Table 1. Summary of Occupied Areas, PCEs and Management Activities Affecting Them, and CHART Ratings ofConservation Value for Watersheds Occupied by Oregon Coast Coho Salmon

Subbasin	Watershed	HUC5 Code	Spawning/ Rearing PCEs (mi)	Rearing/ Migration PCEs (mi)	Presence/ Migration Only PCEs (mi)*	Key Management Activities** and Issues	CHART Rating of HUC5 Conservation Value	CHART Rating of Corridor Conservation Value*
NECANICUM	Necanicum River	1710020101	60.6	26.3		F, G, U - Loss of large woody debris (LWD) and forested land cover, impaired riparian vegetation, loss of habitat access (due to inadequate culverts), diking and floodplain removal, draining and filling of estuarine wetlands, low instream flows associated with municipal water withdrawals, sedimentation (mostly due to landslides associated with roadbuilding and forestry), and urban-related pollution. (Snyder <i>et al.</i> 2002)	Medium	
NEHALEM	Upper Nehalem River	1710020201	155.0	41.7		F, U - Loss of LWD and forest land cover, sedimentation (mostly related to forestry), impaired riparian vegetation, and elevated stream temperatures. (Johnson and Maser 1999)	High	
NEHALEM	Middle Nehalem River	1710020202	124.0	38.0		F, G - Loss of LWD and forest land cover, sedimentation (mostly related to forestry and roadbuilding), impaired riparian vegetation, and elevated stream temperatures. (Johnson and Maser 1999)	High	High
NEHALEM	Lower Nehalem River	1710020203	103.7	38.1	0.4	A, F - Loss of LWD and forest land cover, sedimentation (related to forestry and roadbuilding), stream channel modification (mostly for erosion control), and elevated stream temperatures. (Johnson and Maser 1999)	High	High
NEHALEM	Salmonberry River	1710020204	4.8	11.0		F - Sedimentation (related to forestry and roadbuilding) and loss of LWD and forest land cover. (Johnson and Maser 1999)	Low	
NEHALEM	North Fork Of Nehalem River	1710020205	53.7	25.9		A, F - Loss of LWD and forest land cover, impaired riparian vegetation, stream channel modification (mostly related to erosion control), ongoing water withdrawals (for municipal water supplies), and elevated stream temperatures (Johnson and Maser 1999)	High	
NEHALEM	Lower Nehalem River/Cook Creek	1710020206	45.0	31.5	4.2	A, F, U - Loss of LWD and forest land cover, impaired riparian vegetation (related to urbanization and agriculture), and sedimentation (related to forestry and roadbuilding) (Johnson and Maser 1999)	High	High

Subbasin WILSON/	Watershed Little	HUC5 Code	Spawning/ Rearing PCEs (mi)	Rearing/ Migration PCEs (mi)	Presence/ Migration Only PCEs (mi)*	Key Management Activities** and Issues A, F, U - Loss of LWD and forested land cover, sedimentation	CHART Rating of HUC5 Conservation Value	CHART Rating of Corridor Conservation Value*
TRASK/ NESTUCCA	Nestucca River	1710020301	28.7	9.5		(mostly due to landslides associated with roadbuilding), and altered nutrient cycling related to changes to riparian areas (USDA Forest Service 1998a)	Medium	
WILSON/ TRASK/ NESTUCCA	Nestucca River	1710020302	130.5	42.1	3.2	A, F - Loss of LWD and forested land cover, sedimentation (mostly due to landslides associated with roadbuilding and forestry), lowland channel entrenchment mostly associated with agriculture), and elevated stream temperatures (due to riparian vegetation removal for forestry, roadbuilding, and agriculture) (USDA Forest Service 1994a; Barczak 1998)	High	
WILSON/ TRASK/ NESTUCCA	Tillamook River	1710020303	34.6	21.6		F, G - Loss of LWD and forest land cover, elevated stream temperatures, sedimentation (related to forestry, roadbuilding, and grazing), agriculture-related pollution, floodplain diking and removal, wetland draining and filling, and modification or removal of estuarine habitat (Strittholt and Frost 1995; Tillamook Bay National Estuary Project 1998; Tillamook Bay National Estuary Project 1999)	High	
WILSON/ TRASK/ NESTUCCA	Trask River	1710020304	75.1	42.0		A, F, G, U - Loss of LWD and riparian vegetation, sedimentation (mostly due to erosion related to roadbuilding), stream flow modification (mostly due to forestry), agriculture- and urban-related pollution, diking and removal of floodplains, and low instream flows associated with municipal and agricultural water withdrawals (Follansbee <i>et al.</i> 1998a; Tillamook Bay National Estuary Project 1998; Hawksworth <i>et al.</i> 2003)	High	
WILSON/ TRASK/ NESTUCCA	Wilson River	1710020305	70.3	36.5		F, G, U - Wetland draining, diking, and filling (related to grazing and urban development), loss of LWD and forest land cover, elevated stream temperatures, and fish passage barriers (mainly inadequate culverts and tidegates) (Tillamook Bay National Estuary Project 1998; Tillamook Bay National Estuary Project 1999; Sullivan <i>et al.</i> 2001)	High	

Subbasin	Watershed	HUC5 Code	Spawning/ Rearing PCEs (mi)	Rearing/ Migration PCEs (mi)	Presence/ Migration Only PCEs (mi)*	Key Management Activities** and Issues	CHART Rating of HUC5 Conservation Value	CHART Rating of Corridor Conservation Value*
WILSON/ TRASK/ NESTUCCA	Kilchis River	1710020306	29.5	13.5		F, G - Loss of LWD and forest land cover, impaired riparian vegetation (due to forestry and grazing), sedimentation (mostly due to landslides related to forestry and roadbuilding), wetland diking, draining, and filling, stream channelization and entrenchment, and altered steam substrate composition (Follansbee <i>et al.</i> 1998b; Tillamook Bay National Estuary Project 1998; Tillamook Bay National Estuary Project 1999)	High	
WILSON/ TRASK/ NESTUCCA	Miami River	1710020307	19.6	6.3		A, F, G, U - Loss of LWD and forest land cover, impaired riparian vegetation (due to grazing, agriculture, and development), filling, diking, and draining of wetlands, fish passage barriers (mostly due to inadequate culverts), and stream channelization and entrenchment (Tillamook Bay National Estuary Project 1998; Tillamook Bay National Estuary Project 1999; Snyder <i>et al.</i> 2001)	High	
WILSON/ TRASK/ NESTUCCA	Tillamook Bay	1710020308	4.4	21.8		A, F, G, R, U - Wetland diking, filling, and draining (related to grazing and agriculture), sedimentation (related to forestry, grazing, agriculture, and urbanization), estuary dredging (to support ocean traffic), loss of LWD and forest land cover, and stream channelization (Tillamook Bay National Estuary Project 1998; Tillamook Bay National Estuary Project 1999)	High	High
WILSON/ TRASK/ NESTUCCA	Spring Creek/Sand Lake/Neskow in Creek Frontal	1710020309	32.2	12.2		A, F - Loss of LWD and forested land cover, clearing of riparian areas for agricultural and residential use, and sedimentation (mostly due to landslides associated with roadbuilding) (Barczak 1998; SRI/SHAPIRO/AGCO 1998; Boateng & Associates <i>et al.</i> 1999; Follansbee <i>et al.</i> 1999)	Medium	
SILETZ/ YAQUINA	Upper Yaquina River	1710020401	60.5	24.5		A, F, G, U - Loss of LWD and forested land cover, diking and draining of wetlands (mostly for urban development, agriculture, and grazing), loss of riparian structure, floodplain removal, and sedimentation (Jones and Moore 2000)	High	
SILETZ/ YAQUINA	Big Elk Creek	1710020402	59.6	24.7		F, G - Loss of LWD and forest land cover, impaired riparian vegetation (related to grazing and forestry), elevated stream temperatures, floodplain removal, and sedimentation (mostly due to landslides related to forestry and erosion related to forestry and grazing) (USDA Forest Service 1995a; Jones and Moore 2000)	Medium	

Subbasin	Watershed	HUC5 Code	Spawning/ Rearing PCEs (mi)	Rearing/ Migration PCEs (mi)	Presence/ Migration Only PCEs (mi)*	Key Management Activities** and Issues	CHART Rating of HUC5 Conservation Value	CHART Rating of Corridor Conservation Value*
SILETZ/ YAQUINA	Lower Yaquina River	1710020403	34.6	57.6		A, F, G, R, U - Loss of LWD and forested land cover, dredging and urbanization of lower estuary, and diking and draining of wetlands (mostly for urban development, agriculture, and grazing) (Brophy 1999; Jones and Moore 2000; Garono and Brophy 2001)	High	High
SILETZ/ YAQUINA	Middle Siletz River	1710020405	31.9	15.9		F, G - Sedimentation (mostly due to landslides related to forestry and roadbuilding), modified hydrology (increased peak flows related to forestry and roadbuilding), loss of LWD and forest land cover, and impaired riparian areas (Garono and Brophy 2001)	Medium	
SILETZ/ YAQUINA	Rock Creek/Siletz River	1710020406	26.0	5.3		F, G, S - Loss of LWD and forest land cover, sedimentation (from landslides related to quarries as well as roadbuilding- and grazing-related erosion), and channel entrenchment (possibly related to changes in hydrology related to forestry) (Garono and Brophy 1999)	Medium	
SILETZ/ YAQUINA	Lower Siletz River	1710020407	107.5	69.1		F, G, U - Sedimentation (mostly due to landslides related to forestry and roadbuilding), modified hydrology (increased peak flows related to forestry and roadbuilding), loss of LWD and forest land cover, and impaired riparian areas (USDA Forest Service and USDI 1996; Garono and Brophy 2001)	High	High
SILETZ/ YAQUINA	Salmon River/Siletz/ Yaquina Bay	1710020408	47.6	8.7		A, F - Loss of LWD and forest land cover, impaired riparian function, and sedimentation (mostly due to runoff from roads and landslides associated with forestry and roadbuilding) (Boateng & Associates <i>et al.</i> 1999)	Medium	
SILETZ/ YAQUINA	Devils Lake/Moolac k Frontal	1710020409	28.5	10.4		F, G, U - Sedimentation (mostly due to landslides related to forestry and roadbuilding), modified hydrology (increased peak flows related to forestry and roadbuilding), loss of LWD and forest land cover, impaired riparian areas, urbanization- and forestry related pollution, loss of habitat access due to inadequate culverts and dams, and channel entrenchment (DEQ 2003d; DEQ 2003c; DEQ 2003b; DEQ 2003a; Trask and Higley 2003)	Medium	
ALSEA	Upper Alsea River	1710020501	45.7	12.7		F, S - Loss of LWD and forest cover, degraded riparian vegetation, sedimentation (mostly related to roadbuilding, also related to quarries), and altered hydrology (changes to peak flows related to roadbuilding and forestry) (USDI 1995d; USDI 1995f)	Medium	

Subbasin	Watershed	HUC5 Code	Spawning/ Rearing PCEs (mi)	Rearing/ Migration PCEs (mi)	Presence/ Migration Only PCEs (mi)*	Key Management Activities** and Issues	CHART Rating of HUC5 Conservation Value	CHART Rating of Corridor Conservation Value*
ALSEA	Five Rivers/Lobste r Creek	1710020502	101.3	22.3		F, S - Sedimentation (mostly due to landslides related to forestry and roadbuilding), loss of LWD and forest cover, impaired fish passage (due to inadequate road crossings), and elevated stream temperatures (related to loss of riparian vegetation) (USDI and USDA Forest Service 1997)	High	
ALSEA	Drift Creek	1710020503	47.2	16.9		F, S - Sedimentation (mostly due to landslides related to forestry and roadbuilding), loss of LWD and forest cover, and disturbance of riparian areas (USDA Forest Service and USDI 1997a)	High	
ALSEA	Lower Alsea River	1710020504	85.1	51.9		A, F, G, U - Loss of LWD and forest land cover, over- allocation of surface water (for irrigation and municipal uses), diking and filling of estuarine wetlands, loss of appropriate channel substrates (associated with modified hydrology related to roadbuilding and forestry), and impaired riparian vegetation (mostly due to modification associated with roadbuilding, forestry, agriculture/grazing, and residential development) (USDA Forest Service <i>et</i> \ <i>al.</i> 1999)	High	High
ALSEA	Beaver Creek/Waldp ort Bay	1710020505	25.4	16.9		A, F, U - Loss of LWD and forest land cover, stream channelization and entrenchment (generally due to agricultural use), impaired riparian vegetation, draining and degradation of wetlands, and modified estuary function (related to urbanization) (USDA Forest Service 2001a)	High	
ALSEA	Yachats River	1710020506	43.5	3.7		F, G, U - Loss of LWD, degraded riparian vegetation (related to forestry, roadbuilding, grazing, and residential development), over-allocated water use rights, and stream channelization and entrenchment (related to grazing and development) (USDA Forest Service 1997c)	Medium	
ALSEA	Cummins Creek/ Tenmile Creek/Mercer Lake Frontal	1710020507	64.4	12.3		F - Loss of LWD, sedimentation (related to forestry and roadbuilding), loss of habitat access due to inadequate culverts, and degraded riparian areas (USDA Forest Service 1995b; Andrus <i>et al.</i> 1996)	Medium	
ALSEA	Big Creek/Vingie Creek	1710020508	7.7	1.5		F - Loss of LWD, degraded riparian vegetation (related to forestry and roadbuilding), and loss of habitat access due to inadequate culverts (USDA Forest Service 1997c)	Low	

					Presence/		CHART	CHART
Subbasin	Watarshad	HUC5 Code	Spawning/	Rearing/ Migration	Migration	Koy Managamont Activities** and Issues	Rating of	Rating of Corridor
Subbasiii	water sneu	noes coue	PCFs (mi)	PCFs (mi)	Only PCEs	Key Management Activities ** and issues	Conservation	Conservation
					(mi)*		Value	Value*
SIUSLAW	Upper Siuslaw River	1710020601	123.8	78.4	1.6	A, F - Loss of LWD and forest cover, elevated stream temperature, impaired riparian vegetation, and sedimentation (mostly due to landslides related to forestry and roadbuilding, also due to agriculture) (USDI 1995e; Ecotrust and Siuslaw Watershed Council 2002)	High	High
SIUSLAW	Wolf Creek	1710020602	40.1	17.0	0.5	F - Loss of LWD and forest cover and sedimentation (mostly due to landslides related to forestry and roadbuilding) (USDI 1995e; Ecotrust and Siuslaw Watershed Council 2002)	Medium	
SIUSLAW	Wildcat Creek	1710020603	47.6	4.8		F - Loss of LWD and forest cover and sedimentation (mostly due to landslides related to forestry and roadbuilding) (USDI 1995e; Ecotrust and Siuslaw Watershed Council 2002)	Medium	
SIUSLAW	Lake Creek	1710020604	67.4	30.3	2.1	A, F, G - Loss of LWD and forest cove, impaired riparian vegetation (due to forestry, grazing and agriculture), fish passage barriers (due to inadequate road crossings), and sedimentation (mostly due to landslides related to forestry) (USDI 1995e; USDI 1995b; Ecotrust and Siuslaw Watershed Council 2002)	High	High
SIUSLAW	Deadwood Creek	1710020605	65.4			F, G - Loss of LWD and forest cover, impaired riparian vegetation (due to forestry and grazing), elevated stream temperatures, and sedimentation (mostly due to landslides related to forestry and roadbuilding) (USDI 1995e; USDA Forest Service 1996; Ecotrust and Siuslaw Watershed Council 2002)	High	
SIUSLAW	Indian Creek/Lake Creek	1710020606	59.5			A, F - Loss of LWD and forest cover, impaired riparian vegetation (due to forestry and agriculture), elevated stream temperatures, and sedimentation (mostly due to landslides related to forestry and roadbuilding) (USDI 1995e; USDA Forest Service 1996; Ecotrust and Siuslaw Watershed Council 2002)	High	
SIUSLAW	North Fork Siuslaw River	1710020607	61.8	26.4		F, G, U - Loss of LWD and forest cover (related to forestry and land clearing for grazing and homebuilding), loss of spawning substrate (related to modified hydrology, possibly related to forestry), channel entrenchment (related to grazing activities), altered riparian vegetation, and sedimentation (mostly due to landslides related to forestry and roadbuilding) (USDA Forest Service 1994b; USDI 1995e; Ecotrust and Siuslaw Watershed Council 2002)	High	
SIUSLAW	Lower Siuslaw River	1710020608	78.2	69.2		F, G, U - Diking and levee construction on estuarine wetlands, restricted estuarine water and fish movement (due to tide gates), sedimentation (mostly due to landslides related to forestry and roadbuilding), impaired riparian vegetation (related to forestry and grazing), and loss of LWD and forest land cover (USDI 1995e; USDA Forest Service 1998b; Ecotrust and Siuslaw Watershed Council 2002)	High	High

Subbasin	Watershed	HUC5 Code	Spawning/ Rearing PCEs (mi)	Rearing/ Migration PCEs (mi)	Presence/ Migration Only PCEs (mi)*	Key Management Activities** and Issues	CHART Rating of HUC5 Conservation Value	CHART Rating of Corridor Conservation Value*
SILTCOOS	Waohink River/ Siltcoos River/ Tahkenitch Lake Frontal	1710020701	50.6	87.0		F, G, U - Channelization, diking, and entrenchment of stream channels (mostly related to grazing), impaired riparian vegetation (due to grazing, forestry, and urbanization), sedimentation (due to forestry- and roadbuilding-related landslides and grazing-related erosion), modification of lake water levels and stream flows (related to urbanization and industrial water use), and impaired water quality (mostly due to algal blooms and pollution related to urbanization) (USDA Forest Service 1999a)	High	
NORTH UMPQUA	Boulder Creek	1710030106	0.9			F - Loss of LWD and forested land cover, sedimentation (mostly related to roadbuilding and landslides), increased peak flows associated with forestry, and loss of habitat access due to inadequate culverts (Stillwater Sciences Inc. 1998; USDA Forest Service 2001b; USDI 2001a)	Low	
NORTH UMPQUA	Middle North Umpqua	1710030107	39.7			F, H - Loss of LWD and forested land cover, removal of riparian vegetation, sedimentation (mostly due to landslides related to roadbuilding and forestry), and increased peak stream flows and stream temperatures (Stillwater Sciences Inc. 1998; USDA Forest Service 1999b; USDA Forest Service 2000)	Medium	Medium
NORTH UMPQUA	Steamboat Creek	1710030108	0.7			F - Loss of LWD and forested land cover, removal of riparian vegetation, sedimentation (mostly due to landslides related to roadbuilding and forestry), and increased peak stream flows and stream temperatures (Stillwater Sciences Inc. 1998; USDA Forest Service 1999b; USDA Forest Service 2000)	Low	
NORTH UMPQUA	Canton Creek	1710030109	1.3			F - Loss of LWD and forested land cover, removal of riparian vegetation, sedimentation (mostly due to landslides related to roadbuilding and forestry), and increased peak stream flows and stream temperatures (Stillwater Sciences Inc. 1998; USDA Forest Service 1999b; USDA Forest Service 2000)	Low	
NORTH UMPQUA	Rock Creek/North Umpqua River	1710030110	21.8	1.5		F - Loss of LWD and forested land cover, sedimentation (associated with roadbuilding and forestry-related landslides), loss of habitat access due to inadequate culverts, and stream flow modification related to roadbuilding (USDI 1996e; Stillwater Sciences Inc. 1998)	Medium	

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NORTH UMPQUA	Little River	1710030111	35.0	7.1		F - Loss of LWD and forested land cover, sedimentation (due to accelerated erosion due to forestry and roadbuilding), impaired riparian vegetation, elevated stream temperatures, and elevated peak flows (USDA Forest Service and USDI 1995)	Medium	
NORTH UMPQUA	Lower North Umpqua River	1710030112	33.9	35.1		A, F, G, U - Loss of LWD and forested land cover, impaired riparian vegetation, loss of habitat access due to dams and inadequate culverts, stream channelization and riprapping, wetland draining and filling (for agriculture, grazing, and urbanization), sedimentation, and pollution associated with agriculture/grazing and urbanization (Geyer 2003b)	High	High
SOUTH UMPQUA	Upper South Umpqua River	1710030201	2.3	0.0		F - Loss of LWD, sedimentation, and changes to stream channel morphology and hydrology (Dose and Roper 1994; USDA Forest Service 1995c)	Low	
SOUTH UMPQUA	Jackson Creek	1710030202	9.6	11.4		F, G - Loss of LWD and forested land cover, sedimentation, floodplain removal (due to roadbuilding), stream channelization and riprapping, elevated peak flows and stream temperatures, impaired riparian vegetation (related to grazing and forestry), and loss of habitat access due to inadequate culverts (USDA Forest Service 1995c; Geyer 2003g)	Medium	
SOUTH UMPQUA	Middle South Umpqua River	1710030203	13.0	19.7		F - Sedimentation (related to erosion due to forestry), forestry- related pollution (associated with fertilizer or pesticide use), loss of habitat access (due to inadequate culverts), impaired riparian vegetation, and elevated stream temperature, and loss of LWD (DEQ 2003f; Geyer 2003g)	Medium	Medium
SOUTH UMPQUA	Elk Creek/South Umpqua	1710030204	24.1			F, G - Loss of habitat access (due to inadequate culverts), impaired riparian vegetation, and elevated stream temperature (DEQ 2003e; Geyer 2003g)	Medium	
SOUTH UMPQUA	South Umpqua River	1710030205	64.7	28.2		A, F, G, I, M - Loss of LWD and forest land cover, sedimentation (related to forestry, roadbuilding, and mining), impaired riparian vegetation (related to forestry, roadbuilding, agriculture, and grazing), wetland diking and damming, loss of habitat access due to inadequate culverts, Walker Dam, and Oshea Creek Dam, mining-related pollution, and low instream flows associated with irrigation withdrawals (USDI 1995a; USDI 1996c; USDI 1998a; Geyer 2003f)	Medium	Medium

Subbasin	Watershed	HUC5 Code	Spawning/ Rearing PCEs (mi)	Rearing/ Migration PCEs (mi)	Presence/ Migration Only PCEs (mi)*	Key Management Activities** and Issues	CHART Rating of HUC5 Conservation Value	CHART Rating of Corridor Conservation Value*
SOUTH UMPQUA	Middle Cow Creek	1710030207	66.1	24.7	2.6	A, F, U - Loss of LWD and forest land cover, elevated stream temperatures related to removal of riparian vegetation (due to forestry and agriculture), sedimentation (mostly due to roadbuilding and forestry), wetland diking, draining, and filling (to support agriculture and urbanization), and fish passage barriers (mostly due to improper culverts) (USDI 1997b; USDI 1999b; Kincaid and Umpqua Basin Watershed Council 2002)	High	
SOUTH UMPQUA	West Fork Cow Creek	1710030208	31.3			F - Loss of LWD and forest land cover, increased stream temperature related to impaired riparian vegetation, and sedimentation (related to forestry and roadbuilding) (USDI 1997f; Geyer 2003h)	High	
SOUTH UMPQUA	Lower Cow Creek	1710030209	46.1	0.3	26.6	F, G - Loss of LWD and forested land cover, sedimentation (related to roadbuilding and forestry), elevated stream temperatures, loss of habitat access due to inadequate culverts, and increased peak flows (USDI 1997b)	Medium	High
SOUTH UMPQUA	Middle South Umpqua River	1710030210	42.4	0.0	21.8	A, F, G, S - Loss of LWD and forested land cover, impaired riparian vegetation (associated with forestry, agriculture, and grazing), loss of habitat access due to inadequate culverts, stream channel modification and sedimentation related to gravel mining and agriculture, stream channel downcutting due to grazing, and wetland diking, draining, and filling (USDI 1997b; USDI 1999c; Geyer 2003d)	Medium	High
SOUTH UMPQUA	Myrtle Creek	1710030211	87.5	1.8		A, F, G, I, U - Loss of LWD and forested land cover, wetland filling, diking, and draining, loss of habitat access due to inadequate culverts and irrigation dams, channelization and riprapping, sedimentation (related to roadbuilding and forestry), urban-related pollution, and low instream flows associated with irrigation and municipal use withdrawals (USDI 1997d; Geyer 2003e)	High	
SOUTH UMPQUA	Ollala Creek/Lookin gglass	1710030212	55.2	21.6		F, G, I - Loss of LWD and forested land cover, sedimentation associated with forestry and roadbuilding, low instream flows associated with irrigation withdrawals, channel substrate erosion (due to increased peak flows associated with forestry and roadbuilding), stream channel entrenchment (mostly associated with grazing), loss of habitat access due to Berry Creek Dam, inadequate culverts, and irrigation dams, and impaired riparian vegetation (USDI 1998b; DeVore <i>et al.</i> 2003)	Medium	

Subbasin	Watershed	HUC5 Code	Spawning/ Rearing PCEs (mi)	Rearing/ Migration PCEs (mi)	Presence/ Migration Only PCEs (mi)*	Key Management Activities** and Issues	CHART Rating of HUC5 Conservation Value	CHART Rating of Corridor Conservation Value*
SOUTH UMPQUA	Lower South Umpqua River	1710030213	60.5	1.7	24.9	A, F, G, U - Loss of LWD and forested land cover, sedimentation associated with forestry and roadbuilding, low instream flows associated with irrigation withdrawals, channel substrate erosion (due to increased peak flows associated with forestry, urbanization, and roadbuilding), stream channel entrenchment (mostly associated with grazing), loss of habitat access due to inadequate culverts and irrigation dams, impaired riparian vegetation, riprapping and channelization, agriculture- and urban-related pollution, diking and floodplain removal, and wetland filling and draining (USDI 2000b; Geyer 2003c)	Medium	High
UMPQUA	Upper Umpqua River	1710030301	108.2	0.0	57.4	A, F, G - Loss of LWD and forest land cover, sedimentation (related to forestry and erosion from grazing and agriculture), stream channelization and entrenchment (due to grazing and agriculture), fish passage barriers (mostly due to improper culverts), and impaired riparian vegetation (USDI 1997e)	Medium	High
UMPQUA	Calapooya Creek	1710030302	114.3	14.0	20.1	F, G, I, M, U - Loss of LWD and forested land cover, sedimentation (related to landslides associated with pasture lands, forestry, and roadbuilding), low stream flows associated with irrigation and domestic withdrawals, loss of habitat access due to irrigation dams and inadequate culverts, wetland drain and filling, diking and removal of floodplains, and mining- and urbanization-related pollution (USDI 1999a; Geyer 2003a)	High	
UMPQUA	Elk Creek	1710030303	170.5	4.3	26.0	A, F, G, I - Loss of LWD and forested land cover, sedimentation (related to forestry and roadbuilding), low stream flows associated with water withdrawals, elevated stream temperatures associated with loss of riparian vegetation, increased peak flows associated with forestry, and loss of habitat access due to dams and inadequate culverts (USDI 1996a; USDI 1996d)	High	
UMPQUA	Middle Umpqua River	1710030304	50.1	5.7	18.2	F, G - Loss of LWD, elevated stream temperatures, stream channelization, degradation of riparian habitat, and sedimentation (potentially related to forestry, roadbuilding, and grazing) (USDI 1997e; NMFS 1998)	High	High

Subbasin	Watershed	HUC5 Code	Spawning/ Rearing PCEs (mi)	Rearing/ Migration PCEs (mi)	Presence/ Migration Only PCEs	Key Management Activities** and Issues	CHART Rating of HUC5 Conservation	CHART Rating of Corridor Conservation
					(mi)*		Value	Value*
UMPQUA	Lake Creek	1710030305	17.1	6.9	1.8	F - Sedimentation (due to landslides related to forestry and roadbuilding), impaired riparian vegetation, and loss of LWD and forested land cover (BioSystems <i>et al.</i> 2003)	Low	
UMPQUA	Upper Smith River	1710030306	175.0	1.5		F - Loss of LWD and forested land cover, sedimentation (related to landslides due to roadbuilding and forestry), high stream temperatures (related to impaired riparian vegetation), and loss of habitat access due to inadequate culverts (USDI 1995c)	High	
UMPQUA	Lower Smith River	1710030307	140.4	45.4	11.8	A, F, R - Loss of LWD and forest land cover, sedimentation (mostly due to landslides related to forestry and roadbuilding), modified stream flow patterns, diking and filling of wetlands, and river/estuary channel dredging (USDA Forest Service and USDI 1997b)	High	High
UMPQUA	Lower Umpqua River	1710030308	35.4	49.2		F, G, U - Loss of LWD and forest land cover, stream channelization and entrenchment (mostly associated with grazing), diking and filling of estuarine wetlands (related to grazing and urbanization), and sedimentation (related to landslides related to forestry and roadbuilding) (USDA Forest Service 1997a; BioSystems <i>et al.</i> 2003)	High	High
COOS	South Fork Coos	1710030401	83.5	33.7		A, F, G - Sedimentation (due to agricultural/grazing-related erosion and landslides related to forestry and roadbuilding), diking and draining of wetlands for agriculture/grazing, loss of LWD and forest land cover, and stream channelization and entrenchment (USDI 2001b)	High	
COOS	Millicoma River	1710030402	78.3	20.3		F - Loss of LWD and forested land cover, sedimentation (related to roadbuilding), and elevated stream temperatures (BioSystems <i>et al.</i> 2003)	High	
COOS	Lakeside Frontal	1710030403	38.1	41.7		F, G, U - Loss of LWD and forested land cover, Sedimentation (related to forestry, roadbuilding, and grazing), stream channelization (for grazing and homebuilding), wetland draining and filling, floodplain removal, pollution associated with urbanization, and loss of habitat access due to inadequate culverts and dams (BioSystems <i>et al.</i> 2003; Tenmile Lakes Basin Partnership 2003)	High	
COOS	Coos Bay	1710030404	94.0	149.9	1.4	F, U - Loss of LWD and forested land cover, sedimentation (related to roadbuilding), loss of habitat access due to inadequate culverts, pollution and increased peak flows due to urbanization, stream channelization, and wetland filling and draining (Satre Associates PC <i>et al.</i> 2001; BioSystems <i>et al.</i> 2003)	High	High

			Spawning/	Rearing/	Presence/		CHART Rating of	CHART Rating of
Subbasin	Watershed	HUC5 Code	Rearing	Migration	Migration	Key Management Activities** and Issues	HUC5	Corridor
			PCEs (mi)	PCEs (mi)	Only PCEs		Conservation	Conservation
					(mi)*		Value	Value*
COQUILLE	Lower South Fork Coquille	1710030501	45.2	8.5		A, F, I, M - Loss of LWD and forest land cover, sedimentation (mostly due to landslides related to forestry and roadbuilding, but also to erosion and streambed disturbance from mining activities), and elevated stream temperatures (related to reduced riparian vegetation and water withdrawals related to agriculture) (USDA Forest Service 1995d; USDI 1996b)	Low	
COQUILLE	Middle Fork Coquille	1710030502	65.6	16.1		A, F - Sedimentation (related to roadbuilding and forestry), loss of LWD and forest land cover, elevated stream temperatures, and impaired riparian vegetation (due to agriculture and forestry) (USDI 1997a; USDI 1999d)	Medium	
COQUILLE	Middle Main Coquille	1710030503	40.6	36.3		A, F, G - Sedimentation (mostly related to forestry and roadbuilding), impaired riparian vegetation, draining of wetlands (for grazing and agriculture), loss of LWD and forest land cover, stream channelization and entrenchment, and fish passage barriers (mostly due to improper culverts) (USDI 1997c)	High	High
COQUILLE	East Fork Coquille	1710030504	32.7	11.2		A, F, G, I - Sedimentation (mostly due to landslides related to forestry and roadbuilding), impaired riparian vegetation (related to forestry, agriculture, and grazing), loss of LWD and forest land cover, lowered summer stream flows (due to irrigation withdrawals), and channel downcutting (related to removal of riparian vegetation) (USDI 2000a)	High	
COQUILLE	North Fork Coquille	1710030505	99.3	37.7		A, F, U - Sedimentation (mostly due to landslides related to forestry, also to roadbuilding), loss of LWD and forest land cover, modifications to stream flow volume and timing, water withdrawals (for the city of Myrtle Point), and elevated stream temperatures (USDI 2002)	High	High
COQUILLE	Lower Coquille	1710030506	61.0	90.4		A, F - Loss of LWD and forested land cover, elevated stream temperatures, sedimentation (due to forestry and roadbuilding), loss of habitat access (due to inadequate culverts, tide gates, and dams), diking and draining wetlands, floodplain and riparian area removal, and destruction of estuarine habitat (Hampel 1999)	High	High
SIXES	Sixes River	1710030603	32.9	25.5		A, F, G - Loss of LWD and forested land cover, sedimentation (related to landslides due to forestry and roadbuilding), loss of habitat access due to inadequate culverts, wetland filling and draining (mostly for agriculture and grazing), stream channelization, and high stream temperatures (USDA Forest Service 1997b; Maguire <i>et al.</i> 2001b)	Medium	

Subbasin	Watershed	HUC5 Code	Spawning/ Rearing PCEs (mi)	Rearing/ Migration PCEs (mi)	Presence/ Migration Only PCEs (mi)*	Key Management Activities** and Issues	CHART Rating of HUC5 Conservation Value	CHART Rating of Corridor Conservation Value*
SIXES	New River Frontal	1710030604	60.5	30.0		A, F, G, I, S - Loss of LWD and forest land cover, sedimentation (related to forestry, roadbuilding, and rock mining), impaired riparian vegetation (due to forestry, grazing, and agriculture), stream channelization and entrenchment (due to grazing and agriculture), water withdrawals (mostly related to agriculture and irrigation), and wetland diking and draining (Maguire <i>et al.</i> 2001a)	High	

* Some streams classified as "Presence/Migration Only PCEs" may also include rearing or spawning PCEs, but the GIS data are still undergoing review to confirm species use type.

** This list is not exhaustive. It is intended to highlight key management activities affecting PCEs in each watershed. Activities identified are based on the general categories described by Spence et al. (1996) and summarized previously in the "Special Management Considerations or Protection" section of this report. Coding is as follows: F= forestry, G= grazing, A= agriculture, C= channel modifications/diking, R= road building/maintenance, U= urbanization, S= sand and gravel mining, M= mineral mining, D= hydroelectric dams, I= irrigation impoundments and withdrawals, T= river, estuary, and ocean traffic, W= wetland loss/removal, B= beaver removal, X= exotic/invasive species introductions, H= forage fish/species harvest. Primary sources for this information were the CHART and reports cited in the References and Sources of Information.

Table 2. CHART Conclusions Regarding ESA Section 7 Leverage

The following table identifies those watersheds that met the following possible "low leverage" profile identified by NOAA Fisheries habitat biologists:

- less than 25 percent of the land area in federal ownership
- no hydropower dams, and
- no consultations likely to occur regarding instream work.

We chose these attributes because federal lands, dams and instream work all have a high likelihood of consultation, and activities undergoing consultation have a potential to significantly affect the physical and biological features of salmon and steelhead habitat. Where federal lands are involved any activity occurring there must undergo a section 7 consultation if it may affect the species or the designated critical habitat. Salmon and steelhead habitat can be significantly affected by many activities occurring on federal lands, including grazing, timber harvest, roadbuilding, and mining. Dams generally are either federally operated or federally permitted by the U.S. Army Corps of Engineers or by the Federal Energy Regulatory Commission, triggering section 7 consultation. Dam operation can significantly affect salmon and steelhead in many ways, including by impeding passage, inundating habitat and changing flow and temperature regimes. Instream work generally requires a permit from the Corps. Instream work can significantly affect salmon and steelhead habitat in a number of ways, including by reducing channel complexity, increasing flows, diminishing connectivity between the stream channel and floodplain, and increasing sediment. Other types of activities also impact salmon and steelhead habitat, but their potential leverage was not deemed as predictable as those used in the above low leverage profile.

In addition to watersheds matching this profile, the CHART also reviewed all watersheds identified as low conservation value, but not exceeding a \$91,556 economic threshold, to determine if they were low leverage and should be considered for exclusion. The basis for the threshold used is described in the agency's 4(b)(2) report (NMFS, 2007a), and the data used to query these parameters were the same as those reported in NOAA Fisheries' final economic analysis (NMFS, 2007b). The table below also includes the CHART's assessment as to whether the watershed was in fact likely to be "low leverage," and if so, the CHART's conclusion as to whether excluding a "low leverage" watershed would significantly impede the conservation of the ESU.

Five HUC5 watersheds within the range of the Oregon Coast coho salmon ESU met the criteria for possible low leverage. However, after discussions with the CHART during its final meeting in the Fall of 2007 and a subsequent discussion with the NOAA Fisheries' consultation biologists, it was concluded that none of the watersheds would be considered low leverage, especially in light of the substantial number type of past (and potential) consultations related to transportation systems and maintenance in each watershed.

		Conservation	Value Rating	T '1 1 4	Would	
Watershed Name	Watershed Code	Benefit of designating watershed	Benefit of designating connectivity corridor	be Low Leverage	Exclusion Significantly Impede Conservation?	Comments
Necanicum River	1710020101	Medium		No	na	CHART concluded that consultations were likely to yield significant leverage in this HUC5, noting that the Public Consultation Tracking System (PCTS)* contains numerous ESA consultations or conferences here since 1997 associated with the following activities: Fill; Road Construction/Maintenance; Pipeline Construction/Repair; Pollutant Discharge; Rip-rap; Waste Management; Culvert; Fish Passage/Trapping; Right-of-Way; Bridge Repair/Construction; Pilings; Stormwater Drainage; Erosion Control; Bank Stabilization; & Excavation/Mining. The CHART underscored this by noting that leverage associated with road construction and maintenance is evidenced by the fact that the Necanicum River flows through the cities of Seaside and Gearhart, Highway 26 parallels and crosses nearly the entire length of the Necanicum River, and Highway 101 crosses over Necanicum tributaries as well as several occupied independent streams in this HUC5.
Salmonberry River**	1710020204	Low		No	na	CHART concluded that consultations were likely to yield significant leverage in this HUC5, noting that the Lower Nehalem highway bridge is located at the mouth of the Salmonberry and the recent December 2007 floods caused extensive damage to it and the Port of Tillamook railroad line which runs the entire length of the Salmonberry River. Very recent discussions with the U.S. Army Corps of Engineers and NMFS biologists confirmed that there would be potentially significant leverage in this HUC5 as NMFS and the COE prepare to engage in consultation to address the flood damage and possible railroad bed/track re-alignment. Likely consultation-related activities include: Fill; Road Construction/Maintenance; Pipeline Construction/Repair; Rip-rap; Culvert;

		Conservation	Value Rating		Would	
Watershed Name	Watershed Code	Benefit of designating watershed	Benefit of designating connectivity corridor	Likely to be Low Leverage ?	Exclusion Significantly Impede Conservation?	Comments
						Bridge Repair/Construction; Erosion Control; & Bank Stabilization.
Middle South Umpqua River	1710030210	Medium	High	No	na	CHART concluded that consultations were likely to yield significant leverage in this HUC5, noting that the PCTS contains numerous ESA consultations or conferences here since 1997 associated with the following activities: Timber Sale - Thinning; Timber Harvest/Sales; Habitat Restoration/Improvement; Road Construction/Maintenance; Bridge Repair/Construction; Rip-rap; Bank Stabilization; Erosion Control; Culvert; Fill. Some were associated with tributaries. The CHART underscored this by noting that leverage associated with road construction and maintenance is evidenced by the fact that Interstate 5 and Highway 99 parallel and cross over the South Umpqua River as well as occupied reaches of smaller tributaries.
Lower South Umpqua River	1710030213	Medium	High	No	па	CHART concluded that consultations were likely to yield significant leverage in this HUC5, noting that the PCTS contains numerous ESA consultations or conferences here since 1999 associated with the following activities: Stormwater Drainage; Wetland Modification; Road Construction/Maintenance; Prescribed Burn; Rip-rap; Culvert; Pipeline Construction/Repair; and Cable installation/maintenance. The CHART underscored this by noting that leverage associated with road construction and maintenance is evidenced by the fact that the South Umpqua River flows through the city of Roseburg and Interstate 5 and Highway 99 parallel and cross over the South Umpqua River as well as occupied reaches of smaller tributaries.
Elk Creek	1710030303	High		No	na	CHART concluded that consultations were likely to yield significant leverage in this HUC5, noting that the PCTS contains numerous ESA consultations or conferences here since 1995 associated with the following activities: Timber Harvest/Sales; Timber Sale - Thinning; Timber Sale - Green; Road Use Permit; Road Construction/Maintenance; Trail and Campground Maintenance; Grazing; Culvert; Rip-rap; Erosion Control; Excavation/Mining; Fill; Bridge Repair/Construction; Bank Stabilization; and Fish Passage/Trapping. The CHART underscored this by noting that leverage associated with road construction and maintenance is evidenced by the fact that Elk Creek flows

		Conservation Value Rating			Would	
Watershed Name	Watershed Code	Benefit of designating watershed	Benefit of designating connectivity corridor	Likely to be Low Leverage ?	Exclusion Significantly Impede Conservation?	Comments
						through the city of Drain and it as well as numerous occupied tributaries are paralleled or crossed by Interstate 5 and Highways 38 and 99.

* PCTS queries were made in December 2007 at: http://seahorse.nmfs.noaa.gov/pcts/

** This watershed was subjected to a lower \$1,000 threshold (described in the 4(b)(2) report, NMFS 2007a) because it was under consideration as a potentially "very low" conservation value HUC5. However, for the reasons given above, it was determined to actually have significant potential for leverage.

Table 3. Final CHART Conclusions Regarding Areas Under Consideration for Exclusion from Critical Habitat

The CHART considered whether excluding from critical habitat designation particular areas with certain economic impacts would significantly impede conservation. The CHART considered these areas both alone or in combination with other eligible areas. In making this determination, the CHART considered such factors as the role the particular area plays in the conservation of the population(s), the uniqueness or importance to the population(s), any recovery planning emphasis on the area, and similar considerations. The CHART's final conclusions, summarized below for those watersheds considered eligible for exclusion due to economic impacts, were obtained via discussions with each CHART during meetings conducted in the Fall of 2007.

		Conservation Value Rating			
Watershed Name	Watershed Code	Benefit of designating watershed	Benefit of designating connectivity corridor*	Would Exclusion Significantly Impede Conservation?	Comments
Upper Alsea River	1710020501	М		Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that the NW Forest Plan identified a Tier 1 key watershed in this HUC5, ODFW has identified core areas for coho in this HUC5, and the presence of large and contiguous reaches of high intrinsic potential that comprise 50% of the occupied areas in this HUC5.
Cummins Creek/Tenmile Creek/Mercer Lake Frontal	1710020507	М		Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that the NW Forest Plan identified approximately half of this HUC5 as a Tier 1 key watershed and most of this HUC5 has been classified as an Aquatic Diversity Area by the Oregon Chapter of the American Fisheries Society. This area is also the focus of important habitat restoration work.

		Conservation Value Rating			
Watershed Name	Watershed Code	Benefit of designating watershed	Benefit of designating connectivity corridor*	Would Exclusion Significantly Impede Conservation?	Comments
Middle North Umpqua	1710030107	М	М	Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that the upper Umpqua River is ecologically unique and is the only Cascade drainage within the range of this ESU. The CHART also noted that this watershed contains important summer rearing (cold water) habitat for coho salmon, the NW Forest Plan identified three Tier 1 key watersheds in this HUC5, upper portions of it have been classified as Aquatic Diversity Areas by the Oregon Chapter of the American Fisheries Society . Also, the exclusion of adjacent low conservation watersheds increases the significance of excluding this particular HUC5.
Steamboat Creek	1710030108	L		No	Based on exclusion of entire watershed.
Canton Creek	1710030109	L		No	Based on exclusion of entire watershed.
Little River	1710030111	М		Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that the upper Umpqua River is ecologically unique and is the only Cascade drainage within the range of this ESU. The CHART also noted that this watershed contains the majority of tributary spawning habitat for the North Umpqua coho population and the exclusion of adjacent low conservation watersheds increases the significance of excluding this particular HUC5.
Upper South Umpqua River	1710030201	L		No	Based on exclusion of entire watershed.

		Conservation Value Rating			
Watershed Name	Watershed Code	Benefit of designating watershed	Benefit of designating connectivity corridor*	Would Exclusion Significantly Impede Conservation?	Comments
Jackson Creek	1710030202	М		Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that the upper Umpqua River is ecologically unique and is the only Cascade drainage within the range of this ESU. Given its location this HUC5 is important for maintaining diversity of the South Umpqua population (historically a productive population) and the Umpqua major population group as a whole. The CHART also noted that this HUC5 is part of one of the largest Tier 1 key watersheds identified in the NW Forest Plan and that upper portions of it have been classified as Aquatic Diversity Areas by the Oregon Chapter of the American Fisheries Society . Also, the exclusion of an upstream low conservation watershed increases the significance of excluding this particular HUC5.
Middle South Umpqua River	1710030203	М	М	Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that the upper Umpqua River is ecologically unique and is the only Cascade drainage within the range of this ESU. Given its location this HUC5 is important for maintaining diversity of the South Umpqua population (historically a productive population) and the Umpqua major population group as a whole. The CHART also noted that this HUC5 is part of one of the largest Tier 1 key watersheds identified in the NW Forest Plan and that upper portions of it have been classified as Aquatic Diversity Areas by the Oregon Chapter of the American Fisheries Society . Also, the exclusion of an upstream low conservation watershed increases the significance of excluding this particular HUC5.

		Conservation Value Rating			
Watershed Name	Watershed Code	Benefit of designating watershed	Benefit of designating connectivity corridor*	Would Exclusion Significantly Impede Conservation?	Comments
Elk Creek/ South Umpqua	1710030204	М		Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that the upper Umpqua River is ecologically unique and is the only Cascade drainage within the range of this ESU. Given its location this HUC5 is important for maintaining diversity of the South Umpqua population (historically a productive population) and the Umpqua major population group as a whole. The CHART also noted that this HUC5 is part of one of the largest Tier 1 key watersheds identified in the NW Forest Plan and that the exclusion of an upstream low conservation watershed increases the significance of excluding this particular HUC5.
South Umpqua River	1710030205	М	М	Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that the upper Umpqua River is ecologically unique and is the only Cascade drainage within the range of this ESU. Given its location this HUC5 is important for maintaining diversity of the South Umpqua population (historically a productive population) and the Umpqua major population group as a whole. The CHART also noted that this HUC5 is part of one of the largest Tier 1 key watersheds identified in the NW Forest Plan and that the exclusion of an upstream low conservation watershed increases the significance of excluding this particular HUC5.
Ollala Creek/ Lookingglass	1710030212	М		Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that this HUC5 is important for maintaining diversity of the South Umpqua population (historically a productive population) and the Umpqua major population group as a whole. The CHART also noted that this HUC5 has large and contiguous reaches of high intrinsic potential and that the exclusion of an upstream low conservation watershed increases the significance of excluding this particular HUC5.

		Conservation Value Rating			
Watershed Name	Watershed Code	Benefit of designating watershed	Benefit of designating connectivity corridor*	Would Exclusion Significantly Impede Conservation?	Comments
Lower South Umpqua River	1710030213	М	Н	Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that this HUC5 is important for maintaining diversity of the South Umpqua population (historically a productive population) and the Umpqua major population group as a whole. The CHART also noted that this HUC5 has large and contiguous reaches of high intrinsic potential and that the exclusion of an upstream low conservation watershed increases the significance of excluding this particular HUC5.
Upper Umpqua River	1710030301	М	Н	Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that this HUC5 is important for maintaining diversity of the Umpqua major population group as a whole. The CHART also noted that this HUC5 contains important rearing habitat for three Umpqua populations (South, North and Middle Umpqua) and that the exclusion of upstream low conservation watersheds increases the significance of excluding this particular HUC5.
Lake Creek	1710030305	L		No	Based on exclusion of entire watershed.
Lower South Fork Coquille	1710030501	L		No	Based on exclusion of entire watershed.
Middle Fork Coquille	1710030502	М		Yes	CHART concluded that excluding this watershed would significantly impede conservation, noting that this HUC5 has a relatively high juvenile occupancy rate for the Coquille population, approximately 2/3 of the occupied reaches have been identified by ODFW as core areas for coho, and that the exclusion of an adjacent low conservation watershed increases the significance of excluding this particular HUC5.

* Blanks for the conservation value of connectivity corridors indicate that a watershed does not include a rearing and migration corridor serving occupied watersheds upstream (i.e., there are no occupied upstream watersheds).

Table 4. Summary of Comments and Changes to the Initial CHART Assessment for Oregon Coast Coho Salmon ESU

The following table summarizes the comments received on the initial CHART assessment and the changes made for specific watersheds. Key changes included: (1) Elevating the conservation value rating for five watersheds in the Umpqua River basin as a result of recent population identification and viability work by the Technical Recovery Team (TRT) (Lawson et al., 2007; Wainwright et al., 2007) that further subdivides this basin into four (versus two) independent populations; (2) changing the delineation of occupied habitat areas in several watersheds based on comments and field surveys by the U.S. Bureau of Land Management (BLM), Oregon Department of Fish and Wildlife (ODFW), and NOAA Fisheries staff indicating that the original coho distribution maps/data were in error; (3) removing Josephine and Jackson counties from the relevant critical habitat table in agency regulations because these counties overlap slightly with upland areas in watersheds occupied by Oregon Coast coho salmon but they do not contain stream reaches designated as critical habitat for this ESU; and (4) as a result of revised economic data for this ESU and our final 4(b)(2) assessment, we are no longer excluding habitat areas in three watersheds that were previously proposed for designation.

Subbasin	Watershed code	Watershed name	Summary of Comments and Changes
NEHALEM	1710020206	Lower Nehalem River/Cook Creek	 NOAA Fisheries GIS staff noted an error in the original GIS data for Neahkahnie Creek. Response: Added 1.3 miles (2.1 km) of occupied habitat areas in Neahkahnie Creek based on recent habitat access improvements confirmed by ODFW.
WILSON/ TRASK/ NESTUCCA	1710020302	Nestucca River	BLM comments noted coho distribution errors associated with the upper Nestucca River.Response: Added 4.2 miles (6.8 km) of occupied habitat areas in the upper Nestucca River (downstream of McGuire Dam) and Walker Creek, and removed 3 miles (4.8 km) of unoccupied stream reaches above a falls in Elk Creek based on comments from the BLM and feedback from ODFW.

Subbasin	Watershed code	Watershed name	Summary of Comments and Changes
SILETZ/YAQUINA	1710020409	Devils Lake/Moolack Frontal	Two commenters questioned the "medium" conservation- value rating assigned by the CHART to the habitat area for Devils Lake coho. These areas are within a larger Devils Lake/Moolack Frontal watershed. The commenters cited recent genetic data establishing that coho from Rock Creek/Devils Lake are genetically distinct from other populations in the ESU. The commenters believed that the coho in Devils Lake possess a unique and distinct genetic heritage warranting a "high" conservation value rating. Response: No changes made. The CHART considered these comments along with recent population identification work (Lawson et al., 2007) and genetic analyses by Johnson and Banks (2007). The team maintained that the Devils Lake/Moolack Frontal watershed (which contains Devils Lake) was still of medium conservation value, noting that Devil's Lake coho are one of ten small and dependent populations in this watershed and appear to most closely related to coho in the nearby Siletz River. The team acknowledged that Devils Lake was the most productive of these ten populations but that the overall watershed did not warrant a high conservation value relative to other adjacent watersheds with more extensive habitat areas and functionally independent populations (e.g., the Siletz River and Yaquina River watersheds). Regardless, Devils Lake and all other habitat areas in this watershed are designated as critical habitat for Oregon Coast coho salmon.
NORTH UMPQUA	1710030106	Boulder Creek	Habitat areas in this watershed (originally proposed for exclusion) are no longer eligible for exclusion from designation due to economic impacts.

Subbasin	Watershed code	Watershed name	Summary of Comments and Changes
			BLM comments noted coho distribution errors associated with four tributaries to Rock Creek.
NORTH UMPQUA	1710030110	Rock Creek/North Umpqua River	Response: Added 1.8 miles (2.9 km) of occupied habitat areas in Miller Creek, Woodstock Creek, Conley Creek and an unnamed creek near Kelly Creek based on comments from the BLM and feedback from ODFW.
SOUTH UMPQUA	1710030202	Jackson Creek	The CHART elevated this HUC5's conservation value from Low to Medium due to recent TRT population and viability analyses (Lawson et al. 2007, Wainwright et al. 2007) that now identify four functionally independent populations and related biological recovery criteria in the Umpqua River basin. HUC5 no longer excluded from designation.
SOUTH UMPQUA	1710030204	Elk Creek/South Umpqua	The CHART elevated this HUC5's conservation value from Low to Medium due to recent TRT population and viability analyses (Lawson et al. 2007, Wainwright et al. 2007) that now identify four functionally independent populations and related biological recovery criteria in the Umpqua River basin. HUC5 no longer excluded from designation.
SOUTH UMPQUA	1710030205	South Umpqua River	BLM comments noted coho distribution errors associated with two tributaries to the South Umpqua River. Response: Removed 2 miles (3.2 km) of unoccupied stream reaches in Lavadoure Creek and East Fork Poole Creek based on comments from the BLM and feedback from ODFW.

Subbasin	Watershed code	Watershed name	Summary of Comments and Changes
SOUTH UMPQUA	1710030207	Middle Cow Creek	The CHART elevated this HUC5's conservation value from Low to Medium due to recent TRT population and viability analyses (Lawson et al. 2007, Wainwright et al. 2007) that now identify four functionally independent populations and related biological recovery criteria in the Umpqua River basin.
SOUTH UMPQUA	1710030209	Lower Cow Creek	BLM comments noted coho distribution errors associated with a tributary to Cow Creek.Response: Removed 3 miles (4.8 km) of unoccupied stream reaches in Buck Creek based on comments from the BLM and feedback from ODFW.
SOUTH UMPQUA	1710030211	Myrtle Creek	The CHART elevated this HUC5's conservation value from Medium to High due to recent TRT population and viability analyses (Lawson et al. 2007, Wainwright et al. 2007) that now identify four functionally independent populations and related biological recovery criteria in the Umpqua River basin. HUC5 no longer excluded from designation.
UMPQUA	1710030301	Upper Umpqua River	BLM comments noted coho distribution errors associated with two tributaries to the upper Umpqua River. Response: Removed 2 miles (3.2 km) of unoccupied stream reaches in Bottle Creek and Porter Creek based on comments from the BLM and feedback from ODFW.

Subbasin	Watershed code	Watershed name	Summary of Comments and Changes
			BLM comments noted coho distribution errors associated with a tributary to Elk Creek.
UMPQUA	1710030303	Elk Creek	Response: Removed 1 mile (1.6 km) of unoccupied stream reaches in Brush Creek and Blue Hole Creek based on comments from the BLM and feedback from ODFW. Also, the CHART elevated this HUC5's conservation value from Medium to High due to recent TRT population and viability analyses (Lawson et al. 2007, Wainwright et al. 2007) that now identify four functionally independent populations and related biological recovery criteria in the Umpqua River basin. HUC5 no longer excluded from designation.
UMPQUA	1710030304	Middle Umpqua River	BLM comments noted coho distribution errors associated with a tributary to the Umpqua River.
			Response: Removed 1.5 miles (2.4 km) of unoccupied stream reaches in Mill Creek based on comments from the BLM and feedback from ODFW.
UMPQUA	1710030305	Lake Creek	BLM comments noted coho distribution errors associated with the area near Otter Creek Falls.
			Response: Removed 5.3 miles (8.5 km) of unoccupied stream reaches in Camp Creek based on comments from the BLM and feedback from ODFW.
COQUILLE	1710030504	East Fork Coquille	BLM comments noted coho distribution errors associated with a tributary to the East Fork Coquille River.
			Response: Removed 1.5 miles (2.4 km) of unoccupied stream reaches in Weekly Creek based on comments from the BLM and feedback from ODFW.