

## Appendix 36

### Number of KEFs by Biome

Table 1. The number of Key Ecological Functions performed by the biomes pertinent to Sub basin planning

Select	Key Ecological Functions	Eastside (Interior) Grasslands	Eastside (Interior) Mixed Conifer Forest	Eastside (Interior) Riparian-Wetlands	Herbaceous Wetlands	Montane Mixed Conifer Forest	Ponderosa Pine Forest and Woodlands	Grand Total
	1) Trophic relationships	152	207	245	190	170	193	1157
	1.1) heterotrophic consumer	152	208	246	191	169	193	1159
G	1.1.1) primary consumer (herbivore) (also see below under Herbivory)	84	115	131	77	98	103	608
	1.1.1.1) foliovore (leaf-eater)	18	12	19	27	13	11	100
	1.1.1.10) flower/bud/catkin feeder	9	12	15	2	10	11	59
	1.1.1.11) aquatic herbivore	14	7	15	29	6	6	77
	1.1.1.12) feeds in water on decomposing benthic substrate	4	4	4	5	3	4	24
	1.1.1.13) bark/cambium/bole feeder	1	5	5	4	4	4	23
	1.1.1.2) spermivore (seed-eater)	56	58	71	36	47	58	326
S	1.1.1.3) browser (leaf, stem eater)	5	9	9	6	9	8	46
S	1.1.1.4) grazer (grass, forb eater)	13	22	20	18	21	14	108
	1.1.1.5) frugivore (fruit-eater)	35	49	64	22	41	48	259
	1.1.1.6) sap feeder	2	9	11	1	9	9	41
	1.1.1.7) root feeders	2	3	3	2	3	2	15
	1.1.1.8) nectivore (nectar feeder)	1	3	4	3	2	3	16
S	1.1.1.9) fungivore (fungus feeder)	6	17	13	5	17	12	70
G	1.1.2) secondary consumer (primary predator or primary carnivore)	136	180	221	177	141	172	1027
	1.1.2.1) invertebrate eater	117	152	193	156	116	148	882
	1.1.2.1.1) terrestrial invertebrates	109	146	179	124	111	144	813
	1.1.2.1.2) aquatic macroinvertebrates	26	13	38	83	11	13	184
	1.1.2.1.3) freshwater or marine zooplankton	2	2	3	3	2	2	14

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	1.1.2.2) vertebrate eater	1	2	2	2	2	2	11
	1.1.2.2) vertebrate eater (consumer or predator of herbivorous vertebrates)	51	54	75	79	43	54	356
	1.1.2.2.1) piscivorous (fish eater)	18	21	35	50	17	21	162
	1.1.2.3) ovivorous (egg eater)	9	16	17	15	14	16	87
G	1.1.3) tertiary consumer (secondary predator or secondary carnivore)	7	7	7	6	7	7	41
	1.1.4) carrion feeder	14	18	21	17	15	17	102
	1.1.5) cannibalistic	2	4	4	4	3	3	20
	1.1.6) coprophagous (feeds on fecal material)	2	2	2		3	2	11
	1.1.7) feeds on human garbage/refuse	8	10	11	16	9	10	64
	1.1.7.1) aquatic (e.g. offal and bycatch of fishing boats)				3			3
	1.1.7.2) terrestrial (e.g. garbage cans, landfills)	8	10	11	16	9	10	64
G	1.2) prey relationships	109	140	171	123	115	132	790
	1.2.1) prey for secondary or tertiary consumer	2	3	3	1	2	2	13
	1.2.1) prey for secondary or tertiary consumer (primary or secondary predator)	107	137	168	122	113	130	777
G	2) aids in physical transfer of substances for nutrient cycling (C,N,P, etc.)	17	15	20	28	12	18	110
G	3) organismal relationships	126	183	217	153	150	174	1003
	3.1) controls or depresses insect population peaks	24	36	41	26	27	38	192
	3.1) potentially controls or depresses insect population outbreaks		3	3		3	2	11
	3.10) secondary cavity user	16	42	41	26	33	36	194
	3.11) primary burrow excavator (fossorial or underground burrows)	17	32	30	18	29	22	148
	3.11.1) creates large burrows (rabbit-sized or larger)	6	11	11	8	10	9	55

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	3.11.2) creates small burrows (less than rabbit-sized)	11	21	19	10	19	13	93
	3.12) uses burrows dug by other species (secondary burrow user)	25	32	37	22	25	27	168
	3.13) creates runways (possibly used by other species)	10	18	19	13	17	11	88
	3.14) uses runways created by other species)	13	23	22	16	20	19	113
	3.15) pirates food from other species	2	3	3	10	3	3	24
	3.16) interspecific hybridization	7	9	11	6	6	9	48
	3.2) controls terrestrial vertebrate populations (through predation or displacement)	17	24	27	22	21	21	132
	3.3) pollination vector	1	3	4	3	2	3	16
	3.4) transportation of viable seeds, spores, plants or animals	57	70	90	68	61	65	411
	3.4.1) disperses fungi	2	8	5	2	8	5	30
	3.4.2) disperses lichens		6	3	1	6	3	19
	3.4.4) disperses insects and other invertebrates	14	6	18	43	5	6	92
	3.4.5) disperses seeds/fruits (through ingestion or caching)	43	60	69	20	52	57	301
	3.4.6) disperses vascular plants	12	7	19	43	6	7	94
S	3.5) creates feeding, roosting, denning, or nesting opportunities for other organisms	2	8	7	4	8	6	35
	3.5.1) creates feeding opportunities (other than direct prey relations)	1	6	6	3	6	5	27
	3.5.1.1) creates sapwells in trees		2	2		2	2	8
	3.5.2) creates roosting, denning, or nesting opportunitieess	1	2	1	1	2	1	8

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S	3.6) primary creation of structures (possibly used by other organisms)	11	20	22	27	19	18	117
	3.6.1) aerial structures	11	16	17	15	15	15	89
	3.6.2) ground structures		5	2	3	5	4	19
	3.6.3) aquatic structures		1	3	9	1	1	15
	3.7) user of structures created by other species	9	14	13	15	14	12	77
	3.7.1) aerial structures	6	11	9	8	11	10	55
	3.7.2) ground structures	2	2	3	2	2	1	12
	3.7.3) aquatic structures	1	2	2	5	2	1	13
	3.8) nest parasite	20	37	47	15	25	36	180
	3.8.1) interspecies parasite	1	3	4	4	2	3	17
	3.8.2) common interspecific host	20	37	46	13	24	36	176
S	3.9) primary cavity excavator in snags or live trees	3	16	16	2	13	15	65
G	4) carrier, transmitter, or reservoir of vertebrate diseases	27	20	29	45	16	19	156
	4.1) diseases that affect humans	20	15	20	33	12	14	114
	4.2) diseases that affect domestic animals		3	4	3	2	2	14
	4.3) diseases that affect other wildlife species	16	7	18	35	5	8	89
G	5) soil relationships	17	20	21	9	15	20	102
S	5.1) physically affects (improves) soil structure, aeration (typically by digging)	17	20	21	9	15	20	102
G	6) wood structure relationships (either living or dead wood)	4	7	6	6	7	5	35
	6.1) physically fragments down wood	4	6	5	5	6	5	31
	6.2) physically fragments standing wood	1	2	2	1	2	2	10
G	7) water relationships	1	2	2	2	2	2	11
	7.1) impounds water by creating diversions or dams		1	1	1	1	1	5
	7.2) creates ponds or wetlands through wallowing	1	1	1	1	1	1	6

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G	8) vegetation structure and composition relationships	5	11	11	9	11	8	55
	8.1) creates standing dead trees (snags)	1	3	3	3	3	3	16
	8.2) herbivory on trees or shrubs that may alter vegetation structure and composition (browsers)	3	6	6	4	7	5	31
	8.3) herbivory on grasses or forbs that may alter vegetation structure and composition (grazers)	3	4	3	3	4	3	20
	Grand Total	1910	2579	3098	2448	2130	2396	14561