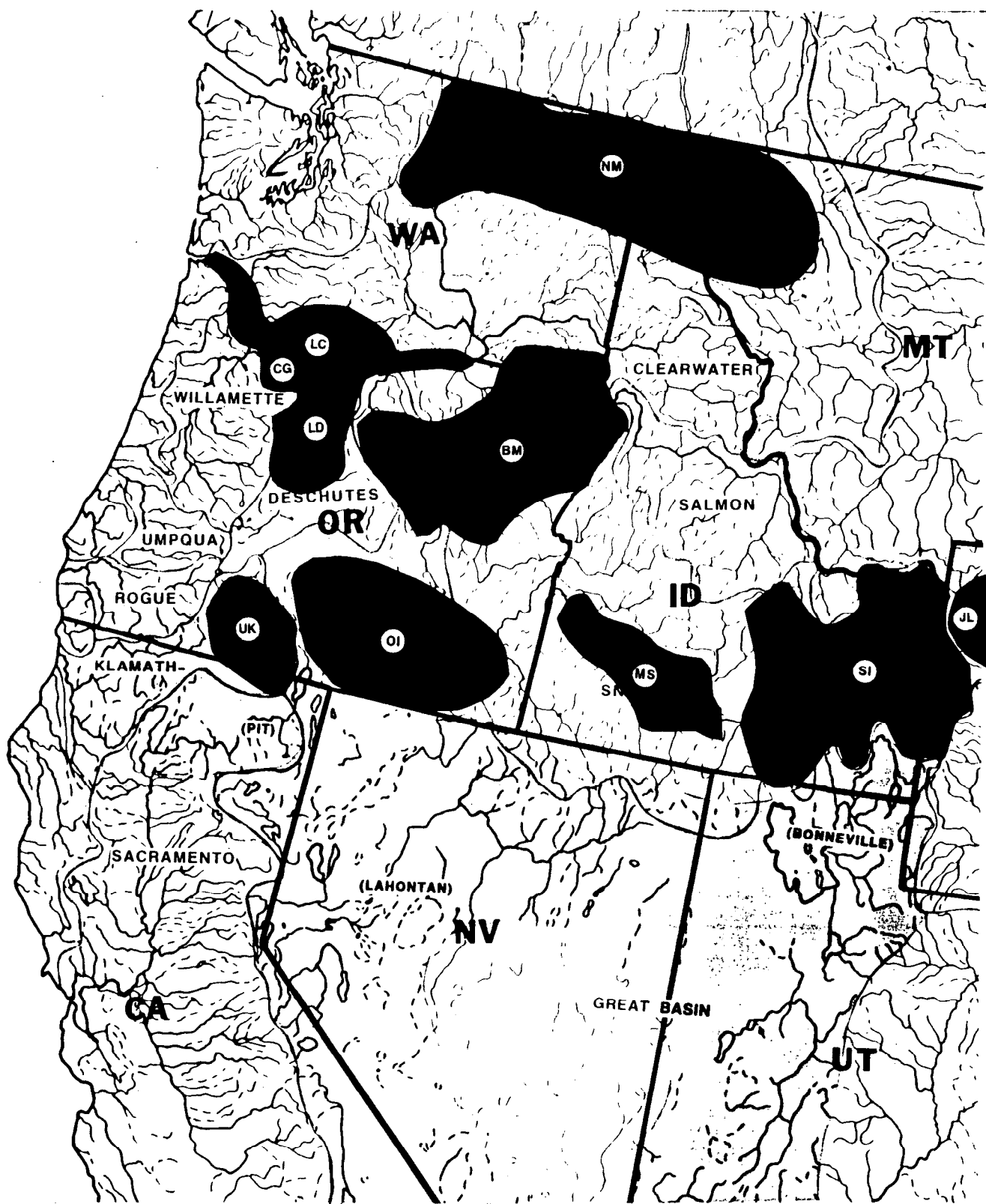


FIGURE 8. REGIONS WITH SUBSTANTIAL FRESHWATER MOLLUSK ENDEMICITY IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

FIGURE 9. DISTRIBUTION OF THE LAND SNAIL GENUS *OREOHELIX* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Red color indicates known distribution of *Oreohelix*. This includes many endemic species clusters, as well as distribution of more widespread taxa, such as *Oreohelix strigosa depressa* (s.l.) and *Oreohelix subrudis* (s.l.).



FIGURE 9. DISTRIBUTION OF THE LAND SNAIL GENUS *OreoHELIX* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

FIGURE 10. DISTRIBUTION OF THE LAND SNAIL GENUS *CRYPTOMASTIX* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Brown indicates area with species belonging to this genus (*s.l.*). Areas to the west of the Cascades mostly represent different species than those of the east. Several endemic species clusters are found in the eastern area.

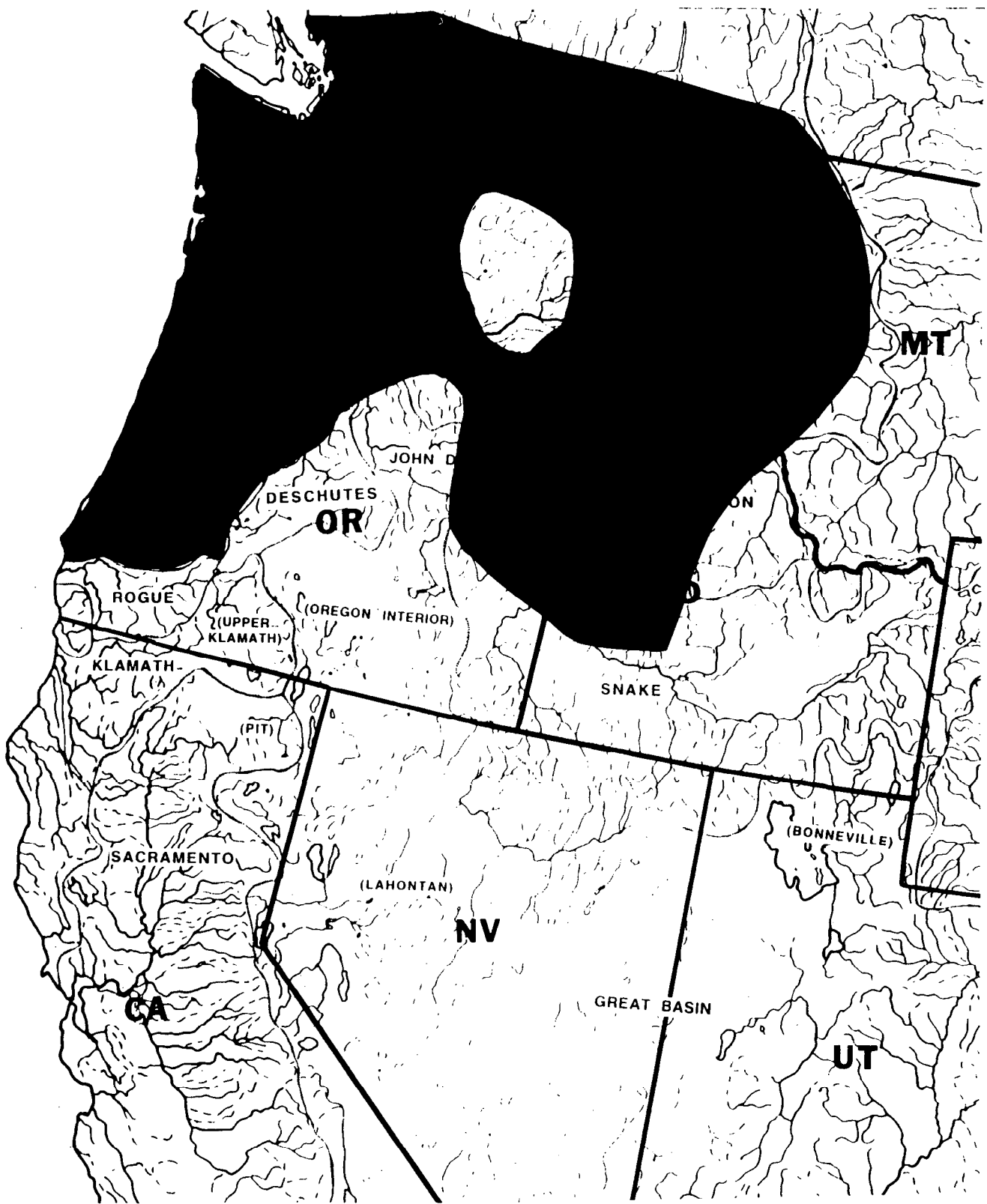


FIGURE 10. DISTRIBUTION OF THE LAND SNAIL GENUS *CRYPTOMASTIX* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

FIGURE 11. DISTRIBUTION OF THE SLUG GENUS *HEMPHILLIA* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Mustard color indicates areas with species of this genus (*s.l.*). In general, species are different on the Cascades side, as compared to those on the flanks of the Rocky Mountains.

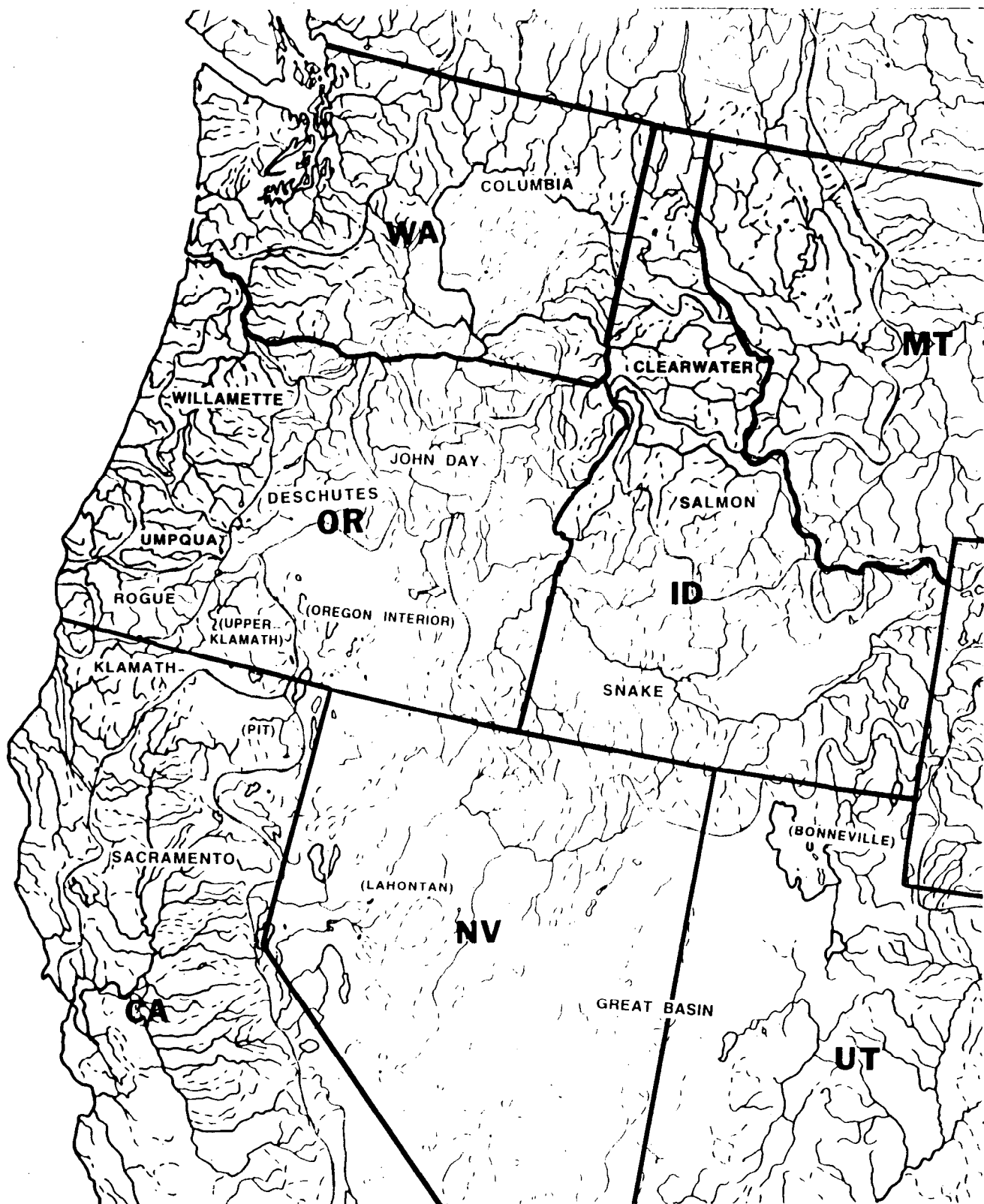


FIGURE 11. DISTRIBUTION OF THE SLUG GENUS *HEMPHILLIA* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

**FIGURE 12. DISTRIBUTION OF THE FRESHWATER SNAIL (HYDROBIID) GENUS
PYRGULOPSIS IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE
WESTERN UNITED STATES.**

Red color indicates areas with this species. Within this area are numerous endemic clusters. Notable are those in the Upper Snake River drainage; Bonneville Basin (including Bear River drainage); NE California and **NW** Nevada; Death Valley: Ash Meadows and Pahrnagat Valley; Oregon Interior Basins; and other areas in northeastern Nevada.

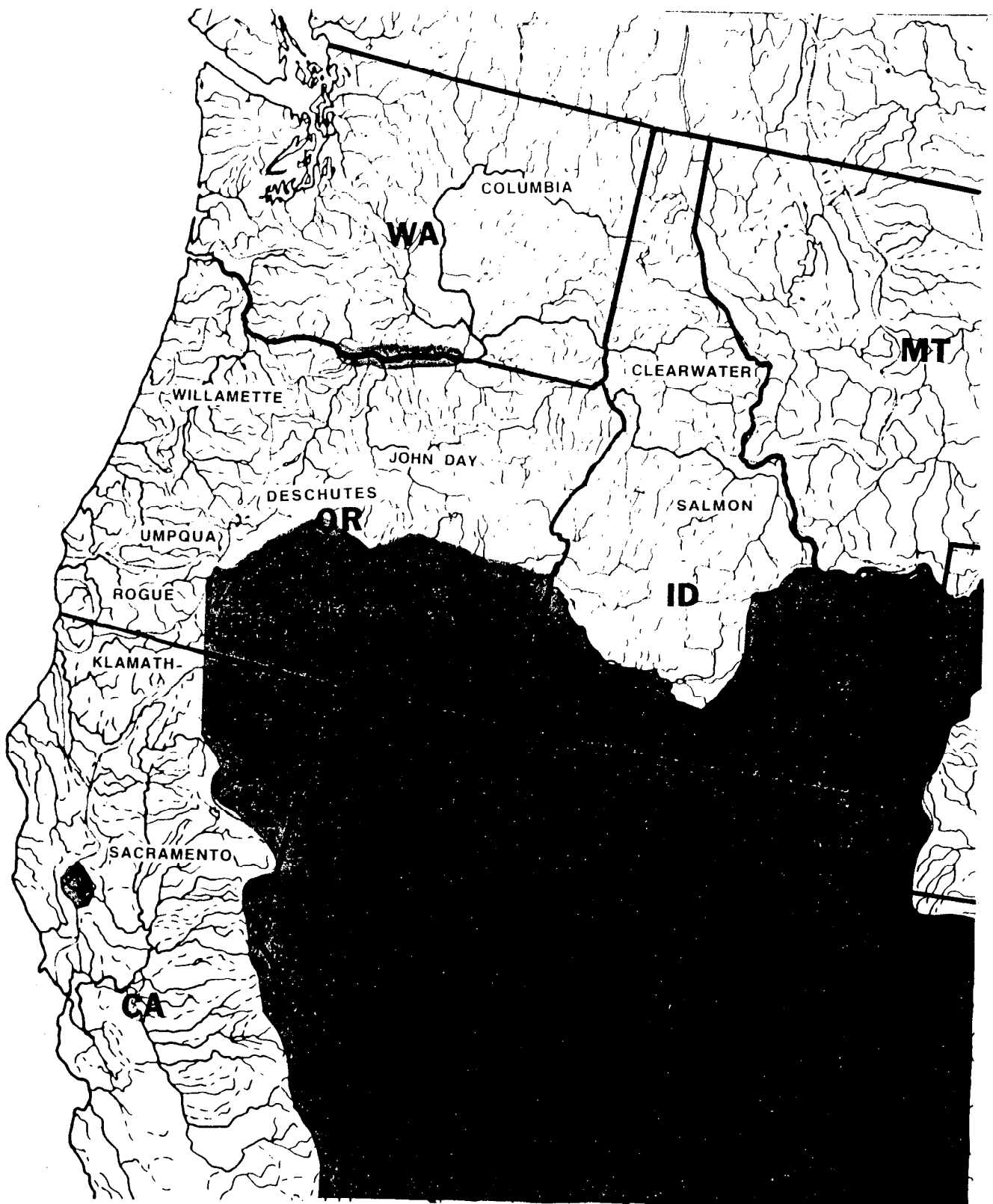


FIGURE 12. DISTRIBUTION OF THE FRESHWATER SNAIL (HYDROBIID) GENUS *PYRGULOPSIS* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

**FIGURE 13. DISTRIBUTION OF THE FRESHWATER SNAIL (HYDROBIID) GENUS
LYOGYRUS IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN
UNITED STATES.**

Green color indicates areas with this genus. Members of the major endemic regions (larger patches) are often quite distinct, with little overlap between other such regions.

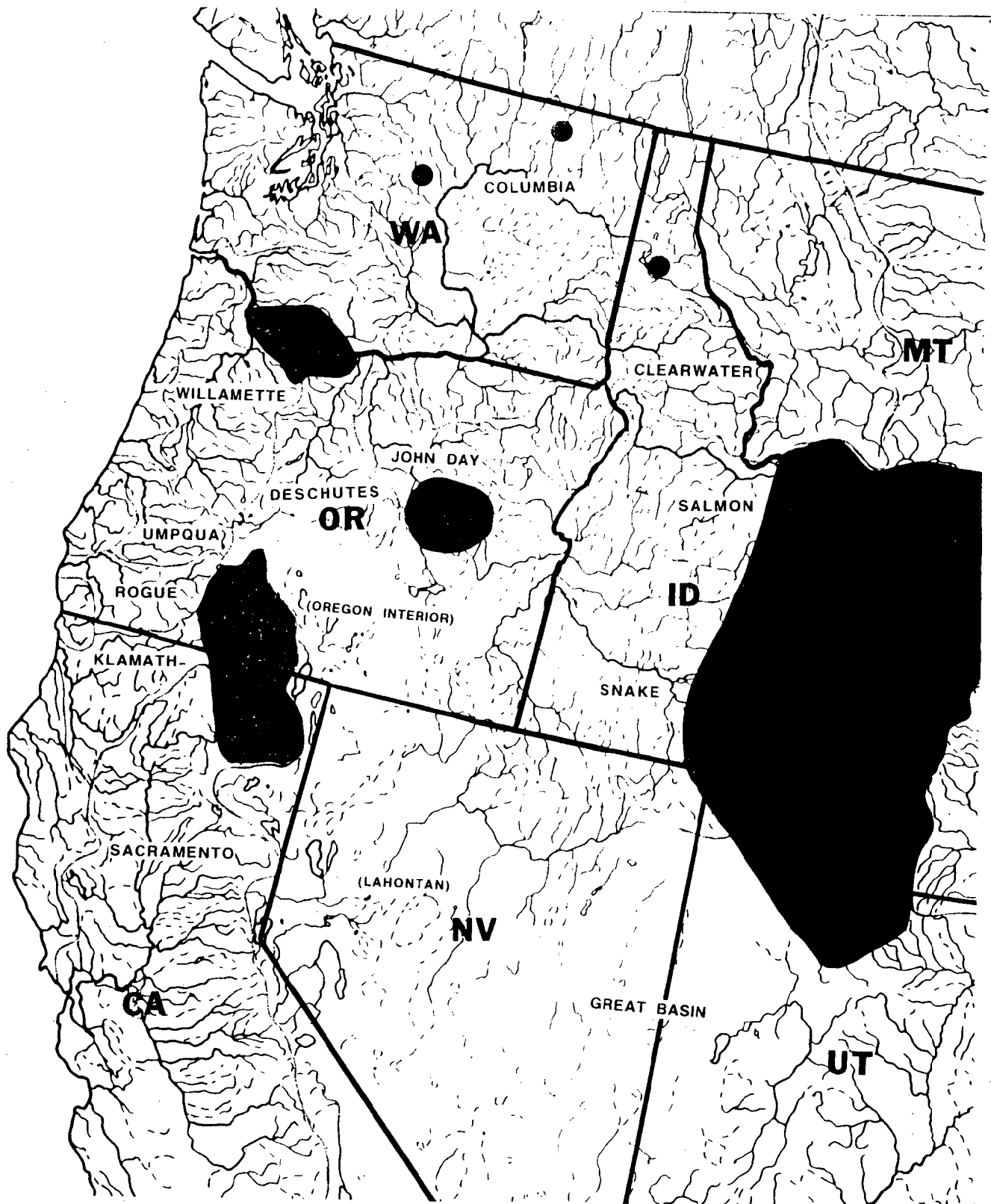


FIGURE 13. DISTRIBUTION OF THE FRESHWATER SNAIL (HYDROBIID) GENUS *LYOgyrus* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

FIGURE 14. DISTRIBUTION OF THE LARGE SPECIES OF THE FRESHWATER SNAIL (HYDROBIID) GENUS *FLUMINICOLA* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Blue color indicates known distribution of larger species of this genus (*s.l.*). Several endemic species clusters occur within this area. In general, Cascades-Coast Range species of Western Washington, western Oregon, and northern California are different from those in eastern Washington, Idaho, and parts of Wyoming and Utah.

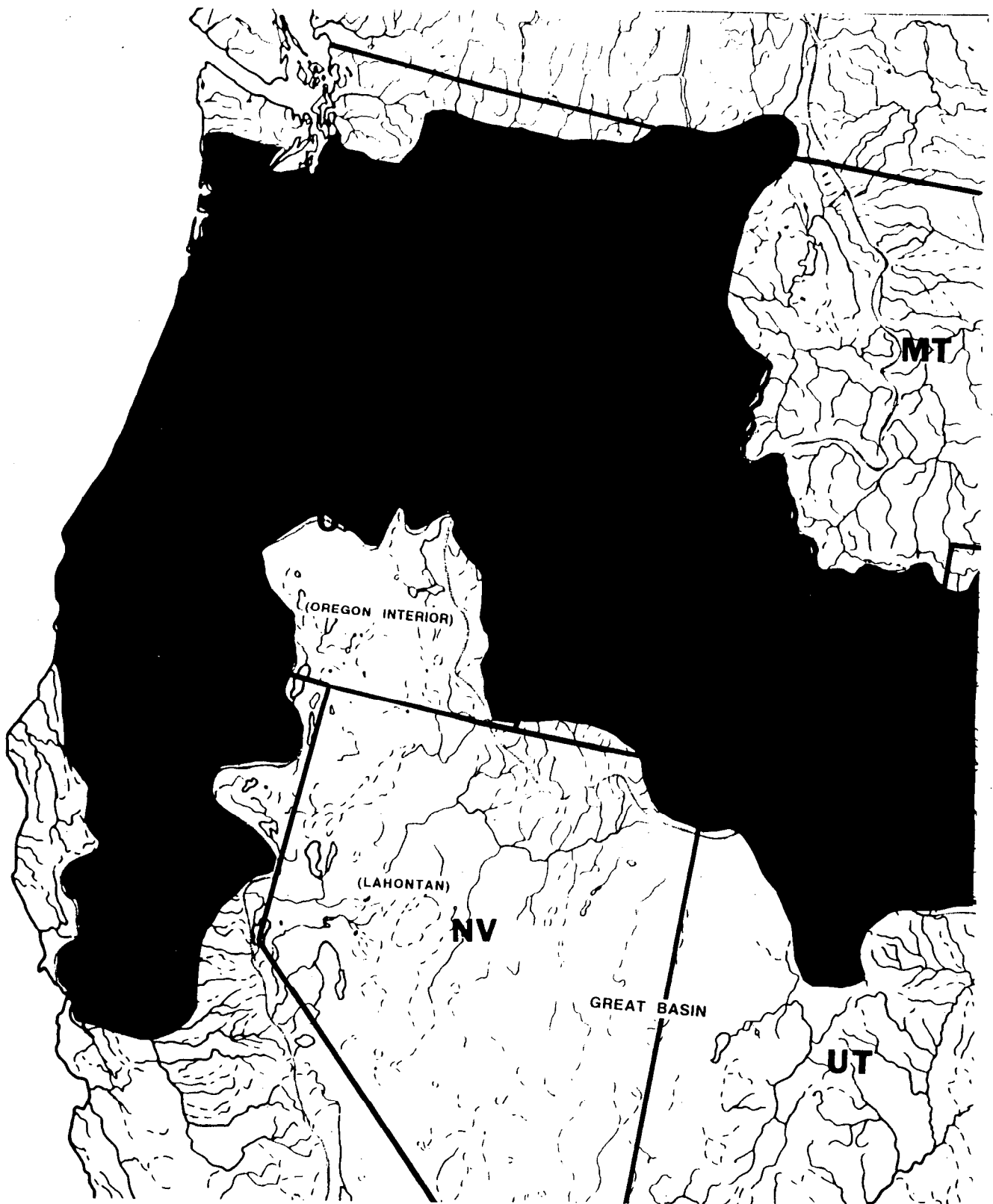


FIGURE 14. DISTRIBUTION OF THE LARGE SPECIES OF THE FRESHWATER SNAIL (HYDROBIID) GENUS *FLUMINICOLA* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

FIGURE 15. DISTRIBUTION OF THE SMALL SPECIES OF THE FRESHWATER SNAIL (HYDROBIID) GENUS *FLUMINICOLA* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Magenta color delineates known distribution of small species of the genus *Fluminicola* (*s.l.*). Within this area are several endemic species clusters. Notable are those of the Upper Sacramento-Pit River drainage; Upper Klamath Lake drainage; Deschutes drainage; and Great Basin periphery, including Oregon Interior Basins.

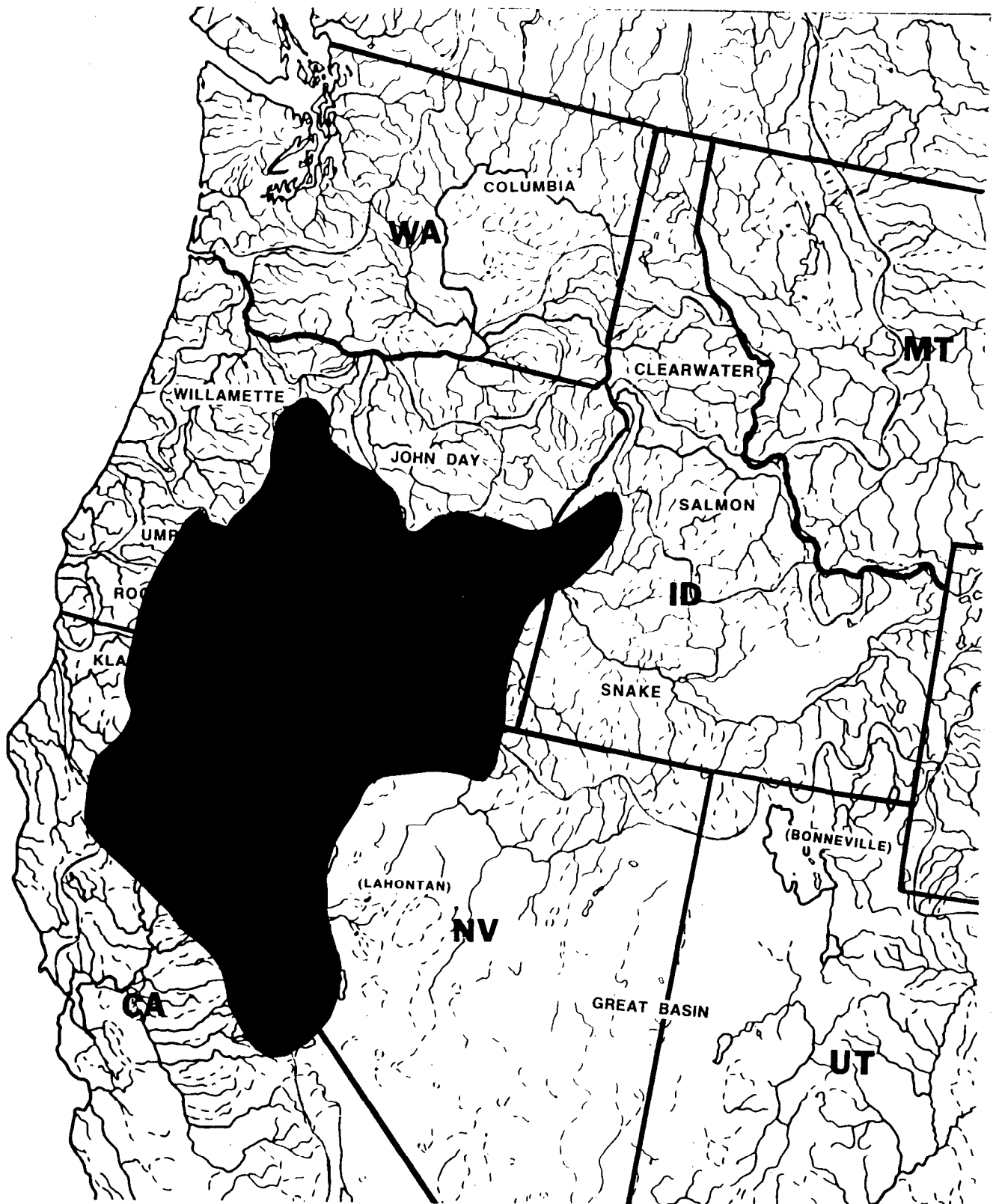


FIGURE 15. DISTRIBUTION OF THE SMALL SPECIES OF THE FRESHWATER SNAIL (HYDROBIID) GENUS *FLUMINICOLA* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

FIGURE 16. DISTRIBUTION OF THE FRESHWATER SNAIL *HELISOMA (CARINIFEX) NEWBERRYI* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

Yellow dots indicate **live** sites for this **taxon**, including all described subspecies; **Pliocene-Pleistocene** fossil sites are indicated by black dots. This distribution is an example of the fish-hook pattern (peripheral Great Basin; *utahensis-newberryi*) of Taylor (1985a) and Taylor & Bright (1987).

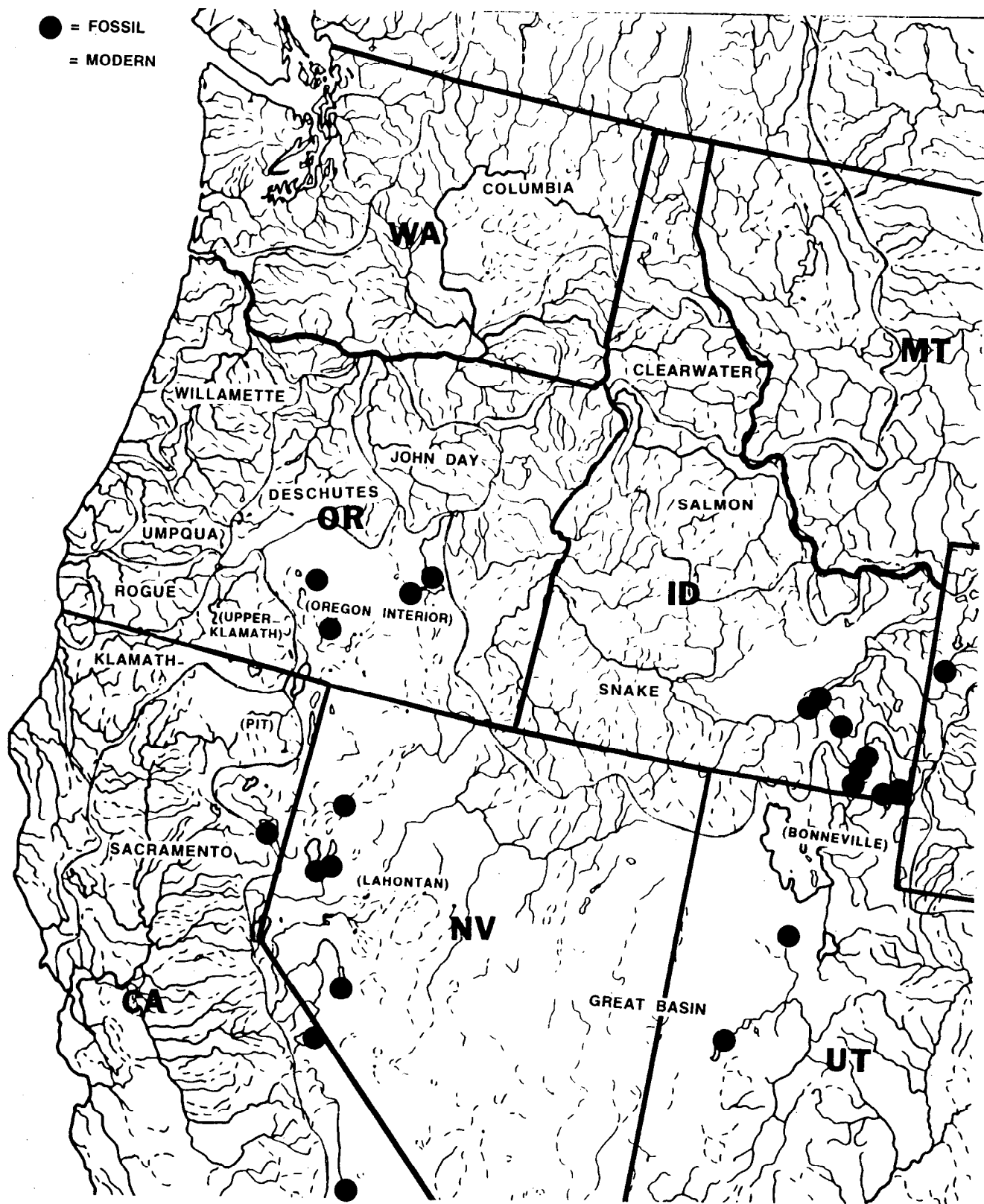


FIGURE 16. DISTRIBUTION OF THE FRESHWATER SNAIL *HELISOMA (CARINIFEX) NEWBERRYI* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

**FIGURE 17. DISTRIBUTION OF THE FRESHWATER BIVALVE (SPHAERIID) *PISIDIUM*
ULTRAMONTANUM IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE
WESTERN UNITED STATES.**

Orange dots indicate live sites for this **taxon**; Pliocene-Pleistocene fossil sites are indicated by black dots. This distribution is an example of the fish-hook pattern (peripheral Great Basin; *utahensis-newberryi*) of Taylor (1985a) and Taylor & Bright (1987).

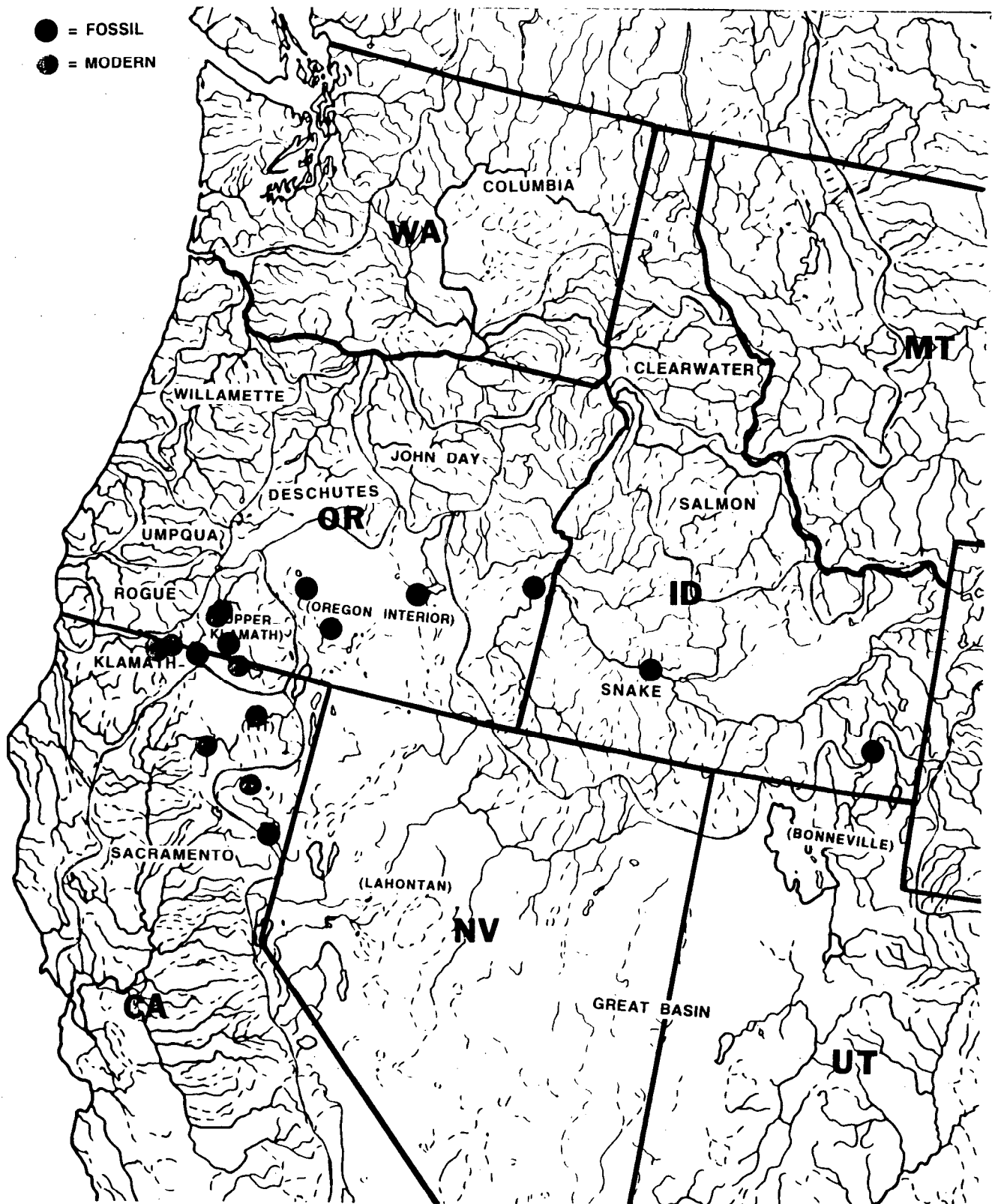


FIGURE 17. DISTRIBUTION OF THE FRESHWATER BIVALVE (SPHAERIID) *PISIDIUM* *ULTRAMONTANUM* IN THE ASSESSMENT AREA AND ADJOINING PORTIONS OF THE WESTERN UNITED STATES.

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