

Table A: Range-wide summary of effects to northern spotted owl nesting/roosting habitat¹ (acres) documented through ESA section 7 consultations or technical assistance reports.

NWFP Timeframe (Decade):

1994 - Present

UPDATE

Land Ownership	Consulted On		Other Habitat Changes ³	
	Habitat Changes ²			
	Removed/ Downgraded	Maintained/ Improved	Removed/ Downgraded	Maintained/ Improved
	USFS, BLM, and NPS	241,804	660,183	622,393
Bureau of Indian Affairs / Tribes	114,574	28,372	3,176	0
Habitat Conservation Plans/Safe Harbor Agreements	339,692	14,539	N/A	N/A
Other Federal, State, County, Private Lands	68,813	28,447	2,607	0
Total Changes	764,883	731,541	628,176	149,859

Notes:

1. Northern spotted owl suitable habitat includes nesting/roosting habitat, and foraging habitat. Nesting/roosting habitat supports all life-history functions for spotted owls including foraging, and is sometimes referred to as nesting, roosting, and foraging habitat (NRF). Foraging-only habitat is a separate category that can include more open and fragmented forests, and does not provide structures for nesting/roosting. Habitat effects summarized in this table are all classified as impacts to nesting/roosting habitats. Impacts to foraging-only habitat are tracked separately.

2. Includes effects documented through ESA section 7 consultations for the period from 1994 to 6/26/2001 (USFWS 2001) and all subsequent effects reported in the USFWS Tracking and Integrated Logging System - Northern Spotted Owl Consultation Effects Database (web application and database).

3. Includes effects to spotted owl nesting/roosting habitat documented through technical assistance reports resulting from wildfires and other natural causes, private timber harvest, and/or land exchanges not associated with ESA section 7 consultations.

Table B. Summary of northern spotted owl nesting/roosting¹ habitat (acres) removed or downgraded as documented through ESA section 7 consultations on Federal lands. Environmental baseline and summary of effects by state, province, and land use function from 2012 to present.

State	Physiographic Province ²	Evaluation Baseline (2012) ³			Nesting/Roosting Habitat Removed/Downgraded ⁴							% Provincial Baseline Affected	% Range-wide Effects
		NR Acres in Reserves	NR Acres in Non-Reserves	Total NR Acres	Land Management Effects			Habitat Loss from Natural Events			Total NR removed/downgraded		
					Reserves ⁵	Non-Reserves ⁶	Total	Reserves	Non-Reserves	Total			
WA	Eastern Cascades	554,786	224,876	779,662	1,563	55	1,618	63,931	0	63,931	65,549	8.41%	14.58%
	Olympic Peninsula	714,555	23,084	737,639	1	0	1	0	0	0	1	0.00%	0.00%
	Western Cascades	957,314	212,325	1,169,639	15	188	203	0	0	0	203	0.02%	0.05%
	Western Lowlands	12,964	3	12,967	0	0	0	0	0	0	0	0.00%	0.00%
OR	Cascades East	206,719	133,080	339,799	1,199	8,042	9,241	2,457	1,717	4,174	13,415	3.95%	2.98%
	Cascades West	1,425,026	949,045	2,374,071	4,527	9,958	14,485	93,478	51,188	144,666	159,151	6.70%	35.41%
	Coast Range	468,575	38,898	507,473	2,310	1,881	4,191	0	0	0	4,191	0.83%	0.93%
	Klamath Mountains	706,840	227,726	934,566	6,997	9,678	16,675	27,826	26,391	54,217	70,892	7.59%	15.77%
	Willamette Valley	3,688	3,938	7,626	0	0	0	0	0	0	0	0.00%	0.00%
CA	Cascades	120,067	89,316	209,383	0	174	174	0	0	0	174	0.08%	0.04%
	Coast	113,857	9,999	123,856	0	0	0	0	2,940	2,940	2,940	2.37%	0.65%
	Klamath	1,143,050	622,027	1,765,077	387	630	1,017	43,515	88,452	131,967	132,984	7.53%	29.58%
Total		6,427,441	2,534,317	8,961,758	16,999	30,606	47,605	231,207	170,688	401,895	449,500	5.02%	100.00%

Notes:

1. Northern spotted owl suitable habitat includes nesting/roosting habitat, and foraging habitat. Nesting/roosting habitat supports all life-history functions for spotted owls including foraging, and is sometimes referred to as nesting, roosting, and foraging habitat (NRF). Foraging-only habitat is a separate category that can include more open and fragmented forests, and does not provide structures for nesting/roosting. Habitat effects summarized in this table are all classified as impacts to nesting/roosting habitat. Impacts to foraging-only habitat are tracked separately.

2. Defined in the Revised Recovery Plan for the Northern Spotted Owl (USFWS 2011) as Recovery Units as depicted on page A-3.

3. Spotted owl nesting/roosting (NR) habitat on Federal lands (includes USFS, BLM, NPS, DoD, USFWS) based on GIS data developed for the Northwest Forest Plan 20-year monitoring report for northern spotted owl habitat as reported by Davis et al. 2016 (PNW-GTR-929). Nesting/roosting habitat acres are approximate values based on 2012 satellite imagery. Values reported here may vary slightly from values reported in PNW-GTR-929.

4. Estimated nesting/roosting habitat removed or downgraded from land management (e.g., timber sales) or natural events (e.g., wildfires) as documented through section 7 consultation or technical assistance. Effects reported here include acres removed or downgraded from 2012 to present.

5. Reserve land use allocations intended to provide spotted owl demographic support include Late-Successional Reserves identified in the Northwest Forest Plan on National Forests, designated Wilderness, and other Congressionally-reserved lands. Reserves on BLM lands in western Oregon managed under the 2016 revised Land and Resource Management Plans include Late-Successional Reserves, Congressionally-reserved lands, National Landscape Conservation System lands, and some District Designated Reserves (e.g., Areas of Critical Environmental Concern).

6. Non-reserve lands intended to provide spotted owl dispersal connectivity between reserves include USFS and BLM designations for timber production (matrix and harvest land base designations), Adaptive Management Areas, and other non-reserved land use designations.

Table B2. Summary of northern spotted owl foraging habitat¹ (acres) removed or downgraded as documented through ESA section 7 consultations on Federal lands. Summary of effects by state, province, and land use function from 2012 to present.

State	Physiographic Province ²	Foraging Habitat Removed/Downgraded ³						
		Land Management Effects			Habitat Loss from Natural Events			Total Foraging Habitat removed/downgraded
		Reserves ⁴	Non-Reserves ⁵	Total	Reserves	Non-Reserves	Total	
WA	Eastern Cascades	0	0	0	0	0	0	0
	Olympic Peninsula	0	0	0	0	0	0	0
	Western Cascades	0	10	10	0	0	0	10
	Western Lowlands	0	0	0	0	0	0	0
OR	Cascades East	124	2,738	2,862	0	62	62	2,924
	Cascades West	263	1,417	1,680	0	0	0	1,680
	Coast Range	24	2,050	2,074	0	0	0	2,074
	Klamath Mountains	242	3,688	3,930	0	0	0	3,930
	Willamette Valley	0	0	0	0	0	0	0
CA	Cascades	571	248	819	0	0	0	819
	Coast	0	1	1	0	7,711	7,711	7,712
	Klamath	1,454	655	2,109	32,849	55,027	87,876	89,985
Total		2,678	10,807	13,485	32,849	62,800	95,649	109,134

Notes:

1. Northern spotted owl foraging habitat occurs in a much broader range of forest types than what is generally represented by nesting/roosting habitat. Foraging-only habitat is a separate category from spotted owl nesting/roosting habitat, and does not provide structures for spotted owl nesting/roosting. The foraging habitat effects summarized in this table are for foraging-only habitat, and do not include effects to nesting/roosting habitat. Environmental baseline information for foraging habitat as a separate habitat category is not available at a provincial scale.

2. Defined in the Revised Recovery Plan for the Northern Spotted Owl (USFWS 2011) as Recovery Units as depicted on page A-3.

3. Estimated foraging-only habitat removed or downgraded from land management (e.g., timber sales) or natural events (e.g., wildfires) as documented through ESA section 7 consultations or technical assistance. Effects reported here include acres removed or downgraded from 2012 to present.

4. Reserve land use allocations intended to provide spotted owl demographic support include Late-Successional Reserves identified in the Northwest Forest Plan on National Forests, designated Wilderness, and other Congressionally-reserved lands. Reserves on BLM lands in western Oregon managed under the 2016 revised Land and Resource Management Plans include Late-Successional Reserves, Congressionally-reserved lands, National Landscape Conservation System lands, and some District Designated Reserves (e.g., Areas of Critical Environmental Concern).

5. Non-reserve lands intended to provide spotted owl dispersal connectivity between reserves include USFS and BLM designations for timber production (matrix and harvest land base designations), Adaptive Management Areas, and other non-reserved land use designations.

Table C: Summary of northern spotted owl nesting/roosting¹ habitat (acres) removed or downgraded on Federal lands from timber harvest, natural disturbance, or other management actions as documented through ESA section 7 consultations and technical assistance. Range-wide changes by land-use function from 2012 to present.

Suitable Habitat Effects	Reserves ³	Non-reserves ⁴	Totals
Evaluation Baseline (2012)²	6,427,441	2,534,317	8,961,758
Removed/Downgraded (timber harvest only)⁵	10,189	29,780	39,969
Removed/Downgraded (other management activities)⁶	6,810	826	7,636
Subtotal	16,999	30,606	47,605
Removed/Downgraded (natural disturbance)⁷	231,207	170,688	401,895
Total Net Change	248,206	201,294	449,500
Baseline Balance	6,179,235	2,333,023	8,512,258
Habitat Maintained⁸	54,032	190,721	244,753

Notes:

1. Northern spotted owl suitable habitat includes nesting/roosting habitat, and foraging-only habitat. Nesting/roosting habitat supports all life-history functions for spotted owls including foraging, and is sometimes referred to as nesting, roosting, and foraging habitat. Foraging-only habitat is a separate category that can include more open and fragmented forests, and does not provide structures for nesting/roosting. Habitat effects summarized in this table are all classified as impacts to nesting/roosting habitats. Impacts to foraging-only habitat are tracked separately.

2. Spotted owl nesting/roosting (NR) habitat on Federal lands (includes USFS, BLM, NPS, DoD, USFWS) based on GIS data developed for the Northwest Forest Plan 20-year monitoring report for northern spotted owl habitat as reported by Davis et al. 2016 (PNW-GTR-929). Nesting/roosting habitat acres are approximate values based on 2012 satellite imagery. Values reported here may vary slightly from values reported in PNW-GTR-929.

3. Reserve land use allocations intended to provide spotted owl demographic support include Late-Successional Reserves identified in the Northwest Forest Plan on National Forests, designated Wilderness, and other Congressionally-reserved lands. Reserves on BLM lands in western Oregon managed under the 2016 revised Land and Resource Management Plans include Late-Successional Reserves, Congressionally-reserved lands, National Landscape Conservation System lands, and some District Designated Reserves (e.g., Areas of Critical Environmental Concern).

4. Non-reserve lands intended to provide spotted owl dispersal connectivity between reserves include USFS and BLM designations for timber production (matrix and harvest land base designations), Adaptive Management Areas, and other non-reserved land use designations.

5. Nesting/roosting habitat removed or downgraded from timber harvest and road construction on Federal lands.

6. Nesting/roosting habitat removed or downgraded from recreation, minerals, or other non-timber harvest programs.

7. Nesting/roosting habitat losses resulting from wildfires, insect and disease, wind-throw or other natural causes.

8. Habitat maintained means that stands of nesting/roosting habitat that have been modified by management (e.g., fuels reduction), but the habitat function remains the same.

Table D: Designated northern spotted owl critical habitat. Summary of northern spotted owl nesting/roosting¹ habitat (acres) removed or downgraded as documented through ESA section 7 consultations. Summary of effects by state, province, and land use function from 2012 to present.

Physiographic Province		Evaluation Baseline		Nesting/Roosting Habitat Removed/Downgraded ⁵							% Provincial Baseline Affected	% Range-wide Effects
				Land Management Effects			Habitat Loss from Natural Events			Total NR Acres Removed		
		Total Designated Critical Habitat Acres ³	Nesting/Roosting Acres ⁴	Reserves ⁶	Non-Reserves ⁷	Total	Reserves	Non-Reserves	Total			
WA	Eastern Cascades	1,022,960	467,221	1,552	55	1,607	3,895	0	3,895	5,502	1.18%	3.87%
	Olympic Peninsula	507,165	211,373	1	0	1	0	0	0	1	0.00%	0.00%
	Western Cascades	1,387,567	606,093	15	185	200	0	0	0	200	0.03%	0.14%
OR	Cascades East	529,652	187,798	1,199	4,618	5,817	1,301	384	1,685	7,502	3.99%	5.28%
	Cascades West	1,965,407	1,255,027	2,519	4,252	6,771	30631	23239	53,870	60,641	4.83%	42.65%
	Coast Range	1,151,874	483,846	1,420	854	2,274	0	0	0	2,274	0.47%	1.60%
	Klamath Mountains	911,681	542,119	2,897	4,068	6,965	3,464	3,314	6,778	13,743	2.54%	9.67%
CA	Cascades	243,205	97,248	0	114	114	0	0	0	114	0.12%	0.08%
	Coast	149,044	94,033	0	0	0	0	2,212	2,212	2,212	2.35%	1.56%
	Klamath	1,708,787	945,505	292	430	722	17012	32,267	49,279	50,001	5.29%	35.16%
Total		9,577,342	4,890,263	9,895	14,576	24,471	56,303	61,416	117,719	142,190	2.91%	100.00%

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- Defined in the Revised Recovery Plan for the Northern Spotted Owl (USFWS 2011) as Recovery Units as depicted on page A-3.
- Northern spotted owl critical habitat as designated December 4, 2012 (77 FR 71876). Total designated critical habitat acres listed here (9,577,342 acres) are derived from GIS data, and vary slightly from the total acres (9,577,969 acres) listed in the Federal Register (-627 acres).
- Spotted owl nesting/roosting (NR) habitat based on GIS data developed for the Northwest Forest Plan 20-year monitoring report by Davis et al. 2016 (PNW-GTR-929). NR habitat acres are approximate values based on 2012 satellite imagery.
- Estimated nesting/roosting habitat removed or downgraded from land management (e.g., timber sales) or natural events (e.g., wildfires) as documented through section 7 consultation or technical assistance. Effects reported here include acres removed or downgraded from 2012 to present.
- Reserve land use allocations intended to provide spotted owl demographic support include Late-Successional Reserves identified in the Northwest Forest Plan on National Forests, designated Wilderness, and other Congressionally-reserved lands. Reserves on BLM lands in western Oregon managed under the 2016 revised Land and Resource Management Plans include Late-Successional Reserves, Congressionally-reserved lands, National Landscape Conservation System lands, and some District Designated Reserves (e.g., Areas of Critical Environmental Concern).
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		Total Designated Critical Acres ³	Land Management Effects			Habitat Loss from Natural Events		
			Reserves ⁵	Non-Reserves ⁶	Total	Reserves ⁵	Non-Reserves ⁶	Total
								Total Foraging Habitat removed/downgraded
WA	Eastern Cascades	1,022,960	0	0	0	0	0	0
	Olympic Peninsula	507,165	0	0	0	0	0	0
	Western Cascades	1,387,567	0	0	0	0	0	0
OR	Cascades East	529,652	0	29	29	0	0	29
	Cascades West	1,965,407	263	687	950	0	0	950
	Coast Range	1,151,874	12	486	498	0	0	498
	Klamath Mountains	911,681	242	1,789	2,031	0	0	2,031
CA	Cascades	243,205	98	91	189	0	0	189
	Coast	149,044	0	1	1	0	4,688	4,689
	Klamath	1,708,787	1,449	523	1,972	12,339	21,613	33,952
Total		9,577,342	2,064	3,606	5,670	12,339	26,301	44,310

Notes:

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