



Trust Lands Habitat Conservation Plan FY 2009 Annual Report

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WASHINGTON STATE DEPARTMENT OF
Natural Resources
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Introduction

The Washington State Department of Natural Resources, like most public agencies nationwide, experienced significant budget reductions over the course of 2009. While this did not significantly impact implementation of the existing Trust Lands Habitat Conservation Plan (HCP) strategies, it did reduce staffing for HCP research, monitoring, and reporting. The loss of staff has both impeded progress and, in some instances, necessitated new approaches for these programs. Staffing changes also have changed roles and responsibilities of individuals within the HCP program.

One change that has occurred is in the HCP annual reporting approach. In an effort to streamline access to information within the confines of a smaller staff and budget, future Trust Lands HCP annual reports will be produced on line, on DNR's HCP webpages, and we hope that this will facilitate communication of trends and measures of success. The website currently is being renovated to improve accessibility and update the content, and is not yet ready to house this level of reporting.

Consequently, for this year, an abbreviated report has been prepared. This report is organized to highlight any changes or new developments in the programs through which we implement the HCP. It does not include the background information on the HCP or individual programs that have been included in past years. This information will be available on the DNR website in the future.

Program Highlights

Silvicultural Activities

- The overall acreage of completed timber harvests was below fiscal year 2008 acreage and the 10-year mean acreage for harvests. While the overall acreage was down, the acreage harvested in the South Coast, Straits, and Yakima planning units showed an increase.
- Forest site-preparation acreage was down from last year but still higher than the 10-year mean. The treated acreage was down from the planned acreage due to projected budget shortages. All units scheduled for treatment were prioritized, with only the most critical acreage treated.
- Forest-regeneration acreage was slightly higher than last year and near the 10-year mean. The level of regeneration activity varies annually with the level of harvest.
- All acreage scheduled for planting was completed.
- Due to budget reductions, vegetation-management acreage was down significantly from both last year and the 10-year mean.
- Due to budget reductions, pre-commercial thinning acreage was also down significantly from both last year and the 10-year mean. The only pre-commercial thinning during the year was conducted by crews from correction camps.

Non-timber Management Activities

Changes from FY 2008 include:

- Increase in miles and decrease in number of rights-of way issued
- Decrease in Christmas greens leases, increase in acres leased
- Decrease in both prospecting leases and mining contracts
- Increase in number of communication sites and communication site leases

Details can be found in the table below.

Table 1. Non-timber Management Activities

FY 2008 TOTAL (for comparison)			FY 2009 TOTAL	
The following represents the number and acres of new rights-of-way issued during the reporting period (not all those active during the reporting period)				
Utility Rights-of-Way	9	15.48 ac (6.03 miles)	8	32.45 ac (7.29 miles)
The following represent the total number and acres of activity in force during the reporting period				
Special Forest Products Leases		Acres	Leases	Acres
Western Greens	446	129,000	446	129,000
Christmas Greens	25	27,419	20	54,451
Christmas Trees	5	188	5	188
Misc. (Medicinal, cone and transplant)	8		8	
Special Forest Products Totals	484	156,607	479	183,639
Valuable Materials				
Silvicultural Pits				
Active Silvicultural Pits	165	317	165	317
Inactive Silvicultural Pits	230	216	230	216
Abandoned Silvicultural Pits	55	56	55	56
Total Silvicultural Rock, Sand and Gravel Pits (No Commercial Sales)	450	589	450	589
Commercial Pits				
Active Commercial Pits	7	101	7	101
Inactive Commercial Pits	2	66	2	66
Total Commercial Rock, Sand and Gravel Pits	9	167	9	167
Sand and Gravel Pits Totals	459	756	459	756
Rock, Sand, and Gravel Sales	3	178	3	178
Rock, Sand, and Gravel Direct Sales	0	0	0	0

Valuable Materials (Rock, Sand, and Gravel) Sales Totals	3	178	3	178
Prospecting Leases/Mining Contracts				
Leases	23	5,085	16	3,219
Contracts	12	1,824	11	2,064
Prospecting Leases/Mining Contracts Totals	35	6,909	27	5,283
Oil and Gas Leases				
Active Leases	182	79,164	182	79,164
Active Oil and Gas Leases Totals	182	79,164	182	79,164
Grazing Permits/Leases				
Eastside	108	131,983	108	131,983
Westside	2	11	2	11
Grazing Permits/Leases Totals	110	131,994	110	131,994
Communications Site Leases				
Number Sites	57		58	
Number Active Leases	271		282	
Recreation Site Totals	123	2,409	123	2,409
Special Use Leases Totals	86	5,699	86	5,699

Sustainable Recreation Rule Changes

Recreation rule changes became effective on March 15, 2009. The changes, which guide public access and recreation on DNR-managed lands, can be found in Chapter 332-52 of the Washington Administrative Code (WAC). The new rules guide the public as well as state agencies and were last updated in 1970.

The new language underwent review through the State Environmental Policy Act (SEPA) in 2008. This language was developed in cooperation with agency staff, other natural resources agencies, an advisory committee, and incorporated public feedback. The rule updates address such topics as sanitation, traffic, firearms, and target shooting. New language covers roads, trails, campground use, water recreation facilities, and boat anchorage. DNR staff reviewed the applicability and scope of the rules to ensure that they are consistent and current and don't contain gaps that could lead to inconsistent management.

Recreation Plan Development

Recreation plans for the state trust lands at Reiter Foothills forest in the North Puget HCP Planning Unit, and the Ahtanum State Forest in the Yakima HCP Planning Unit, have been developed and are currently undergoing SEPA review. Development of these plans was funded by the 2008 Washington State Legislature.

Natural Areas Program

In FY 2009, the Natural Areas Program protected an additional 6,237 acres of natural areas, nearly all of which fall within the area covered by the trust lands HCP. Highlights include:

- Nearly 3000 acres were added to the Mount Si Natural Resource Conservation Area (NRCA), helping protect a large landscape containing mature conifer forest communities, old growth Sitka spruce, and riparian habitat along the Middle Fork Snoqualmie River.
- Charley Creek Natural Area Preserve (NAP) was expanded by 842 acres to protect additional areas of naturally-regenerated low- and mid-elevation mature coniferous forest, as well as low-elevation pond and riparian habitat.
- 650 acres were added to the Camas Meadows NAP, including mid-elevation Eastern Cascade forest, and additional concentrations and habitat for the federally endangered Wenatchee Mts. checkermallow and the State Threatened Wenatchee larkspur.

- The 957-acre Hamma Hamma Balds NAP was established, protecting rare grassland balds and the State Sensitive common bluecup, as well as Pacific madrones and Douglas-fir forest communities.

Table 2. Number of acres added to Natural Areas in FY 2009, and current total acreage

Natural Area	Natural Area Preserve (NAP) or Natural Resources Conservation Area (NRCA)	County	Acres added in FY 2009	Current Acres
Admiralty Inlet	NAP	ISL		33.0
Bald Hill	NAP	TH		313.7
Bone River	NAP	PA		2,565.0
Camas Meadows	NAP	CH	650.0	1,987.2
Carlisle Bog	NAP	GH		310.0
Cattle Point	NRCA	SJ		112.1
Charley Creek	NAP	KG	842.0	1,966.0
Chehalis River Sp	NAP	GH		2,644.2
Clearwater Bogs	NAP	JE		504.1
Clearwater Corridor	NRCA	JE		2323
Columbia Falls	NAP	SKA		513.9
Cypress Highlands	NAP	SKT		1,072.3
Cypress Island	NRCA	SKT	7.8	4,088.5
Dabob Bay	NAP/NRCA	JE	210.0	404.8
Dailey Prairie	NAP	WHA		228.8
Devils Lake	NRCA	JE		80
Elk River	NRCA	GH		4,972.9
Ellsworth Creek	NRCA	PA		557
Goose Island	NAP	GH		12
Granite Lakes	NRCA	SKT		603.2
Gunpowder Island	NAP	PA		152
Hamma Hamma Balds	NAP	MA	957.0	957.0
Hat Island	NRCA	SKT		91.2
Hendrickson Canyon	NRCA	WAH		159
Kennedy Creek	NAP	MA		202.6
Kings Lake Bog	NAP	KG		309.2
Kitsap Forest	NAP	KIP		571.9
Klickitat Canyon	NRCA	YA		470

Natural Area	Natural Area Preserve (NAP) or Natural Resources Conservation Area (NRCA)	County	Acres added in FY 2009	Current Acres
Lake Louise	NRCA	WHA		137.7
Lummi Island	NRCA	WHA		661.4
Merrill Lake	NRCA	COW		114.2
Mima Mounds	NAP	TH		635.5
Monte Cristo	NAP	KL		1151
Morning Star	NRCA	SN		30,372.9
Mt Si	NRCA	KG	2,934.0	12,486.9
Niawiakum River	NAP	PA	93.5	996.5
North Bay	NAP	GH		1,098.1
Oak Patch	NAP	MA		17.3
Olivine Bridge	NAP	SKT		148.0
Point Doughty	NAP	SJ		56.5
Rattlesnake Ridge	NRCA	KG		1,771.4
Rocky Prairie	NAP	TH		35
Sand Island	NAP	GH		8
Shipwreck Point	NRCA	CLM		471.8
Shumocher Creek	NAP	MA	5.1	493.7
Skagit Bald Eagle	NAP	SKT		1,546.0
Skookum Inlet	NAP	MA		142.6
Snoqualmie Bog	NAP	KG		110.5
South Nemah	NRCA	PA		2,439.5
South Nolan	NRCA	JE		213
Stavis	NRCA	KIP	47.5	1,556.8
Table Mtn	NRCA	SKA		2,836.5
Tahoma	NRCA	LW		230
Teal Slough	NRCA	PA		8.4
Trout Lake	NAP	KL	200.0	1,773.0
Washougal Oaks	NAP/NRCA	CLK	114.0	203.3
West Tiger Mtn	NRCA	KG	149.0	3,907.9
Whitcomb Flats	NAP	GH		5
White Salmon Oak	NRCA	KL		551.2
Willapa Divide	NAP	PA		587
Woodard Bay	NRCA	TH	8.2	799.6
Totals			6,218.4	95,770.8

Natural Areas Outside the Area Covered by the HCP				
Natural Area	Natural Area Preserve (NAP) or Natural Resources Conservation Area (NRCA)	County	Acres added in FY 2009	Current Acres
Badger Gulch	NAP	KL		180
Barker Mt	NAP	OK		120
Castle Rock	NAP	GR		81.2
Chopaka	NAP	OK		2764.5
Cleveland Shrub Steppe	NAP	KL		640
Columbia Hills	NAP	KL		3593.6
Davis Canyon	NAP	OK		293
Dishman Hills	NRCA	SPK		70
Entiat Slopes	NAP	CH		1919.9
Kahlotus Ridgetop	NAP	FR		239.5
Little Pend Oreille River	NAP	ST		290.1
Loomis State Forest	NRCA	OK		24672
Marcellus Shrub Steppe	NAP	AD		122.2
Methow Rapids	NAP	OK	19.2	85.2
Pinecroft	NAP	SPK		100.1
Riverside Breaks	NAP	OK		36.3
Selah Cliffs	NAP	YA		301.4
Spring Creek Canyon	NAP	LI		235
Two Steppe	NAP	DGL		394.0
Upper Dry Gulch	NAP	CH		320
Totals			19.2	36,458.0
Grand Totals			6237.6	132,228.8

Table 3. Threatened and Endangered species found in NAPs and NRCAs within the area covered by the trust lands HCP

Species	Federal Status	Natural Area
Northern Spotted Owl ¹	Threatened	Camas Meadows NAP, Granite Lakes NRCA, Skagit Bald Eagle NAP, South Nemah NRCA, Table Mountain NRCA, Teal Slough NRCA, Trout Lake NAP, Morning Star NRCA
Marbled Murrelet ²	Threatened	Bone River NAP, Clearwater Bogs NAP, Clearwater Corridor NRCA, Elk River NRCA, Niawiakum River NAP, South Nemah NRCA, South Nolan NRCA, Teal Slough NRCA, Willapa Divide NAP, Morning Star NRCA
Bull trout	Threatened	Chehalis River Surge Plain NAP, Carlisle Bog NAP, Olivine Bridge NAP, Skagit Bald Eagle NAP, Morning Star NRCA
Chinook Salmon – Puget Sound	Threatened	Kitsap Forest NAP, Mt. Si NRCA, West Tiger Mountain NRCA, Olivine Bridge NAP, Skagit Bald Eagle NAP
Chinook Salmon – Lower Columbia	Threatened	Klickitat Canyon NRCA
Steelhead – Lower Columbia	Threatened	Klickitat Canyon NRCA, Table Mountain NRCA, Washougal Oaks NAP/NRCA
Golden paintbrush	Threatened	Rocky Prairie NAP, Admiralty Inlet NAP
Wenatchee Mts. checker-mallow	Endangered	Camas Meadows NAP

¹Only sites with established territories included

²Only occupied sites included

Table 4. Special status species (Federal Species of Concern, State-listed, State Candidate or other sensitive species) found in Tables III.14 and III.17 of the Final trust lands HCP

(Note that new Federal Candidates within the area covered by the HCP and found in natural areas have been added, and any change in species status has also been changed).

Species	Natural Area ¹
Federal Candidates	
Coho salmon (Lower Columbia/SW Washington)	Washougal Oaks NAP/NRCA
Oregon spotted frog	Trout Lake NAP
Taylor's checkerspot	Bald Hill NAP
Federal Species of Concern	
Beller's ground beetle	Snoqualamie Bog NAP, Kings Lake Bog NAP

Species	Natural Area¹
California bighorn sheep	Morning Star NRCA
Cascades frog	Mt. Pilchuck NRCA
Columbia torrent salamander	Ellsworth Creek NRCA
Fringed myotis	Camas meadows NAP
Gorge daisy	Columbia Falls NAP
Harlequin duck	Morning Star NRCA
Hatch's click beetle	Kings Lake Bog NAP
Howell's daisy	Columbia Falls NAP, Table Mt. NRCA
Larch Mountain salamander	Table Mt. NRCA, Columbia Falls NAP
Makah copper	North Bay NAP, Carlisle Bog NAP
Northern goshawk	Clearwater Corridor NRCA, Morning Star NRCA
Northern red-legged frog	Carlisle Bog NAP, North Bay NAP, Table Mountain NRCA, Morning Star NRCA, Ellsworth Creek NRCA, Kings Lake Bog NAP
Olive-sided flycatcher	Numerous sites
Oregon sullivantia	Columbia Falls NAP
Peregrine falcon	Table Mountain NRCA, Cypress Island NAP, Mt. Si NRCA, Elk River NRCA, Hat Island NRCA, Lummi Island NRCA, North Bay NAP
Slender-billed white-breasted nuthatch	Washougal Oaks NAP/NRCA
Suksdorf's desert-parsley	White Salmon Oak NRCA
Tailed frog	Table Mountain NRCA, Morning Star NRCA
Tall bugbane	Washougal Oaks NAP, Columbia Falls NAP
Valley silverspot	Mima Mounds NAP
Van Dyke's salamander	South Nemah NRCA, Ellsworth Creek NRCA
Wenatchee larkspur	Camas Meadows NAP
White-top aster	Rocky Prairie NAP, Mima Mounds NAP
Yuma myotis	Woodard Bay NRCA
State listed – no federal status	
Sandhill crane (State Endangered)	Trout Lake NAP, Klickitat Canyon NRCA
State candidate – no federal status	
Dunn's salamander	Teal Slough NRCA, South Nemah NRCA
Pileated woodpecker	Table Mountain NRCA, Morning Star NRCA, Kitsap Forest NAP, and others
Puget blue	Rocky Prairie NAP
Purple martin	Woodard Bay NRCA, Kennedy Creek NAP

Species	Natural Area¹
Vaux's swift	Numerous sites
State Sensitive or State Monitor Species	
Olympic mudminnow	Carlisle Bog NAP, Chehalis River Surge Plain NAP, West Tiger Mountain NRCA
Western bluebird	Rocky Prairie NAP, Mima Mounds NAP

¹Locality information was determined by consulting the following databases: Washington Natural Heritage BCD and the following WDFW databases: Heritage Points, Herp database, Owl database, murrelet database, Priority Habitats and Species and Streamnet.

Table 5. Natural areas located within the area covered by the trust lands HCP and composed primarily of mature forests, late seral forests or a combination of both

Natural Area	Natural Area size (acres)
Coastal	
Kitsap Forest NAP	572
Stavis NRCA	1557
South Nemah NRCA	2,440
Willapa Divide NAP	587
Hendrickson Canyon NAP	159
Ellsworth Creek NRCA	557
Clearwater Corridor NRCA	2,323
South Nolan NRCA	213
Western Cascades	
Skagit Bald Eagle NAP	1,546
Granite Lakes NRCA	603
Morning Star NRCA	30,373
West Tiger Mt. NRCA	3,908
Mt. Si NRCA	12,487
Rattlesnake Mt. Scenic Area	1,771
Table Mt. NRCA	2,837
Columbia Falls NAP	514
Charley Creek NAP	1,966
Tahoma NRCA	230
Eastern Cascades	
Monte Cristo NAP	1,151
Klickitat Canyon NRCA	470
Total	66,264

Cultural Resources

The following FY 2009 archeology highlights are presented in general terms. Future reports will include specific numbers of surveys and acreages affected.

- Reviewed an average of four proposed transactions or projects per week to identify cultural resource issues, covering tens of thousands of acres
- Tracked external agency actions with potential to affect DNR managed uplands statewide and State-owned Aquatic Lands on the coast, in Puget Sound, Strait of San Juan de Fuca, and the lower Columbia
- Surveyed thousands of acres of DNR-managed state-owned lands to find and protect sites potentially affected by timber sales, agricultural conversions, land transfers, recreation facilities, and restoration projects
- Continued working on Cypress Island Natural Area Preserve, including: archaeological monitoring of building demolition, archaeological survey of proposed estuary restoration project, condition monitoring of known sites, and research into the cultural landscape
- Worked with other DNR cultural resource staff and staff from Department of Transportation and Department of Archaeology and Historic Preservation to continue cultural resource awareness training and development for staff of DNR, other state agencies, and tribes
- Worked to certify numerous DNR field personnel as cultural resource technicians
- Began work with DNR and DAHP to develop Programmatic Agreement for reporting
- Worked with Natural Area Preserve, Natural Resources Conservation Area and Natural Heritage staff and DNR's tribal liaison on strategies for natural area management oriented toward traditional 'first foods' sustainable use
- Worked with Cowlitz, Port Gamble S'Klallam, Jamestown S'Klallam, Lower Elwha, Samish, Confederated Colville, Quinault, Spokane, Suquamish, and Yakama Tribes to develop cooperative approaches to survey, evaluation, and protection of sites and other cultural resources
- Responded to numerous public requests for information regarding archaeological resources
- Served as a member of Timber Fish and Wildlife Cultural Resources Committee, an advisory committee to the Forest Practices Board.
- Recorded and evaluated approximately 55 sites on DNR-managed forested uplands.

Road Management Activities

An increase in road miles in the Yakima planning unit is due to the acquisition of Western Pacific Timberlands ownership, this land exchange was completed in the spring of 2008. The parcel exchange was not equal in terms of acre for acre because the DNR- managed state trust lands in the exchange were of higher value; therefore DNR acquired more acreage for the trust, and more road miles.

The trend for the agency is to pick up lower value land and get more acreage and road miles, or purchase cut over lands that are highly roaded. As a consequence, the trend that our road miles are substantially increasing continued at least through calendar year 2009.

Table 6. Road Management, Calendar Year 2008

Activity (Miles)	HCP Planning Unit									
	Chelan	Columbia	Klickitat	N. Puget	OESF	S. Coast	S. Puget	Straits	Yakima	Grand Total
New Road Constructed	0	28.21	5.45	54.11	3.1	21.02	13.48	17.05	13.41	155.84
Road Reconstructed	0	14.58	7.4	67.76	0	15.56	5.63	5	7.65	123.57
Forest Roads Abandoned	0	11.18	5.91	80.45	3.4	2.98	11.17	5.53	13.28	133.91
Forest Roads Decommissioned	0	0.66	0	5.38	1.7	2.92	5.38	4.8	14.18	35.02
Inventoried Road Mileage in Unit	90.65	1350	591.21	1522.49	1812	1556	876.31	734.92	990.18	9523.76
Total Fish Barriers Removed	0	5	17	17	21	9	2	6	4	81

Table 7. Road Management, Calendar Year 2009

Activity (miles)	HCP Planning Unit										
	Chelan	Columbia	Klickitat	Non-HCP Lands	North Puget	OESF	South Coast	South Puget	Straits	Yakima	Grand Total
Road Reconstructed (Miles)	0	9.02	2.54	3.30	60.27	0.58	7.16	5.39	5.02	2.34	95.62
FEMA Storm Damage (# of projects)	0	0	0	0	30	10	0	25	0	0	65
Forest Roads Abandoned (Miles)	0.72	3.5	0.94	6.86	53.94	0.73	6.81	12.24	6.3	7.71	99.76
Forest Roads Decommissioned (Miles)	0	1.2	2.43	1.13	0	5.91	2.13	4.17	1.87	15.38	34.22
Inventoried Road mileage in Unit	90.65	1350	591.21	137.50	1609.11	1812	1556	874.79	737.86	990.18	9749.29
New Road Constructed (Miles)	0	16.71	3.11	7.05	54.02	4.20	16.67	13.15	8.76	3.15	126.82
Public Use Maintenance	0	0	0	0	0	0	0	0	0	0	0
Road Maintenance	0.27	0	171.44	94.50	1315.00	0	0	0	0	142.43	1723.64
Total Fish Barriers Removed	0	5	0	10	16	14	13	7	3	2	70

Table 8. Road Use Permits and Easements

Planning Unit	Columbia	Klickitat	North Puget	South Coast	South Puget	Total
New road Constructed						
Miles	0.2	0.0	0.12	0.56	0.0	0.88
Acres	1.3	0.0	0.79	3.45	0.0	5.54
Road Reconstruction						
Miles	0.0	0.26	0.0	.02	0.0	0.28
Acres	0.0	0.96	0.0	.12	0.0	1.08
Road Abandonment						
Miles	0.0	0.0	0.0	0.0	0.06	0.06
Acres	0.0	0.0	0.0	0.0	0.15	0.15
Fish Barrier Removal						
Miles	0.0	0.0	0.0	0.0	0.0	0.0
Acres	0.0	0.0	0.0	0.0	0.0	0.0

Table 9. Utility Easements

Planning Unit	Klickitat	North Puget	OESF	Total
New Construction				
Miles	0.29	7.3	1.0	8.59
Acres	0.36	5.29	2.13	7.78

Land Transactions Activity by Planning Unit

Chelan

One DNR-managed trust parcel was transferred to the Camas Meadows Natural Area. This is a change in status, but it continues in state ownership, and continues to contribute to habitat in the HCP, so the parcel is not included in the compiled report. Out of the 424 acres transferred 226 acres are designated Nesting Roosting Foraging (NRF).

Columbia

One private parcel was acquired for an addition to the Washougal Oaks Natural Area.

A 680 acre parcel known as Camp Bonneville (a former military site) was transferred to Clark County and 30 acres to the City of Battleground, both for recreational purposes. The remainder is forest land traded to Port Blakely Tree Farms.

Klickitat

One trust property was acquired and one addition to the Trout Lake Natural Area.

North Puget

The majority of the acquired acres are forest land acquired for the trusts, with the largest block in King County (6,777 acres) in the Raging River area. It will contribute to the trust lands HCP.

Two properties were transferred to Island County for recreation purposes; sold two small lots to private parties.

About 2900 acres of Common School trust land was transferred to Mount Si Natural Area – change of status only, but it continues in state ownership, and continues to contribute to habitat in the HCP,.

OESF

About 160 acres of Common School trust lands were transferred to the Hoh Tribe for use as a residential site.

South Coast

The majority of the acres both acquired and disposed in this planning unit are the result of a land exchange between DNR and Port Blakely Tree Farms.

South Puget

Common School trust acquired forest land in King and Kitsap Counties; private land was also acquired for addition to the Stavis Creek Natural Area.

The majority of the land disposed was to Kitsap County for recreation; one lot sold to the Rainier School District for a school site.

Straits

Trust acquired several smaller in-holding parcels.

One parcel was disposed of to the City of Port Townsend.

Yakima

One isolated Common School trust parcel was disposed of that is primarily used for agriculture.

Effects of Transactions on Permit Lands - July 2008 to June 2009

Information subject to corrections and additions over time.

	Transaction Activity	Planning Unit									
		Chelan	Columbia	Klickitat	N Puget	OESF	S Coast	S Puget	Straits	Yakima	Totals
	Total Acres Acquired	-	110.00	220.58	7,412.38	-	8,525.36	1,850.91	338.94	-	18,458.17
	Total Acres Disposed	-	(3,651.46)	-	(100.20)	(160.00)	(5,572.70)	(602.41)	(81.53)	(40.00)	(10,208.30)
	Net Change	-	(3,541.46)	220.58	7,312.18	(160.00)	2,952.66	1,248.50	257.41	(40.00)	8,249.87
Owl Habitat	Designated Dispersal	-	-	-	-	-	-	-	-	-	-
Acquired	Existing Dispersal (41+)	-	-	-	-	-	-	-	-	-	-
	Designated DFC	-	-	-	-	-	-	-	-	-	-
	Existing DFC	-	-	-	-	-	-	-	-	-	-
	Designated NRF	-	-	200.00	-	-	-	-	-	-	200.00
	Existing NRF (71+)	-	-	54.00	-	-	-	-	-	-	54.00
	OESF	-	-	-	-	-	-	-	-	-	-
	No Role	-	110.00	20.58	7,412.38	-	8,525.36	1,850.91	338.94	-	18,258.17
											18,458.17
Owl Habitat	Designated Dispersal	-	-	-	-	-	-	-	-	-	-
Disposed	Existing Dispersal (41+)	-	-	-	-	-	-	-	-	-	-
	Designated DFC	-	-	-	-	-	-	-	-	-	-
	Existing DFC	-	-	-	-	-	-	-	-	-	-
	Designated NRF	-	-	-	-	-	-	-	-	-	-
	Existing NRF (71+)	-	-	-	-	-	-	-	-	-	-
	OESF	-	-	-	-	(160.00)	-	-	-	-	(160.00)
	No Role	-	(3,651.46)	-	(100.20)	-	(5,572.70)	(602.41)	(81.53)	(40.00)	(10,048.30)
											(10,208.30)
Other	Murrelet	-	-	-	-	-	-	-	-	-	-
Habitats	Oregon silverspot butterfly	-	-	-	-	-	-	-	-	-	-
Acquired	Aleutian Canadian goose	-	-	-	-	-	-	-	-	-	-
	Bald eagle	-	-	-	-	-	-	-	-	-	-
	Peregrine falcon	-	-	-	-	-	-	-	-	-	-
	Gray wolf	-	-	-	-	-	-	-	-	-	-
	Grizzly bear	-	-	-	-	-	-	-	-	-	-
	Columbia white-tailed deer	-	-	-	-	-	-	-	-	-	-
	Talus and cliffs	-	-	-	-	-	-	-	-	-	-
	Meadows	-	-	-	-	-	-	-	-	-	-
Other	Murrelet	-	-	-	-	(22.78)	(5.63)	-	-	-	(28.41)
Habitats	Oregon silverspot butterfly	-	-	-	-	-	-	-	-	-	-
Disposed	Aleutian Canadian goose	-	-	-	-	-	-	-	-	-	-
	Bald eagle	-	-	-	-	-	-	-	-	-	-
	Peregrine falcon	-	-	-	-	-	-	-	-	-	-
	Gray wolf	-	-	-	-	-	-	-	-	-	-
	Grizzly bear	-	-	-	-	-	-	-	-	-	-
	Columbia white-tailed deer	-	-	-	-	-	-	-	-	-	-
	Talus and cliffs	-	-	-	-	-	-	-	-	-	-
	Meadows	-	-	-	-	-	-	-	-	-	-

	Transaction Activitycontinued	Planning Unit									
		Chelan	Columbia	Klickitat	N Puget	OESF	S Coast	S Puget	Straits	Yakima	Totals
Riparian:	Stream type 1	-	-	0.58	0.95	-	2.28	-	-	-	3.81
Stream Miles	Stream type 2	-	-	-	0.82	-	0.68	-	0.31	-	1.81
Acquired	Stream type 3	-	0.45	-	8.26	-	28.37	3.12	1.08	-	41.28
	Stream type 4	-	-	-	13.80	-	13.47	3.91	-	-	31.18
	Stream type 5	-	-	-	26.51	-	47.02	7.30	0.70	-	81.53
	Stream type 9	-	-	0.22	12.89	-	11.52	1.01	0.03	-	25.67
	Total Miles	-	0.45	0.80	63.23	-	103.34	15.34	2.12	-	185.28
ROS/Slopes											
Acquired	Rain on Snow	-	-	200.00	3,779.70	-	-	489.11	29.50	-	4,498.31
Riparian:	Stream type 1	-	-	-	-	-	-	-	-	-	-
Stream Miles	Stream type 2	-	-	-	-	-	(0.74)	-	-	-	(0.74)
Disposed	Stream type 3	-	(9.61)	-	(0.05)	(0.80)	(9.40)	-	-	-	(19.86)
	Stream type 4	-	(2.62)	-	-	-	(8.89)	-	-	-	(11.51)
	Stream type 5	-	(20.72)	-	-	(0.36)	(39.30)	-	-	0.06	(60.32)
	Stream type 9	-	(17.62)	-	(0.09)	-	(41.54)	(2.19)	-	-	(61.44)
	Total Miles	-	(50.57)	-	(0.14)	(1.16)	(99.87)	(2.19)	-	0.06	(153.87)
ROS/Slopes											
Disposed	Rain on Snow	-	-	-	-	-	-	-	-	(40.00)	(40.00)

Effects of Transactions on Permit Lands - July 2008 to June 2009—Continued

Information subject to corrections and additions over time.

Activity	Forest Type	Planning Unit									
		Chelan	Columbia	Klickitat	N Puget	OESF	S Coast	S Puget	Straits	Yakima	Totals
Age class	Open 0-10	-	-	-	1,355.50	-	1,490.77	315.32	40.00	-	3,201.59
Acquired	Regeneration 11-20	-	-	6.98	2,311.00	-	1,271.00	558.94	80.00	-	4,227.92
	Pole 21-40	-	-	-	2,191.65	-	2,678.00	510.39	31.60	-	5,411.64
	Closed 41-70	-	83.50	63.00	138.70	-	1,086.33	314.42	106.90	-	1,792.85
	Complex 71-100	-	-	54.00	83.70	-	201.00	39.00	2.22	-	379.92
	Complex 101-150	-	-	-	4.79	-	-	11.30	-	-	16.09
	Functional 150+	-	-	-	-	-	-	-	-	-	-
	Non-Forest Land	-	26.50	96.60	1,327.04	-	1,798.50	101.54	78.22	-	3,428.40
	Total Acres	-	110.00	220.58	7,412.38	-	8,525.36	1,850.91	338.94	-	18,458.17
Age class	Open 0-10	-	(907.25)	-	-	-	(590.87)	-	-	-	(1,498.12)
Disposed	Regeneration 11-20	-	(62.00)	-	-	-	(101.47)	(297.37)	-	-	(460.84)
	Pole 21-40	-	(633.66)	-	-	(141.00)	(2,537.71)	(30.84)	-	-	(3,343.21)
	Closed 41-70	-	(1,792.15)	-	(14.59)	-	(1,843.00)	(85.86)	-	(20.21)	(3,755.81)
	Complex 71-100	-	(252.24)	-	(23.00)	-	(303.65)	(141.27)	(75.70)	(10.78)	(806.64)
	Complex 101-150	-	-	-	(22.00)	-	-	-	-	-	(22.00)
	Functional 150+	-	-	-	-	-	-	-	-	-	-
	Non-Forest Land	-	(4.16)	-	(40.61)	(19.00)	(196.00)	(47.07)	(5.83)	(9.01)	(321.68)
	Total Acres	-	(3,651.46)	-	(100.20)	(160.00)	(5,572.70)	(602.41)	(81.53)	(40.00)	(10,208.30)

Trust Lands HCP Implementation Monitoring

Implementation monitoring supports continual improvement of HCP procedures by assessing and documenting implementation of a wide variety of activities. In 2009, we completed a multi-year monitoring of timber sales implemented under the Klickitat Northern Spotted Owl (NSO) strategy, and initiated a study of the fate of snags on Westside timber sales.

Trust Lands HCP 2009 implementation monitoring accomplishments:

- Post-timber-harvest measurements were completed on two projects initiated in 2006 to compare NSO habitat characteristics pre- and post-harvest on two timber sales: Loop (Eastside) and Big Beaver (Westside). Results will help provide guidance on future NSO habitat thinning design.
- Initiation of a pilot study to determine the number of snags pre- and post-harvest on timber sales. The project was initiated in response to the low number of snags documented during previous 2008 implementation monitoring of large and unique trees and snags in 2008. The new project will provide further insight into the fate of the original population of snags and provide feedback to current department snag-retention guidance.

A detailed report on these projects can be found at:

www.dnr.wa.gov/ResearchScience/Topics/TrustLandsHCP/Pages/implementation_monitoring.aspx

HCP Effectiveness Monitoring for the Riparian Forest Restoration Strategy

Effectiveness Monitoring of the Riparian Forest Restoration Strategy increases management confidence and options, supports continual improvement of HCP procedures. It also provides replicated, controlled monitoring to document treatment outcomes, and tests alternatives to current management practices that can be considered in the future. For FY2009:

- Table 11 summarizes the status of the ongoing riparian silviculture monitoring sites. No new sites were established. Budget curtailment slowed re-measurement and data analysis in the latter half of 2009.
- Table 11 also summarizes the current locations and status of riparian silviculture effectiveness monitoring efforts.

Table 11. Riparian Silviculture Monitoring

Stand Name	Region	Sub-Study	2009 Status	Harvest Year	Treatments
Sumas Pass	NW	EM ¹	1st Post-harvest monitoring due	2006	RD40 ² , RD50, CTL
North Mountain	NW	EM	Post-harvest monitoring ongoing	2010	RD40, RD50, CTL
H1320	Oly	EM	1st Post-harvest monitoring completed	2005	RD40, RD50, CTL
Salmon PC	Oly	EM	1st Post-harvest monitoring completed	2005	RD40, RD50, CTL
Cougarilla	SPS	EM	1st Post-harvest monitoring ongoing	2006	RD40, RD50, RD50Gap, CTL
Pink Flamingo	NW	EM older stands	Post-harvest monitoring due	2008	RD40, RD50, CTL
Big Beaver	SPS	EM Older Stand	Post-harvest measurements due	2008	RD40, RD50, RD50Gap, CTL
Hurd Pole	SPS	Snag Development	Post-harvest monitoring ongoing	2007	trees were girdled above 2 live whorls of branches in the canopy.
Whiskers	SPS	Snag Development	Post-harvest monitoring ongoing	2008	Healthy trees of 5 species were girdled at the base.
Shotgun Blowdown	SPS	Salvage Operations	Post-harvest monitoring ongoing	2007	Removal of most down wood, retention of standing wood.

¹ EM = Effectiveness monitoring per Experimental Design *Monitoring Plan for Riparian Silviculture Effectiveness Monitoring* last updated in 2009.

² Curtis relative density (RD) is equal to the basal area of a stand divided by the square root of the quadratic mean diameter, CTL=untreated controls, gap= a small opening designed to encourage understory and secondary canopy structure. Treatments are defined by Curtis Relative Density (RD). RD is an index of stand density that integrates basal area, and number of trees used to gage the relative completion between trees in a stand. Treatments represent successive reductions in competition (RD 40 is lower density with less inter- tree competition than RD 50) in order to measure progress in tree growth, and development of the structural complexity characteristics of older forests. Untreated controls (CTL) provided reference for quantitative comparison of treatments.

Riparian in-stream and conditions effectiveness monitoring

One other component of riparian effectiveness monitoring that documents changes over time is in-stream habitat conditions.

Our 2009 accomplishments include:

- Published results from HCP in-stream conditions monitoring described the recovery trajectory of stream temperatures on the OESF. This work is important because it places a landscape context on stream temperature recovery. See Pollock, M. M., T. J. Beechie, M. Liermann, and R. E. Bigley, 2009. Stream Temperature Relationships to Forest Harvest in Western Washington. *Journal of the American Water Resources Association*. 45 (1) 141- 156.

Northern Spotted Owl Effectiveness Monitoring

Effectiveness Monitoring of the Northern Spotted Owl strategy increases management confidence and options, supports continual improvement of HCP procedures and provides replicated, controlled monitoring to document treatment outcomes.

Our 2009 accomplishments include:

- Completed the post-harvest stand re-measurements for the effectiveness monitoring permanent plots in Big Beaver timber management unit (Elbe Block, South Puget HCP Planning Unit). Data analysis is in process, and preliminary results are expected to be available in summer of 2010.
- National Council for Air and Stream Improvement (NCASI) completed contract work conducting spotted owl demography surveys in Klickitat Planning Unit. The contract covered three field seasons (2007 – 2009) and all owl sites were surveyed according to the specified protocol. A summary report was due from NCASI in January 2010.
- National Council for Air and Stream Improvement is continuing a telemetry survey (originally sponsored by Weyerhaeuser and DNR; now sponsored by Weyerhaeuser) on both DNR and Weyerhaeuser lands in SW Washington. A progress report has been provided and a DNR final report was due by mid February 2010.

Adaptive Management

The HCP includes provisions for continual improvement of HCP implementation. The adaptive management component of the HCP is an important tool for ongoing modifications of DNR's conservation strategies in order to respond to monitoring information and new scientific developments. Two such improvements were advanced in 2009:

- Refinement of the definition of NSO dispersal habitat within the South Puget HCP Planning Unit, and
- The *Draft Headwaters Conservation Strategy*. The refinement of the definition of NSO dispersal habitat and the headwaters conservation strategy are examples of the use of adaptive-management process to successfully implement the conservation objectives outlined in the HCP.

Definition of Northern Spotted Owl dispersal habitat

In the Forest Land Plan for the South Puget HCP Planning Unit, DNR used adaptive management to implement and modify the existing HCP conservation strategy for managing dispersal habitat for the Northern Spotted Owl. Based on a collaborative working process with wildlife biologists from the U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, and DNR, an agreement regarding habitat needs for dispersing spotted owls has been reached and an improved strategy developed to meet these needs. This strategy modifies the current dispersal habitat definition in the planning unit and includes a threshold requirement for the creation and maintenance of higher-quality NSO habitat that includes important elements of structure, such as snags, coarse woody debris, and canopy diversification (Table 12). It also changes the spatial unit used to account for habitat thresholds from a watershed to landscape scale. The dispersal landscapes are aggregated watershed scale units called Spotted Owl Management Units (SOMU).

Table 12. Existing and new Northern Spotted Owl habitat definitions for the South Puget Planning Unit

Existing HCP NSO <i>Dispersal</i> Habitat	New South Puget NSO <i>Movement</i> Habitat	New South Puget NSO <i>Movement, Roosting and Foraging (MoRF)</i> Habitat
	Forest community dominated by conifers with at least 30 percent conifers (measured as stems per acre dominant, co-dominant, and intermediate trees)	Forest community dominated by conifers with at least 30 percent conifers (measured as stems per acre dominant, co-dominant, and intermediate trees)
Canopy closure at least 70% measured as Curtis's Relative Density of 48	Canopy closure at least 70% measured as Curtis's Relative Density of 48	Canopy closure at least 70% measured as Curtis's Relative Density of 48
Quadratic mean diameter of 11 inches dbh for the 100 largest trees greater than or equal to 3.5 inches dbh	Quadratic mean diameter of 11 inches dbh for the 100 largest trees greater than or equal to 3.5 inches dbh	At least two canopy layers Process for measurement is outlined in <i>A Strategy for NSO Dispersal Habitat in the South Puget HCP Planning Unit</i> attached
	Tree density no more than 280 trees per acre greater than or equal to 3.5 inches dbh	Tree density of between 115 and 280 trees greater than or equal to 3.5 inches dbh per acre
Dominant and co-dominant trees at least 85 feet tall	Dominant and co-dominant trees at least 85 feet tall	Dominant and co-dominant trees at least 85 feet tall
At least four trees per acre from the largest size class retained for future snag and cavity tree recruitment	At least four trees per acre from the largest size class retained for future snag and cavity tree recruitment	At least five percent coverage of down woody debris measured as 2,400 cubic feet per acre
		At least three snags/cavity trees/acre at least 15" dbh

Headwaters Conservation Strategy

The *Draft Headwaters Conservation Strategy* was produced to complete the HCP Riparian Conservation Strategies. It represents a several-year collaborative effort between the Services, the scientific community, and DNR managers. The strategy incorporates emerging ideas about the importance of non-fish habitat for ecosystem conservation and the linkage to downstream fish habitat quality. The strategy provides clear guidance to prioritize site-specific protections and integrate with other existing leave areas to maximize conservation effectiveness.

In response to a letter of support from the Services in November 2008, the department conducted outreach to tribes and started preparations for the final SEPA process on headwater conservation. Staff reduction resulting from budget curtailment and competing priorities have temporarily postponed progress.

Olympic Experimental State Forest Research and Monitoring Program

ACCOMPLISHMENTS FOR CALENDAR YEAR 2009³

The Draft Research and Monitoring Strategy for the OESF

The *Draft Research and Monitoring Strategy* document provides guidance for information-gathering activities in the OESF, based on the areas of management uncertainty, and identifies key near- and long- term research projects. It received extensive internal and external review including input from state trust beneficiaries, the timber industry, the Federal Services and others. The draft strategy was published in August 2009 and is available on DNR's website. It will be integrated with the OESF Forest Land Plan development process and refined and expanded as the analyses evolve in the plan. The strategy is expected to be finalized by the end of 2010 after the completion of the OESF Forest Land Plan currently anticipated for October 2010.

Coordination with the OESF Forest Land Planning Project

Coordination with the new OESF Forest Land Planning Project started in October 2009. The specific areas of collaboration include development of background papers and analyses for the effects of the planned activities on Northern Spotted Owls and Marbled Murrelets. Also included in the collaborative efforts are the development of the adaptive-management section in the plan, and through the plan analyses, identification of priority management questions that need to be addressed through the OESF Research and Monitoring Program.

OESF included in the National Experimental Forests and Ranges Network

In August 2009, DNR signed an agreement with USFS Pacific Northwest Research Station to designate the OESF as a participating forest in the Forest Service's Experimental Forest and Range Network. This national network includes 70 experimental forests and ranges, and is coordinated by the Forest Service to encourage data-sharing and to promote collaborative research. Through participating in the network, DNR seeks a

³ Due to changes in positions and long-term assignments resulting from the Spring 2009 reductions in force (RIFs), Teodora Minkova replaced Mark Teply as the permanent OESF Research and Monitoring Manager. She assumed her new position duties in June 2009.

means to accomplish many trust lands HCP objectives for the OESF in fulfilling its long-term vision for an experimental forest. Direct benefits from joining the network include increased visibility for the OESF among research organizations, worldwide access to results of research and monitoring, syntheses, and technology transfer being done nationwide in the Experimental Forest and Range Network.

Riparian Research Synthesis

USFS Pacific Northwest researchers were contracted in 2008 to synthesize the recent field research which has occurred on state trust lands and other ownerships in the area. Researchers synthesized the extent and forest conditions of interior and exterior riparian buffers and the appropriate models, metrics, and /or criteria needed to assess the restoration of riparian functions at the watershed scale. After DNR review of a draft report, the final report was submitted to DNR in December 2009. It is available on DNR's website.

Initiating Scoping and Development for New Research Projects in the OESF

Three research topics have been scoped and developed into research proposals planned for the OESF and adjacent ownerships. The proposals follow the priorities identified in the *Draft Research and Monitoring Strategy*. The document addresses critical questions regarding landscape-level assessment of riparian management, including development of a riparian monitoring design; testing different silvicultural techniques to accelerate development of older forest conditions; and long-term ecosystem productivity—including carbon dynamics—under different silvicultural regimes. The research will be conducted by researchers from USFS Pacific Northwest Research Station in cooperation with DNR and other scientists. DNR will seek funding for the proposals in 2010.

Continuing to Build Collaborative Partnerships and Conduct Outreach

Meetings to discuss specific collaborative work were held with numerous current and potential research partners, including USFS Pacific Northwest Research Station, Olympic Natural Resource Center, Olympic National Park, and Olympic National Forest. Outreach activities were carried out to solicit input and to seek support for specific research and monitoring projects. DNR outreach involved state trust beneficiaries, timber industry, and the Conservation Caucus.

Marbled Murrelet Conservation Strategy

Long-term Conservation Strategy for the Olympic Experimental State Forest, Straits, South Coast and Columbia Planning Units

The planning process for the Marbled Murrelet Long-term Conservation Strategy was halted in early 2009. Budget reductions resulted in the cutback of Ecosystem Services Section staff and a reprioritization of existing projects. The development of the long-term conservation strategy was prioritized second to the Forest Land Plan for the Olympic Experimental State Forest. Once the OESF Forest Land Plan is completed, it is anticipated that development of the Marbled Murrelet Long-term Conservation Strategy will then proceed.

Analysis of Permitted Take of Marbled Murrelets under the 1997 HCP

As part of exploring options for moving forward with the development of a Long-term Conservation Strategy for the Marbled Murrelet, there is interest on the part of both DNR and US Fish and Wildlife Service (FWS) to analyze how much permitted take has been used to date in the process of implementing the interim conservation strategy. Analysis of this question has been delayed by staffing changes within the Ecosystem Services Section, and we expect the analysis to be complete by June 30, 2010.

Interim Marbled Murrelet Strategy – South Puget and North Puget Planning Units

SOUTH PUGET PLANNING UNIT

The original 1997 HCP interim agreement for the Marbled Murrelet called for conducting a habitat relationship study within each planning unit in Western Washington. The purpose of the Marbled Murrelet habitat relationship study is to research the types of murrelet habitat that exist within each of the six Westside HCP planning units. Information from the habitat relationship study would be used in a predictive model that identifies where 95 percent of the expected occupied sites would be found. DNR then would survey those areas and use that information to develop a long-term conservation strategy specific to the South Puget Planning Unit.

In early 2007, DNR and the USFWS (with consultation from the Washington Department of Fish and Wildlife) began exploring alternative options within the South Puget HCP Planning Unit concerning the identification of Marbled Murrelet habitat. Alternative options were

pursued due to previous difficulties developing the predictive models in other Westside planning units. In July of 2009, DNR and the USFWS signed a concurrence letter that substitutes an alternative methodology in lieu of the methodology developed through the habitat relationship study. Details of the habitat release can be found in the approved concurrence letter.

Table 12. Summary of Marbled Murrelet Habitat Status by Area and Acreage in the South Puget Planning Unit

Area	Suitable Habitat	Unsuitable Habitat	Occupied Habitat	Potential Habitat
Tiger Mt.	142	559	0	0
Elbe/Tahoma	96	816	468	1,377
Black Diamond	355	2,524	111	0
Belfair/Kitsap	81	570	0	754
	674	4,469	579	2,131
Total Evaluated Habitat in South Puget Planning Unit				7,853

Due to budget shortfalls, the Marbled Murrelet Project coordinator position and inventory survey program have been suspended. It is not known when the program will be reinitiated.

NORTH PUGET PLANNING UNIT

Budget shortfalls also affected the progress of Marbled Murrelet surveys in the North Puget Planning Unit. The Marbled Murrelet Project Coordinator position and inventory survey program have been suspended. It is not known when the program will be reinitiated.

DNR presented to the USFWS a proposal to release 1,440 acres of surveyed, unoccupied Marbled Murrelet habitat within the north half of the planning unit. The process for habitat release was a result of a joint process that followed the general methodology identified in the HCP Interim Marbled Murrelet Conservation Strategy Marbled Murrelet, but was adapted to address the unique circumstances of the North Puget Planning Unit. Details of the habitat release can be found in the approved concurrence letter.

Forest Certifications

Sustainable Forestry Initiative® (SFI®):

FY 2009 SFI Renewal Audit

The 2009 renewal audit was conducted by an independent-third party auditing firm, and was held in Northeast and Southeast Regions in May 2009.

This audit yielded six notable practices by DNR related to:

- 1) implementing the Lynx Management Plan;
- 2) collaboratively developing an interim protection procedure for the northern goshawk;
- 3) developing a draft procedure for Retention and Perpetuation of Legacy Trees, Snags and Downed Wood for conservation of old trees on the Eastside using information on old tree identification from the field guide by Robert Van Pelt, "Identifying Old Trees and Forests in Eastern Washington";
- 4) utilizing timber harvest to maintain and enhance the growth of several rare plant species while recovering logs with economic value;
- 5) playing a key role in collaborative, cooperative planning and implementation efforts to restore dry forest and shrub steppe zones; and
- 6) cooperative efforts to provide a business development park where multiple wood product enterprises could utilize small diameter logs for value-added products and biomass utilization.

The SFI audit team noted that DNR continues to effectively implement activities on the ground and has very good documentation of those activities. It was also noted that DNR staff are very knowledgeable of forest management operations, and the auditors continue to be impressed with DNR's vision for landscape planning and willingness to cooperate and collaborate with other stakeholders in implementing management strategies to improve habitat.

Forest Stewardship Council (FSC)

FY 2009 FSC Special Audit

The 2009 special audit was conducted by an independent-third party auditing firm, and was held in the South Puget HCP Planning Unit in December 2008. This audit focused on addressing six corrective action requests from the initial Forest Stewardship Council (FSC) audit, June 2007.

The report noted that DNR put forth a substantial amount of evidence for each of the six corrective action requests issued during the initial audit. For each corrective action, sufficient evidence was produced to clear the requirement. The Department was complimented on the quality and extent of evidence provided to the auditor. The corrective action requests that were cleared were related to:

- 1) completing the draft EIS of the Forest Land Plan for the South Puget HCP Planning Unit, and ensuring that all elements are available;
- 2) preparing a plan summary for the management plan;
- 3) implementing a systematic process for social impact assessment;
- 4) giving more attention to maximization of potential stocking and growth within regeneration cuts;
- 5) moving towards smaller average regeneration harvest block size as per the Pacific Coast Regional FSC Standard; and
- 6) being more inclusive within the DNR SEPA Guidance Handbook to align with the Glossary for the Pacific Coast Region definitions of “rare species” and “rare plant communities.”

One corrective action request was issued related to ensuring that invoices for FSC timber include the product group (FSC Pure), and the certificate number was issued during this FY 2009 audit. It is the opinion of the auditor that DNR continues to meet the requirements of the FSC forest management standard for the Pacific Coast of the USA. All six of the outstanding minor corrective action requests have been addressed and closed.

Conservation of Old Trees and Old-growth Forest

Westside

A new secondary old-growth forest screening protocol was implemented in October 2009, for Westside stands, to supplement the Weighted Old-growth Habitat Index (Index). The screening method was developed by Dr. Robert Van Pelt to respond to a large number of “false-positive” old-growth identifications (that is, stands that were identified by the Index as potential old growth, requiring a field assessment and report, which turned out not to be old growth). Such false-positive identifications require a significant amount of region staff time to assess, and Dr. Van Pelt was contracted to investigate approaches to refine the Index screening. The resulting screening tool analyzes candidate forest stands for:

- 1) large tree component,
- 2) diameter diversity component,

- 3) downed wood component,
- 4) re-examination of Diameter Diversity score, and
- 5) ratio of shade tolerant to shade-intolerant understory tree species.

All but the last step in the procedure has been implemented (the fourth step will be implemented pending funding to recalibrate the Index, after adjustments in the screening have been made). The new protocol has been very useful on high-productivity stands that have trees that are large but not old, and is to be used with caution on low-productivity stands, where trees may be old, but are not always large.

Eastside

A legacy tree procedure was developed, specifying a selection process for legacy trees that uses crown form and bark characteristics, as described in *Identifying Old Trees and Forests in Eastern Washington* Van Pelt, 2008. Such an approach will ensure that the oldest trees, which are quite rare on the landscape, will be retained. This procedure, called Retention and Perpetuation of Legacy Trees, Snags and Downed Wood (eastside), has been through a 'Determination of Non-significance' SEPA process with a 30-day comment period. Comments have been received and incorporated, and the latest procedure draft is currently waiting for a final DNR Executive Management review for consideration of adoption.

