Biophysical Habitat Units

of the

South Okanagan Study Area

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February, 1998

Resources Inventory Branch British Columbia Ministry of Environment, Lands and Parks

Wildlife Working Report WR-XX

ECOREGION UNITS

NOB	Northern Okanagan Basin
NOH	Northern Okanagan Highlands Ecosection
OKR	Okanagan Range Ecoregion
SOB	Southern Okanogan Basin Ecosection
SOH	Southern Okanogan Highlands Ecosection

BIOGEOCLIMATIC UNITS

BGxh1	Okanagan Very Dry Hot Bunchgrass variant
PPxh1	Okanagan Very Dry Hot Ponderosa Pine variant
IDFxh1	Okanagan Very Dry Hot Interior Douglas-fir variant
IDFdk1	Thompson Dry Cool Interior Douglas-fir variant
IDFdm1	Kettle Dry Mild Interior Douglas-fir variant
IDFmw1	Shuswap Moist Warm Interior Douglas-fir variant
MSdm1	Okanagan Dry Mild Montane Spruce variant
MSxk	Very Dry Cool Montane Spruce subzone

ESSFxc Very Dry Cold Engelmann Spruce - Subalpine Fir subzone

HABITAT CLASSES FOR SOUTH OKANAGAN (those marked with an asterisk (*) are not further described; the rest are fully described)

BGxh1 Okanagan Very Dry Hot Bunchgrass variant

AΕ	Antelope-brush -	evening_nrimrose	coutherly senect	coarce cand
ΛL	Antelope-brush -	evening-priningse	southerry aspect,	coarse sand

- AN Antelope-brush needle-and-thread grass coarse-textured soils
- ANc Antelope-brush needle-and-thread grass coarse-textured soils, cool aspect
- ANf Antelope-brush needle-and-thread grass coarse-textured soils, fan
- ANw Antelope-brush needle-and-thread grass coarse-textured soils, warm aspect
- ARg Trembling aspen Wood's rose moist, gully
- ARp Trembling aspen Wood's rose moist, floodplain
- ASg Trembling aspen common snowberry moist, gully
- ASp Trembling aspen common snowberry moist, floodplain
- BA* Barren
- BD Water birch red-osier dogwood swamp
- BE* Beach
- BS Paper Birch common snowberry moist, gully
- CA* Canal
- CB Summer-cypress bentgrass meadow
- CD Black cottonwood red-osier dogwood floodplain
- CF* Cultivated field
- CLc* Cliff high, cool aspect
- CLw* Cliff high, warm aspect
- CMc* Cliff moderate, cool aspect
- CMw* Cliff moderate, warm aspect
- CO* Cultivated orchard
- CT Common cattail marsh
- CV* Cultivated vineyard
- FL* Feedlot
- GB* Gravel bar
- GC* Golf Course
- GP* Gravel Pit
- HA Black hawthorn copse
- LA* Large lake
- MI* Mine
- OS Oregon-grape saskatoon gully
- OW Shallow open water
- OWa Shallow open water, alkaline
- PA Ponderosa pine antelope-brush coarse-textured soil
- PAf Ponderosa pine antelope-brush coarse-textured soil, fan
- PB Ponderosa pine water birch moist fan
- PD* Pasture, dry
- PF Ponderosa Pine Idaho fescue warm aspect, deep soil
- PM* Pasture, moist
- PO* Pond
- PS Ponderosa pine selaginella shallow soil
- PSc Ponderosa pine selaginella shallow soil, cool aspect
- PSw Ponderosa pine selaginella shallow soil, warm aspect
- PW Ponderosa pine bluebunch wheatgrass mesic
- PWc Ponderosa pine bluebunch wheatgrass mesic, cool aspect
- PWf Ponderosa pine bluebunch wheatgrass mesic, fan
- RM Western redcedar Douglas maple riparian
- RO* Rock outcrop lichen
- ROc* Rock outcrop lichen, cool aspect
- ROw* Rock outcrop lichen, warm aspect
- SB Silverweed bulrush meadow
- SL* Sewage lagoon
- SN Big sagebrush needle-and-thread grass coarse-textured soil
- SNf Big sagebrush needle-and-thread grass coarse-textured soil, fan
- SOc Saskatoon mock-orange talus, cool aspect

SOw Saskatoon - mock-orange talus, warm aspect SP Common snowberry - pinegrass moist SS Big sagebrush - selaginella very shallow soil ST Stream (includes seasonal gravel bars) SWl Big sagebrush - bluebunch wheatgrass mesic, lacustrine Big sagebrush - bluebunch wheatgrass mesic, morainal SWm TAc* Talus, cool aspect TAw* Talus, warm aspect TC* Transportation corridor UR* Urban - suburban Bluebunch wheatgrass - Sandberg's bluegrass deep soil, cool aspect WBc WBw Bluebunch wheatgrass - Sandberg's bluegrass deep soil, warm aspect WJ Bluebunch wheatgrass - junegrass mesic WR Woolly sedge - rush marsh WSc Bluebunch wheatgrass - selaginella shallow soil, cool aspect WSw Bluebunch wheatgrass - selaginella shallow soil, warm aspect YS Yellow pine - saskatoon fan Okanagan Very Dry Hot Ponderosa Pine variant PPxh1 ΑN Antelope-brush - needle-and-thread grass coarse-textured soils ANc Antelope-brush - needle-and-thread grass coarse-textured soils, cool aspect Antelope-brush - needle-and-thread grass coarse-textured soils, fan ANf ANw Antelope-brush - needle-and-thread grass coarse-textured soils, warm aspect Trembling aspen - common snowberry moist, gully ASg Trembling aspen - common snowberry moist, floodplain ASp BA Barren BD Water birch - red-osier dogwood swamp BE Beach BSPaper birch - common snowberry moist, gully CA Canal CD Black cottonwood - red-osier dogwood floodplain CF* Cultivated field CLc* Cliff high, cool aspect Cliff high, warm aspect CLw* CMc* Cliff moderate, cool aspect CMw* Cliff moderate, warm aspect CO* Cultivated orchard Common cattail marsh CTCV* Cultivated vineyard DPc Douglas-fir - pinegrass mesic, cool aspect FL* Feed lot GB* Gravel bar GC* Golf Course GP* Gravel Pit HA Black hawthorn copse MI* Mine OW Shallow open water Shallow open water, alkaline OWa Ponderosa pine - antelope-brush coarse-textured soil PA PB Ponderosa pine - water birch moist, fan PAf Ponderosa pine - antelope-brush coarse-textured soil, fan PD* Pasture, dry PF Ponderosa pine - Idaho fescue warm aspect, deep soil PM* Pasture, moist PO* Pond PS Ponderosa pine - selaginella shallow soil PSc Ponderosa pine - selaginella shallow soil, cool aspect PSw Ponderosa pine - selaginella shallow soil, warm aspect PW Ponderosa pine - bluebunch wheatgrass mesic PWc Ponderosa pine - bluebunch wheatgrass mesic, cool aspect

PWf Ponderosa pine - bluebunch wheatgrass mesic, fluvial

RM Western redcedar - Douglas maple riparian

RO* Rock outcrop - lichen

ROc* Rock outcrop - lichen, cool aspect
ROw* Rock outcrop - lichen, warm aspect

SB Silverweed - bulrush meadow

SN Big sagebrush - needle-and-thread grass coarse textured soil
SNf Big sagebrush - needle-and-thread grass coarse textured soil, fan

SOc Saskatoon - mock-orange talus, cool aspect SOw Saskatoon - mock-orange talus, warm aspect SP Common snowberry - pinegrass moist SS Big sagebrush - selaginella very shallow soil

SWl Big sagebrush - bluebunch wheatgrass mesic, lacustrine

TC* Transportation corridor
TAc* Talus, cool aspect
TAw* Talus, warm aspect

SWl Big sagebrush - bluebunch wheatgrass mesic, lacustrine

UR Urban

WAc Bluebunch wheatgrass - arrow-leaved balsamroot deep soil, cool aspect WAw Bluebunch wheatgrass - arrow-leaved balsamroot deep soil,warm aspect

WF Bluebunch wheatgrass - Idaho fescue coarse-textured soil
WFf Bluebunch wheatgrass - Idaho fescue coarse-textured soil, fan

WJ Bluebunch wheatgrass - junegrass mesic

WSc Bluebunch wheatgrass - selaginella shallow soil, cool aspect WSw Bluebunch wheatgrass - selaginella shallow soil, warm aspect

YS Yellow pine - saskatoon fan

<u>IDFdm1</u> Kettle Dry Mild Interior Douglas-fir variant

CMc* Cliff moderate, cool aspect
CMw* Cliff moderate, warm aspect
CT Common cattail marsh
DT Douglas-fir - twinflower mesic

DTc Douglas-fir - twinflower mesic, cool aspect DTs Douglas-fir - twinflower mesic, shallow soil

OW Shallow open water

PO* Pond

PPd Ponderosa pine - pinegrass warm aspect, deep soil PPs Ponderosa pine - pinegrass warm aspect, shallow soil

PS Ponderosa pine - selaginella shallow soil

RO* Rock outcrop - lichen

ROc* Rock outcrop - lichen, cool aspect
ROw* Rock outcrop - lichen, warm aspect
SD Spruce - red-osier dogwood moist gully

SE Sedge wetland

SOc Saskatoon - mock-orange talus, cool aspect SOw Saskatoon - mock-orange talus, warm aspect SS Big sagebrush - selaginella very shallow soil

TAc* Talus, cool aspect TAw* Talus, warm aspect

WAw bluebunch wheatgrass - arrow-leaved balsamroot deep soil, warm aspect

WSc Bluebunch wheatgrass - selaginella shallow soil, cool aspect WSw Bluebunch wheatgrass - selaginella shallow soil, warm aspect

IDFxh1 Okanagan Very Dry Hot Interior Douglas-fir variant

ASg Trembling aspen - common snowberry moist, gully

BA Barren

BD Water birch - red-osier dogwood swamp

BE* Beach

BS Paper birch - common snowberry moist gully CD Black cottonwood - red-osier dogwood floodplain

CLc* Cliff high, cool aspect
CLw* Cliff high, warm aspect
CMc* Cliff moderate, cool aspect
CMw* Cliff moderate, warm aspect
CT Common cattail marsh
DP Douglas-fir - pinegrass mesic

DPc Douglas-fir - pinegrass mesic, cool aspect
DPf Douglas-fir - pinegrass mesic, fluvial
DPs Douglas-fir - pinegrass mesic, shallow soil

DW Douglas-fir - bluebunch wheatgrass warm aspect, deep soil FW Idaho fescue - bluebunch wheatgrass steep, warm aspect

GB Gravel bar LA Large lake

OW Shallow open water

OWa Shallow open water, alkaline

PD* Pasture, dry PM Pasture moist

PO* Pond

PS Ponderosa pine - selaginella shallow soil

PSc Ponderosa pine - selaginella shallow soil, cool aspect PSw Ponderosa pine - selaginella shallow soil, warm aspect

RO* Rock outcrop - lichen

ROc* Rock outcrop - lichen, cool aspect
ROw* Rock outcrop - lichen, warm aspect
SB Silverweed - bulrush meadow

SE Sedge wetland SOc Saskatoon - mock-orange talus, cool aspect SOw Saskatoon - mock-orange talus, warm aspect SP Common snowberry - pinegrass moist SS Big sagebrush - selaginella very shallow soil SWl Big sagebrush - bluebunch wheatgrass mesic, lacustrine TAc* Talus, cool aspect TAw* Talus, warm aspect Vasey's big sagebrush - Kentucky bluegrass grassland, cool aspect VKc VKw Vasey's big sagebrush - Kentucky bluegrass grassland, warm aspect WA Bluebunch wheatgrass - arrow-leaved balsamroot deep soil WAc Bluebunch wheatgrass - arrow-leaved balsamroot deep soil, cool aspect Bluebunch wheatgrass - arrow-leaved balsamroot deep soil, warm aspect WAw WBc Bluebunch wheatgrass - Sandberg's bluegrass deep soil, cool aspect WJ Bluebunch wheatgrass - junegrass mesic WSc Bluebunch wheatgrass - selaginella shallow soil, cool aspect WSw Bluebunch wheatgrass - selaginella shallow soil, warm aspect YS Yellow pine - saskatoon fan <u>IDFdk1</u> Thompson Dry Cool Interior Douglas-fir variant ASg Trembling aspen - common snowberry moist, gully BE* Beach DYd Douglas-fir - yarrow warm aspect, deep soil DYs Douglas-fir - yarrow warm aspect, shallow soil LP Lodgepole pine - pinegrass mesic LPc Lodgepole pine - pinegrass mesic, cool aspect Lodgepole pine - pinegrass mesic fan LPf LPs Lodgepole pine - pinegrass mesic shallow soil OW Shallow open water PSc Ponderosa pine - selaginella shallow soil, cool aspect PSw Ponderosa pine - selaginella shallow soil, warm aspect RO* Rock outcrop ROc* Rock outcrop, cool aspect ROw* Rock outcrop, warm aspect SE Sedge wetland SOc Saskatoon - mock-orange talus, cool aspect SOw Saskatoon - mock-orange talus, warm aspect SP Common snowberry - pinegrass moist SS Big sagebrush - selaginella very shallow soil TAc* Talus, cool aspect TAw* Talus, warm aspect Vasey's big sagebrush - Kentucky bluegrass grassland VK VKc Vasey's big sagebrush - Kentucky bluegrass grassland, cool aspect VKw Vasey's big sagebrush - Kentucky bluegrass grassland, warm aspect WAw Bluebunch wheatgrass - arrow-leaved balsamroot deep soil, warm aspect WSc Bluebunch wheatgrass - selaginella shallow soil, cool aspect WSw Bluebunch wheatgrass - selaginella shallow soil, warm aspect MSxk Very Dry Cool Montane Spruce subzone Trembling aspen - common snowberry moist, gully ASg

ASg Trembling aspen - common snowberry moist, gully
DAd Douglas-fir - heart-leaved arnica warm aspect, deep soil
DAs Douglas-fir - heart-leaved arnica warm aspect, shallow soil
LL Lodgepole pine - arctic lupine mesic
LLc Lodgepole pine - arctic lupine mesic, cool aspect
LLs Lodgepole pine - arctic lupine mesic, shallow soil

OW Shallow open water RO* Rock outcrop

ROc* Rock outcrop, cool aspect

ROw* Rock outcrop, warm aspect SG Spruce - black gooseberry moist

TAc* Talus, cool aspect TAw* Talus, warm aspect

VK Vasey's big sagebrush - Kentucky bluegrass grassland

VKc Vasey's big sagebrush - Kentucky bluegrass grassland, cool aspect
VKw Vasey's big sagebrush - Kentucky bluegrass grassland, warm aspect
WSw Bluebunch wheatgrass - selaginella shallow soil, warm aspect

ESSFxc Very Dry Cold Engelmann Spruce - Subalpine Fir subzone

FG Subalpine fir - grouseberry mesic

FGc Subalpine fir - grouseberry mesic, cool aspect

OW Shallow open water

PO* Pond

RO* Rock outcrop

ROc* Rock outcrop, cool aspect ROw* Rock outcrop, warm aspect

SE Sedge wetland

SG Spruce - black gooseberry moist

VK Vasey's big sagebrush - Kentucky bluegrass grassland

VKc Vasey's big sagebrush - Kentucky bluegrass grassland, cool aspect VKw Vasey's big sagebrush - Kentucky bluegrass grassland, warm aspect WSw Bluebunch wheatgrass - selaginella shallow soil, warm aspect

Successional Stages

- 1 Shrub-Herb
- 2 Pole-Sapling
- 3 Young Forest
- 4 Mature Forest
- 5 Old-growth Forest

Range Condition Classes

- P Poor
- F Fair
- G Good
- E Excellent

(range condition classes mapped are based on knowledge of the most common range condition in a particular area, not from sampling on each map unit; these ratings need to be checked on the ground)

Shrub Closure (based on the presence of sagebrush or antelope-brush)

- s Sparse (less than 10% crown closure)
- m Moderate (10 to 30% crown closure)
- d Dense (greater than 30% crown closure)
- c Dense (greater than 30% crown closure) cover of snowbrush ceanothus

Tree Crown Closure

- s Sparse (less than 25%)
- m Moderate (25 to 65%)
- d Dense (greater than 65%)

HABITAT CLASSES OF THE BGxh1

AE	Antelope-brush - evening-primrose warm aspect, coarse sand	Biogeoclimatic Unit BGxh1
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Description: occurs at lower elevations on warm southeast to westerly aspects; deep soils of coarse-textured glaciofluvial materials; very droughty, rapidly drained soil; moderate to steep sloped; greater than 25% slope

Map	Successional Trends			
Symbol	Stage	Dominants	Associates	Plots
AE: P	Poor	shrub/grassland with sparse herb layer of: antelope-brush cheatgrass evening-primrose	big sagebrush rabbit-brush snow buckwheat prickly-pear cactus	
AE:F	Fair	shrub/grassland of: antelope-brush cheatgrass needle-and-thread grass prickly-pear cactus	big sagebrush rabbit-brush sand dropseed red three-awn snow buckwheat bluebunch wheatgrass evening-primrose	
AE:G	Good	shrub/grassland of: antelope-brush needle-and-thread grass bluebunch wheatgrass	big sagebrush rabbit-brush sand dropseed red three-awn snow buckwheat prickly-pear cactus cheatgrass	
AE:E	Excellent	shrub/grassland of: antelope-brush bluebunch wheatgrass needle-and-thread grass	big sagebrush rabbit-brush sand dropseed red three-awn	

Comments: Aeolian or subject to removal of organic material with heavy use by livestock.

AN	Antelope-brush - needle-and-thread grass coarse-textured soils	Biogeoclimatic Unit BGxh1
AN	Antelope-brush - needle-and-thread grass coarse-textured soils	BGxh1

Description: coarse-textured soils of glaciofluvial materials, often with a capping of aeolian sands; occurs on flat to gently sloping areas; rapidly drained, droughty sites

Map		Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
AN:P	Poor	shrub/grassland of: antelope-brush cheatgrass needle-and-thread grass	rabbit-brush red three-awn sand dropseed big sagebrush Indian wheat	90031B 91055
AN:F	Fair	shrub/grassland of: antelope-brush needle-and-thread grass cheatgrass sand dropseed	rabbit-brush red three-awn Sandberg's bluegrass big sagebrush prickly pear cactus bluebunch wheatgrass	90031A 90021 91050 92254
AN:G	Good	shrub/grassland of: antelope-brush bluebunch wheatgrass red three-awn compact selaginella needle-and-thread grass	red three-awn sand dropseed Sandberg's bluegrass snow buckwheat prickly-pear cactus cheatgrass arrow-leaved balsam root	91048 91033 91024 91003
AN:E	Excellent	shrub/grassland of: antelope-brush bluebunch wheatgrass compact selaginella red three-awn	sand dropseed Sandberg's bluegrass needle-and thread grass three-leaved sedge cheatgrass	91045 91003

Comments:

-litter layers are important for maintaining soil moisture and for humus accummulation; cryptogams are valuable for preventing soil erosion

Antelope-brush - needle-and-thread grass coarse-textured soils, cool aspect

Biogeoclimatic Unit
BGxh1

Description: coarse-textured soils of glaciofluvial materials, often with a capping of aeolian sands; occurs on moderate to steeply sloping areas of easterly and northerly aspects greater than 25%; rapidly drained, droughty sites

Map		Succes	ssional Trends	
Symbol	Stage	Dominants	Associates	plots
ANc:P	Poor	shrub/grassland of: antelope-brush cheatgrass needle-and-thread grass	rabbit-brush red three-awn sand dropseed big sagebrush Indian wheat	
ANc:F	Fair	shrub/grassland of: antelope-brush needle-and-thread grass cheatgrass sand dropseed	rabbit-brush red three-awn Sandberg's bluegrass big sagebrush prickly pear cactus bluebunch wheatgrass	
ANc:G	Good	shrub/grassland of: antelope-brush bluebunch wheatgrass red three-awn compact selaginella needle-and-thread grass	red three-awn sand dropseed Sandberg's bluegrass snow buckwheat prickly-pear cactus cheatgrass arrow-leaved balsam root	
ANc:E	Excellent	shrub/grassland of: antelope-brush bluebunch wheatgrass compact selaginella red three-awn	sand dropseed Sandberg's bluegrass needle-and thread grass three-leaved sedge cheatgrass	

Comments:

litter layers are important for maintaining soil moisture and for humus accummulation; cryptogams are valuable for preventing soil erosion

ANf Antelope-brush - needle-and-thread grass coarse-textured soils, fan

Biogeoclimatic Unit
BGxh1

Description: coarse-textured soils of glaciofluvial fans, often with a capping of aeolian sands; occurs on flat to gently sloping areas; rapidly drained, droughty sites

Map		Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
ANf:P	Poor	shrub/grassland of: antelope-brush cheatgrass needle-and-thread grass	rabbit-brush red three-awn sand dropseed big sagebrush Indian wheat	
ANf:F	Fair	shrub/grassland of: antelope-brush needle-and-thread grass cheatgrass sand dropseed	rabbit-brush red three-awn Sandberg's bluegrass big sagebrush prickly pear cactus bluebunch wheatgrass	
ANf:G	Good	shrub/grassland of: antelope-brush bluebunch wheatgrass red three-awn compact selaginella needle-and-thread grass	red three-awn sand dropseed Sandberg's bluegrass snow buckwheat prickly-pear cactus cheatgrass arrow-leaved balsam root	
ANf.E	Excellent	shrub/grassland of: antelope-brush bluebunch wheatgrass compact selaginella red three-awn	sand dropseed Sandberg's bluegrass needle-and thread grass three-leaved sedge cheatgrass	

Comments:

litter layers are important for maintaining soil moisture and for humus accummulation; cryptogams are valuable for preventing soil erosion; moisture may be available from deep within the soil profile allowing for tree establishment or growth or shrubs, such as saskatoon.

ANw Antelope-brush - needle-and-thread grass coarse-textured soils, warm aspect Biogeoclimatic Unit
Biogeoclimatic Unit
BGxh1

Description: coarse-textured soils of glaciofluvial materials, often with a capping of aeolian sands; occurs on moderate to steeply sloping areas of warm southeast to westerly greater than 25% slope; rapidly drained, droughty sites

Map		Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
ANw:P	Poor	shrub/grassland of: antelope-brush cheatgrass needle-and-thread grass	rabbit-brush red three-awn sand dropseed big sagebrush Indian wheat	
ANw:F	Fair	shrub/grassland of: antelope-brush needle-and-thread grass cheatgrass sand dropseed	rabbit-brush red three-awn Sandberg's bluegrass big sagebrush prickly pear cactus bluebunch wheatgrass	
ANw:G	Good	shrub/grassland of: antelope-brush bluebunch wheatgrass red three-awn compact selaginella needle-and-thread grass	red three-awn sand dropseed Sandberg's bluegrass snow buckwheat prickly-pear cactus cheatgrass arrow-leaved balsam root	
ANw:E	Excellent	shrub/grassland of: antelope-brush bluebunch wheatgrass compact selaginella red three-awn	sand dropseed Sandberg's bluegrass needle-and thread grass three-leaved sedge cheatgrass	

Comments:

litter layers are important for maintaining soil moisture and for humus accummulation; cryptogams are valuable for preventing soil erosion

ASg Trembling aspen - common snowberry moist, gully

Biogeoclimatic Unit
BGxh1

Description: moist gully areas, sometimes with seasonal creeks; often rich soils due to a buildup of broad-leaved litter; may be steep-sided slopes into the gully;

Map		Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
ASg1	Shrub-Herb	shrub/herb dominated cover of: Wood's rose common snowberry trembling aspen Kentucky bluegrass	choke cherry saskatoon poison-ivy white clematis red-osier dogwood common hound's-tongue	
ASg2	Pole-Sapling	broad-leaved forest of: trembling aspen Wood's rose poison-ivy common snowberry	choke cherry white clematis common hound's-tongue red-osier dogwood Kentucky bluegrass	
ASg3	Young Forests	broad-leaved forest of: trembling aspen Wood's rose poison ivy saskatoon common snowberry	choke cherry white clematis common hound's-tongue common snowberry black cottonwood red-osier dogwood	90061 90014
ASg4	Mature Forests	broad-leaved forest of: trembling aspen Wood's rose common snowberry saskatoon trembling aspen Kentucky bluegrass	choke cherry saskatoon poison-ivy white clematis red-osier dogwood Kentucky bluegrass common hound's-tongue	90052
ASg5	Old-Growth	closed forest of: Douglas-fir Wood's rose common snowberry saskatoon may not occur, however these sites may even	Kentucky bluegrass trembling aspen choke cherry poison-ivy white clematis red-osier dogwood common hound's-tongue	

Comments:

the old-growth stage may not occur, however these sites may eventually be dominated by Douglas-fir with no disturbance; rich forest floor material of deciduous leaves

REDO BASED ON PLOT 90061

(I don't have the info)

ASp	Trembling aspen - commor	n snowberry moist, floodplain	Biogeoclima BGxh		
Descriptio leaved litte		eas, usually above regularly flooded sites;	often rich soils due to a buildup of	of broad-	
Map	Successional Trends				
Symbol	Stage	Dominants	Associates	Plots	
ASp1	Shrub-Herb	shrub/herb dominated cover of: Wood's rose common snowberry trembling aspen Kentucky bluegrass	choke cherry saskatoon poison-ivy white clematis red-osier dogwood common hound's-tongue		
ASp2	Pole-Sapling	broad-leaved forest of: trembling aspen saskatoon mock orange cheatgrass	choke cherry red-osier dogwood wood's rose common snowberry poison ivy red elderberry		
ASp3	Young Forests	broad-leaved forest of: trembling aspen saskatoon mock orange cheatgrass	choke cherry red-osier dogwood wood's rose common snowberry poison ivy red elderberry	90016	
ASp4	Mature Forests	broad-leaved forest of: trembling aspen Wood's rose common snowberry poison-ivy Kentucky bluegrass	choke cherry saskatoon white clematis red-osier dogwood common		
ASp5	Old-Growth	closed forest of: Wood's rose common snowberry trembling aspen saskatoon choke cherry	Douglas fir- water birch- Douglas maple common hound's-tongue	90052 90009	
Comments		may not occur, however these sites may evest floor material of deciduous leaves	ventually be dominated by Dougla	s-fir with no	

BD	Water birch - red-osier dogwood swamp			Biogeoclimatic Unit BGxh1	
Description	active floodplain a	rea; high water table for part of year;	imperfectly to poorly	drained soils	
Map		Vegetation			
Symbol	Stage	Dominants	Asso	ciates	Plots
BD	Edaphic Climax	dense shrub cover of: mountain alder red-osier dogwood water birch poison-ivy Wood's rose	willows stinging ne star-flower Solomo bittersweet Canda this	red false n's-seal	90039 90022 91004 91053
Comments:	usually surrounded by	y other wetland types such as marshes a	nd shallow open wat	er areas	

Description	pondside area sub	ject to high water table for much of the	year; very poorly drained lacustring	e material
Map	Map Vegetation			
Symbol	Stage	Dominants	Associates	Plot
СВ	Edaphie Climax	forb cover of: summer cypress bentgrass bulrush	dock lamb's quarters thistle	90064

CD Black cottonwood - red-osier dogwood floodplain Biogeoclimatic Unit
Biogeoclimatic Unit
BGxh1

Description: active floodplain area; subject to high water table for part of year; usually sandy material over gravels

Map		Successional Trends				
Symbol	Stage	Dominants	Associates	Plots		
CD1	Shrub-Herb	shrub dominated cover of: willows red-osier dogwood black cottonwood poison-ivy	common snowberry sumac star flowered false Solomon's seal Wood's rose Nootka rose mountain alder water birch	92231		
CD2	Pole-Sapling	broad-leaved forest of: black cottonwood and a dense shrub cover of red-osier dogwood Wood's rose poison-ivy	paper birch willows common snowberry sumac Kentucky bluegrass scouring-rush star-flowered false Solomon's-seal			
CD3	Young Forests	broad-leaved forest of: black cottonwood and a dense shrub cover of red-osier dogwood Wood's rose poison-ivy	paper birch willows common snowberry sumac Kentucky bluegrass scouring-rush star-flowered false Solomon's-seal			
CD4	Mature Forests	broad-leaved forest of: black cottonwood and a dense shrub cover of red-osier dogwood Wood's rose poison-ivy	paper birch willows common snowberry sumac Kentucky bluegrass scouring-rush star-flowered false Solomon's-seal			
CD5	Old-Growth	broad-leaved forest of: black cottonwood and a dense shrub cover of red-osier dogwood Wood's rose poison-ivy	willows common snowberry sumac Kentucky bluegrass scouring-rush star-flowered false Solomon's-seal	92240 90001 90018 90035 90062 91010 91032 92228		

Comments: usually very dense shrub understory; rich forest floor material of deciduous leaves; these areas can have common hound's tongue

Descriptio		Common cattail marsh			
	on: high water table fo	r most of the year; vegetation is usually	y partially covered	by water	
Map			Vegetation		
Symbol	Stage	Dominants		sociates	Plots
СТ	Edaphic Climax	emergent cover of: common cattail or great bulrush wetlands where cattail dominates should	reed cana rush	duckweed arygrass	9223 ⁴ 9004 ⁴

НА	Black hawthorn copse			matic Unit xh1		
Description	n: moist areas often associ	ated with seasonal creeks				
Map		Vegetation				
Symbol	Stage	Dominants	Associates	Plots		
НА	Edaphic Climax	Dense shrub thicket of black hawthorn				
Comments	:					

ow	Shallow open water			Biogeoclimatic Unit BGxh1	
Descriptio	n: Shallow open wate	er wetland with water generally less than 2m of	leep.		
Map	Vegetation				
Symbol	Stage	Dominants	Ass	ociates	Plots
OW	Edaphic Climax	Various submerged aquatic vegetation including: poond weeds duckweed milfoil			
Comments	: Variety of habitat fro	m sparsely to densely vegetated, may become	dry in sumn	ner	

PA	Ponderosa pine - antelope l	onderosa pine - antelope brush coarse-textured soil		ic Unit			
Descriptio soil	n: coarse-textured soi	ed soils of glacio-fluvial soil; occurs on flat to gently sloping areas; rapidly drained dro					
Map		Successional Trends					
Symbol	Stage	Dominants	Associates	Plots			
PA1	Shrub-Herb						
PA2	Pole-Sapling						
PA3	Young Forests						
PA4	Mature Forests	Ponderosa pine bluebunch wheatgrass	saskatoon cheatgrass antelope brush compact selaginella Idaho fescue	91051 91007			
PA5	Old-Growth	Ponderosa pine bluebunch wheatgrass red three-awn	saskatoon arrow-leaved balsamroot compact selaginella Sandberg's bluegrass antelope brush	91023			
Comments	:						

PB	Ponderosa pine - water biro	onderosa pine - water birch moist fan			natic Unit xh1	
Descriptio	n: gently-sloping sand	ly fluvial fan; imperfectly drained soil				
Map						
Symbol	Stage	Dominants		sociates	Plots	
PB1	Shrub-Herb	shrub-herb cover of saskatoon water birch kinnikinick	Wood's black ha field pus	wthorn		
PB2	Pole-Sapling	open, mixed forest of: ponderosa pine saskatoon water birch Kentucky bluegrass kinnikinnick	black cottonwood Wood's rose black hawthorn nodding onion field pussytoes			
PB3	Young Forests	open, mixed forest of: ponderosa pine saskatoon water birch Kentucky bluegrass kinnikinnick	black cottonwood Wood's rose black hawthorn nodding onion field pussytoes			
PB4	Mature Forests	open, mixed forest of: ponderosa pine saskatoon water birch Kentucky bluegrass kinnikinnick	black cottonwood Wood's rose black hawthorn nodding onion field pussytoes			
PB5	Old-Growth	open, mixed forest of: ponderosa pine saskatoon water birch Kentucky bluegrass kinnikinnick	black cottonwood Wood's rose black hawthorn nodding onion field pussytoes			
Comments	: unusual combination rare ecosystem.	of moist and dry species due to dry laye	ers of soil at top an	d moister soil at	depth;	

PSc Ponderosa pine - selaginella shallow soil, cool aspect Biogeoclimat BGxh	
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Description: steep, cool, northerly or easterly aspects; shallow (less than one metre) soils of various parent materials over bedrock; droughty sites

Map		Successional Trends			
Symbol	Stage	Dominants	Associates	Plots	
PSc1	1 Shrub-Herb grass/steppe of: saskatoon bluebunch wheatgrasss cheatgrass compact selaginella		big sagebrush Idaho fescue Sandberg's bluegrass arrow-leaved balsamroot desert-parsley		
PSc2	Pole-Sapling	parkland to open forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	ponderosa pine big sagebrush saskatoon Idaho fescue bluebunch wheatgrass cheatgrass		
PSc3	Young Forests	parkland to open forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley		
PSc4	Mature Forests	open to closed forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley		
PSc5	Old-Growth	open to closed forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley		

Comments:

early successional stages will have similar range condition classes as the Bluebunch wheatgrass - selaginella shallow soil, cool aspect (WSc) habitat class

SB	Silverweed - bulrush mead	ilverweed - bulrush meadow				
Description: pondside area subject to high water table for much of the year; very poorly drained lacustrine material						
Map	Iap Successional Trends					
Symbol	Stage	Dominants	Ass	sociates	Plots	
SB	Edaphic Climax	graminoid-forb cover of: bulrush silverweed	weeping		90043	
Comments	:					

SN

Big sagebrush - needle-and-thread grass coarse-textured soil

Biogeoclimatic Unit BGxh1

Description: gentle to moderate sloping areas; coarse-textured sandy soils of glaciofluvial material; rapidly drained soils often with and aeolian capping; this unit usually occurs at higher elevation in the Okanagan Valley or in the Similkameen River drainage

Map		Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
SN:P	Poor	shrub/steppe vegetation of: big sagebrush cheatgrass Indian wheat	rabbit-brush threetip sagebrush Sandberg's bluegrass needle-and-thread grass sand dropseed	90013 90029 90012 90049 90038 90041
SN:F	Fair	shrub/steppe vegetation of: big sagebrush needle-and-thread grass Sandberg's bluegrass cheatgrass	rabbit-brush threetip sagebrush antelope-brush sand dropseed brittle prickly-pear cactus bluebunch wheatgrass	90047 90015
SN:G	Good	shrub/steppe of: big sagebrush needle-and-thread grass bluebunch wheatgrass	rabbit-brush threetip sagebrush antelope-brush Sandberg's bluegrass sand dropseed brittle prickly-pear cactus cheatgrass moderate cover of cryptogams	
SN:E	Excellent	shrub/steppe of: big sagebrush needle-and-thread grass bluebunch wheatgrass good cover of cryptogams	rabbit-brush threetip sagebrush antelope-brush Sandberg's bluegrass sand dropseed brittle prickly-pear cactus cheatgrass	

Comments:

this unit is replace by the Antelope-brush - needle-and-thread grass coarse-textured soil (AN) habitat class at lower elevations in the main Okanagan valley; extensively occurring unit; big sagebrush may become less common in the excellent condition stage due to competition from the grasses

SNf Big sagebrush - needle-and-thread grass coarse-textured soil, fan

Biogeoclimatic Unit
BGxh1

Description: gentle to moderate sloping areas; coarse-textured sandy soils of glaciofluvial fans; rapidly drained soils often with and aeolian capping; this unit usually occurs at higher elevation in the Okanagan Valley or in the Similkameen River drainage

Map		Successi	ional Trends	
Symbol	Stage	Dominants	Associates	Plots
SNf:P	Poor	shrub/steppe vegetation of: big sagebrush cheatgrass Indian-wheat	rabbit-brush threetip sagebrush Sandberg's bluegrass needle-and-thread grass barren vulpia sand dropseed six-weeks fescue low pussytoes	
SNf:F	Fair	shrub/steppe vegetation of: big sagebrush compact selaginella	rabbit-brush cheatgrass Sandberg's bluegrass arrow-leaved balsamroot bluebunch wheatgrass	92230
SNf:G	Good	shrub/steppe of: big sagebrush needle-and-thread grass bluebunch wheatgrass	rabbit-brush threetip sagebrush antelope-brush Sandberg's bluegrass sand dropseed brittle prickly-pear cactus cheatgrass moderate cover of cryptogams	
SNfE	Excellent	shrub/steppe of: big sagebrush needle-and-thread grass bluebunch wheatgrass good cover of cryptogams	rabbit-brush threetip sagebrush antelope-brush Sandberg's bluegrass sand dropseed brittle prickly-pear cactus cheatgrass	

Comments:

this unit is replace by the Antelope-brush - needle-and-thread grass coarse-textured soil (AN) habitat class at lower elevations in the main Okanagan valley; big sagebrush may become less common in the excellent condition stage due to competition from the grasses

SOc	Saskatoon - mock-orange talus, cool aspect	Biogeoclimatic Unit BGxh1

Description: steep sites of rubbly or blocky colluvial material at the base of rock outcrops; cool northern and eastern aspect (over 25% slope).

Map		Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
SOc	Edaphic Climax	sparse shrub cover of: saskatoon sumac ocean-spray big sagebrush poison-ivy white clematis	antelope-brush mock-orange bluebunch wheatgrass cheatgrass Oregon woodsia	

Comments:

sparsely vegetated unit often mixed with unvegetated talus; Douglas-fir or ponderosa pine may occur

SOw	Saskatoon - mock-orange talus, warm aspect	Biogeoclimatic Unit BGxh1
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Description: steep sites of rubbly or blocky colluvial material at the base of rock outcrops; southeast to westerly aspect (greater than 25% slope)

Map		Successional Trends			
Symbol	Stage	Dominants	Associates	Plots	
SOw	Edaphic Climax	sparse shrub cover of: mock orange saskatoon big sagebrush sumac	cheatgrass poison-ivy bluebunch wheatgrass white clematis	91006 90030	
Comments:	sparsely vegetated un	nit often mixed with unvegetated talus; [Oouglas-fir or ponderosa pine may o	ccur	

Biogeoclimatic Unit BGxh1 SP Common snowberry - pinegrass moist

Description: moisture receiving sites in lower slope positions; often gulleys; rich soil

Map Successional Trends			nal Trends	
Symbol	Stage	Dominants	Associates	Plots
SP1	Shrub-Herb	moderate to dense shrub cover of Wood's rose common snowberry pinegrass	tall Oregon grape Douglas maple kentucky bluegrass	
SP2	Pole-Sapling	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass	
SP3	Young Forests	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass	
SP4	Mature Forests	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass	
SP5	Old-Growth	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass	

SS	Big sagebrush - selaginella very shallow soil	Biogeoclimatic Unit BGxh1
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Description: drained

gentle to moderate sloping areas of very shallow soil over rock outcrops; droughty sites that are rapidly

Map		Succes	sional Trends	
Symbol	Stage	Dominants	Associates	Plots
SS:P	Poor	sparse shrub/steppe of: big sagebrush cheatgrass needle-and-thread grass	sand dropseed Indian-wheat rabbit-brush parsnip-flowered buckwheat line leaved fleabane	90065
SS:F	Fair	sparse shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass compact selaginella	rabbit-brush sand dropseed bluebunch wheatgrass line-leaved fleabane Sandberg's bluegrass brittle prickly-pear cactus	
SS:G	Good	sparse shrub/steppe of: big sagebrush bluebunch wheatgrass Sandberg's bluegrass compact selaginella needle-and-thread grass	saskatoon three-tip sagebrush line leaved fleabane brittle prickly pear cactus cheatgrass arrow-leaved balsamroot	90034
SS:E	Excellent	sparse shrub/steppe of: big sagebrush bluebunch wheatgrass needle-and-thread grass compact selaginella	rabbit-brush sand dropseed Sandberg's bluegrass line-leaved fleabane cheatgrass brittle prickly-pear cactus	

Comments:

SWI Big sagebrush - bluebunch wheatgrass mesic, lacustrine Biogeoclimatic Unit
BGxh1

Description: gentle to moderate sloped areas of lacustrine material; deep, well drained soil

Map		Succes	ssional Trends	
Symbol	Stage	Dominants	Associates	Plots
SWI:P	Poor	shrub/steppe of: big sagebrush cheatgrass Indian wheat	threetip sagebrush needle-and-thread grass Sandberg's bluegrass rabbit-brush sand dropseed	90060
SWI:F	Fair	shrub/steppe of: big sagebrush needle-and-thread grass Sandberg's bluegrass	threetip sagebrush rabbit-brush sand dropseed cheatgrass bluebunch wheatgrass long-leaved phlox	
SWI:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass needle-and-thread grass Sandberg's bluegrass	threetup sagebrush rabbit brush sand dropseed cheatgrass long-leaved fleabane six-weeks fescue junegrass long-leaved phlox moderate cryptogam cover	92242
SWI:E	Excellent	shrub/steppe of: big sagebrush bluebunch wheatgrass needle-and-thread grass Sandberg's bluegrass good cover of cryptogams	antelope brush needle-and-thread grass Idaho fescue threetip sagebrush sand dropseed junegrass	92238

Comments: droughty sites due to slow percolation of moisture.

SWm	Big sagebrush - bluebunch wheatgrass mesic, morainal	Biogeoclimatic Unit BGxh1

Description: gentle to moderate sloped areas of lacustrine material; deep, well drained soil

Map		Succe	ssional Trends	
Symbol	Stage	Dominants	Associates	Plots
SWm:P	Poor	shrub/steppe of: big sagebrush cheatgrass Sandberg's bluegrass Indian wheat	threetip sagebrush rabbit-brush sand dropseed needle-and-thread grass arrow-leaved balsam root long-leaved phlox	90028
SWm:F	Fair	shrub/steppe of: big sagebrush Sandberg's bluegrass	threetip sagebrush rabbit-brush sand dropseed long-leaved phlox needle-and-thread grass cheatgrass bluebunch wheatgrass	90003 90023
SWm:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass needle-and-thread grass Sandberg's bluegrass	threetip sagebrush rabbit-brush sand dropseed junegrass cheatgrass long-leaved phlox moderate cryptogam cover	
SWm:E	Excellent	shrub/steppe of: big sagebrush bluebunch wheatgrass good cover of cryptogams	Sandberg's bluegrass silky lupine threetip sagebrush rabbit brush sand dropseed junegrass	91029

Comments:

		Biogeoclimatic Unit
WBc	Bluebunch wheatgrass - Sandberg's bluegrass deep soil, cool aspect	BGxh1

Description: steep, cool, northerly or easterly aspects; deep soils of various parent materials;

Map		Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
WBc:P	Poor	shrub/steppe of: big sagebrush cheatgrass	threetip sagebrush long-leaved phlox thread-leaved phacelia pasture sage needle-and-thread grass Sandberg's bluegrass arrow-leaved balsam- root	90051 90019
WBc:F	Fair	shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass Sandberg's bluegrass	three-tip sagebrush bluebunch wheatgrass sand dropseed arrow-leaved balsamroot Sandberg's bluegrass long-leaved phlox shaggy fleabane	
WBc:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass Sandberg's bluegrass junegrass	threetip sagebrush rabbit brush silky lupine long-leaved fleabane needle and thread grass sand dropseed cheatgrass	90048 90063
WBc:E	Excellent	grass/steppe of: bluebunch wheatgrass Sandberg's bluegrass junegrass big sagebrush	threetip sagebrush Idaho fescue sand dropseed cheatgrass long-leaved fleabane	

Comments: WBc:P can be dominated by threetip sagebrush or big sagebrush with the other absent depending on hte site.

			Biogeoclimatic Unit
	WBw	Bluebunch wheatgrass - Sandberg's bluegrass deep soil, warm aspect	
			BGxh1
Г			

Description: steep, warm, southeast to west aspects; deep soils of various parent materials;

Map		Succession	nal Trends	
Symbol	Stage	Dominants	Associates	Plots
WBw:P	Poor	shrub/steppe of: big sagebrush cheatgrass	antelope-brush sand dropseed long-leaved phlox thread-leaved phacelia pasture sage needle-and-thread grass Sandberg's bluegrass	90028 90007
WBw:F	Fair	shrub/steppe of: big sagebrush cheatgrass Sandberg's bluegrass sand dropseed	bluebunch wheatgrass arrow-leaved balsamroot needle-and-thread grass red three awn snow buckwheat pasture sage antelope brush	90046 90020
WBw:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass Sandberg's bluegrass junegrass	antelope-brush needle-and-thread grass sand dropseed cheatgrass silky lupine long-leaved fleabane arrow-leaved balsamroot	
WBw:E	Excellent	grass/steppe of: bluebunch wheatgrass Sandberg's bluegrass cheatgrass	antelope brush big sagebrush long-leaved fleabane junegrass Idaho fescue	90059

Comments: Idaho fescue is more common at ipper elevations of this unit.

WSc Bluebunch wheatgrass - selaginella shallow soil, cool aspect	Biogeoclimatic Unit BGxh1
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Description: steep, cool, northerly or easterly aspects; shallow (less than one metre) soils of various parent materials over bedrock; droughty sites

Мар		Succ	essional Trends		
Symbol	Stage	Dominants	Associates	Plots	
WSc:P	Poor	shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass	rabbit-brush sand dropseed pasture sage compact selaginella bluebunch wheatgrass		
WSc:F	Fair	shrub/steppe of: big sagebrush Sandberg's bluegrass	rabbit-brush needle-and-thread grass cheatgrass long-leaved phlox three-tip sagebrush	92229 90024	
WSc:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass compact selaginella	rabbit-brush Sandberg's bluegrass needle-and-thread grass cheatgrass pasture sage threetip sagebrush antelope brush		
WSc:E	Excellent	shrub/steppe of: big sagebrush bluebunch wheatgrass Sandberg's bluegrass compact selaginella	rabbit-brush needle-and-thread grass cheatgrass sand dropseed snow buckwheat		

WSw Bluebunch wheatgrass - selaginella shallow soil, warm aspect	Biogeoclimatic Unit BGxh1
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Description: steep, warm southeast to west aspects; shallow (less than one metre) soils of various parent materials over bedrock; droughty sites

Map		Succe	essional Trends	
Symbol	Stage	Dominants	Associates	Plots
WSw:P	Poor	shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass	rabbit-brush sand dropseed pasture sage compact selaginella bluebunch wheatgrass	
WSw:F	Fair	shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass bluebunch wheatgrass compact selaginella	rabbit-brush sand dropseed Sandberg's bluegrass snow buckwheat pasture sage	
WSw:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass compact selaginella	rabbit-brush Sandberg's bluegrass needle-and-thread grass cheatgrass sand dropseed snow buckwheat	
WSw:E	Excellent	shrub/steppe of: big sagebrush bluebunch wheatgrass	three-tip sagebrush Sandberg's bluegrass compact selaginella sagebrush mariposa lily Thompson's paintbrush	90017

Biogeoclimatic Unit YS Yellow pine (or ponderosa) - saskatoon fan BGxh1 **Description:** moderate to gentle sloping fan; rubbly and blocky colluvial materials; **Successional Trends** Map Plots Symbol **Dominants** Associates Stage YS1 Shrub-Herb shrub/steppe of: saskatoon big sagebrush sumac bluebunch wheatgrass compact selaginella needle-and-thread grass pussytoes cheatgrass YS2 Pole-Sapling open forest of: Douglas-fir ponderosa pine sumac saskatoon squaw currant bluebunch wheatgrass Sandberg's bluegrass compact selaginella timber milk-vetch YS3 Young Forests open forest of: Douglas-fir

ponderosa pine

open forest of:

ponderosa pine

open forest of:

ponderosa pine

saskatoon

saskatoon

bluebunch wheatgrass

bluebunch wheatgrass

bluebunch wheatgrass

compact selaginella

compact selaginella

compact selaginella

saskatoon

Comments:

YS4

YS5

Mature Forests

Old-Growth

these sites are very droughty on the surface and may have good moisture available deeper in the soil; for the shrub-herb stage range condition classes will be similar to the Big sagebrush - selaginella very shallow soil (SS) habitat unit

sumac

squaw currant

Douglas-fir

Douglas-fir

squaw currant

Sandberg's bluegrass

timber milk-vetch

sumac

squaw currant

sumac

Sandberg's bluegrass

Sandberg's bluegrass

90002

timber milk-vetch

timber milk-vetch

HABITAT CLASSES OF THE Ppxh1

		Biogeoclimatic Unit
ASg	Trembling aspen - common snowberry moist, gully	PPxh1
		PPxh1a

Description: moist gully areas, sometimes with seasonal creeks; often rich soils due to a buildup of broad-leaved litter; may be steep-sided slopes into the gully;

Map Successional Trends			onal Trends		
Symbol	Stage	Dominants	Associates	Plots	
ASg1	Shrub-Herb	shrub/herb dominated cover of: Nootka rose common snowberry trembling aspen Kentucky bluegrass	choke cherry water birch saskatoon Douglas maple red-osier dogwood common hound's-tongue		
ASg2	Pole-Sapling	broad-leaved forest of: trembling aspen common snowberry saskatoon	common hound's-tongue Kentucky bluegrass	91037	
ASg3	Young Forests	broad-leaved forest of: trembling aspen common snowberry saskatoon	common hound's-tongue Kentucky bluegrass		
ASg4	Mature Forests	broad-leaved forest of: trembling aspen Nootka rose common snowberry Kentucky bluegrass	choke cherry water birch saskatoon Douglas maple red-osier dogwood common hound's-tongue		
ASg5	Old-Growth	broad-leaved forest of: trembling aspen common snowberry water birch red-osier dogwood	Douglas-fir saskatoon Douglas maple thimbleberry pinegrass	90056 (PPxh1a)	

Comments:

the old-growth stage may not occur, however these sites may eventually be dominated by Douglas-fir with no disturbance; rich forest floor material of deciduous leaves

BD	Water Birch - Red-osier dogwood swamp			Biogeoclin PPx	oclimatic Unit PPxh1	
Descriptio	n:		,			
Map		Succ	cessional Trends			
Symbol	Stage	Dominants	Ass	sociates	Plots	
BD1	Shrub-Herb					
BD2	Pole-Sapling					
BD3	Young Forests					
BD4	Mature Forests					
BD5	Old-Growth	broad-leaved forest of: water birch red-osier dogwood Nootka rose	mountair soft-leave black cot stinging	ed willow tonwood	92253	

Biogeoclimatic Unit BS Paper birch - common snowberry moist, gully PPxh1 **Description:** moist, receiving gully areas usually of fluvial materials; rich top layers of soil due to thick deciduous litter **Successional Trends** Map Dominants Symbol Plots Associates Stage BS1 Shrub-Herb dense shrub cover of: mountain alder Scouler's willow Nootka rose paper birch saskatoon common snowberry thimbleberry Douglas maple showy aster heart-leaved arnica BS2 Pole-Sapling dense broad-leaved forest of: Douglas-fir paper birch ponderosa pine common snowberry Douglas fir Douglas maple red-osier dogwood BS3 Young Forests dense broad-leaved forest of: Douglas-fir 92201 ponderosa pine 91011 paper birch Douglas maple common snowberry red-osier dogwood BS4 dense broad-leaved forest of: Mature Forests ponderosa pine common snowberry Nootka rose 90005

saskatoon

thimbleberry western larch black cottonwood Douglas maple red-osier dogwood tall oregon grape

paper birch

Douglas-fir

Nootka rose

thimbleberry showy aster star-flowered false Solomon's-seal

saskatoon

91028

Comments: western larch may occur in these units on the east side of Okanagan Valley;

dense forest of:

Douglas maple

common snowberry

heart-leaved arnica

Douglas-fir

BS5

Old-Growth

CD	Black cottonwood - red-osier dogwood floodplain			Biogeoclimatic Unit PPxh1	
Descriptio	n:				
Map		Succ	cessional Trends		
Symbol	Stage	Dominants	As	sociates	Plots
CD1	Shrub-Herb				
CD2	Pole-Sapling				
CD3	Young Forests				
CD4	Mature Forests	broad-leaved forest of: black cottonwood paper birch red-osier dogwood Douglas maple pink wintergreen	common thimbleb red raspb blue wild	perry	92232
CD5	Old-Growth	paper birch red-osier dogwood	black go	oseberry	92214
Comments	:				

CT	Common cattail marsh			Biogeoclimati PPxh1	c Unit
Descriptio	n: high water table fo	or most of the year; vegetation is usually pa	rtially covered	l by water	
Map		Vege	etation		
Symbol	Stage	Dominants		ssociates	Plots
СТ	Edaphic Climax	emergent cover of: common cattail great bulrush			
Comments	:				

ow	Shallow open water		Biogeoclim PPxl		
Description	on:				
Map		Ve	getation		
Symbol	Stage	Dominants		ociates	Plots
Comments	3:		•		•

PA Ponderosa pine - antelope-brush coarse-textured soil Biogeoclimatic Unit
PPxh1

Description: coarse-textured soils of glaciofluvial materials, often with a capping of aeolian sands; occurs on flat to gently sloping areas; rapidly drained, droughty sites

Map		Succe	essional Trends	
Sy9mbol	Stage	Dominants	Associates	Plots
PA1	Shrub-Herb	shrub/steppe of: antelope-brush bluebunch wheatgrass Ponderosa pine diffuse knapweed	red three-awn Sandberg's bluegrass arrow-leaved balsamroot	92203 91002
PA2	Pole-Sapling	open forest of: ponderosa pine bluebunch wheatgrass red three-awn cheatgrass	Douglas-fir compact selaginella antelope brush arrow-leaved balsamroot	91025 91035
PA3	Young Forests	open forest of: ponderosa pine bluebunch wheatgrass red three-awn cheatgrass	Douglas-fir compact selaginella antelope brush arrow-leaved balsamroot	
PA4	Mature Forests	open forest of: ponderosa pine antelope-brush bluebunch wheatgrass cheatgrass arrow-leaved balsamroot	Douglas-fir sand dropseed red three-awn timber milk-vetch	92244 92245 91054
PA5	Old-Growth	open forest of: ponderosa pine antelope-brush	saskatoon needle-and-thread grass sand dropseed red three-awn compact selaginella cheatgrass graceful cinquefoil soft brome bluebunch wheatgrass	92245 90077

Comments:

early successional stages of this unit has similar range condition classes as the Antelope-brush - needle-and thread grass coarse-textured soils (AN) habitat class

PB	Ponderosa pine - water birch moist, fan		Biogeoclimatic Unit PPxh1		
Descriptio	n:				
Мар		Suc	ccessional Trends		
Symbol	Stage	Dominants		sociates	Plots
PB1	Shrub-Herb				
PB2	Pole-Sapling				
PB3	Young Forests				
PB4	Mature Forests				
PB5	Old-Growth	ponderosa pine black cottonwood Wood's rose Kentucky bluegrass kinnikinnick	saskatoo black have water bir common red clove nodding	wthorn ch snowberry er	90036
Comments	:				

PF Ponderosa pine - Idaho fescue warm aspect, deep soil Biogeoclimatic Unit
PPxh1

Description: steep, warm, southeast to west aspects; deep soils of various parent materials;

Map		Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
PF1	Shrub-Herb	grass/steppe of: Idaho fescue bluebunch wheatgrass arrow-leaved balsamroot cheatgrass	big sagebrush prickly phlox sand dropseed red three-awn Sandberg's bluegrass six-weeks fescue sagebrush buttercup	
PF2	Pole-Sapling	parkland forest of: ponderosa pine bluebunch wheatgrass arrow-leaved balsamroot	cheatgrass antelope brush Idaho fescue	91012 92208
PF3	Young Forests	parkland forest of: ponderosa pine bluebunch wheatgrass arrow-leaved balsamroot	cheatgrass antelope brush Idaho fescue	91012 92208
PF4	Mature Forests	parkland forest of: ponderosa pine Idaho fescue bluebunch wheatgrass arrow-leaved balsamroot	Douglas-fir prickly phlox Sandberg's bluegrass six-weeks fescue upland larkspur small-flowered blue-eyed Mary meadow death-camas sagebrush buttercup cheatgrass	
PF5	Old-Growth	parkland forest of: ponderosa pine Idaho fescue	Sandberg's bluegrass small-flowered blue-eyed Mary cheatgrass threetip sagebrush antelope sagebrush arrow-leaved balsamroot bluebunch wheatgrass yarrow long-leaved fleabane	91014 90006

Comments:

early stages will have range condition classes similar to the Bluebunch wheatgrass - Sandberg's bluegrass deep soil, warm aspect (WBw) habitat class

PS Ponderosa pine - selaginella shallow soil Biogeoclimatic Unit
PPxh1

Description: gentle to moderately sloping areas; shallow (less than one metre) soils of various parent materials over bedrock; droughty sites

Map		Successional Trends			
Symbol	Stage	Dominants	Associates	Plots	
PS1	Shrub-Herb	grass/steppe of: saskatoon bluebunch wheatgrasss cheatgrass compact selaginella	big sagebrush Idaho fescue Sandberg's bluegrass arrow-leaved balsamroot desert-parsley		
PS2	Pole-Sapling	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley		
PS3	Young Forests	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley		
PS4	Mature Forests	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley		
PS5	Old-Growth	parkland forest of: ponderosa pine compact selaginella needle-and-thread grass cheatgrass	Douglas-fir Sandberg's bluegrass six weeks fescue	92213	

Comments:

early successional stages will have similar range condition classes as the Bluebunch wheatgrass - selaginella shallow soil, cool aspect (WSc) habitat class

PSc	Ponderosa pine - selaginella shallow soil, cool aspect	Biogeoclimatic Unit PPxh1

Description: steep, cool, northerly or easterly aspects; shallow (less than one metre) soils of various parent materials over bedrock; droughty sites

			1
Stage		Associates	Polgon
Shrub-Herb	grass/steppe of: saskatoon bluebunch wheatgrasss cheatgrass compact selaginella	big sagebrush Idaho fescue Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
Pole-Sapling	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
Young Forests	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
Mature Forests	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
Old-Growth	bluebunch wheatgrass compact selaginella Idaho fescue	Douglas-fir big sagebrush arrow-leaved balsamroot ponderosa pine saskatoon	90016
	Pole-Sapling Young Forests Mature Forests	Stage Shrub-Herb Shrub-Herb Shrub-Herb Shrub-Herb Shrub-Herb Shrub-Herb Shrub-Herb Sayling	Shrub-Herb grass/steppe of: saskatoon bluebunch wheatgrasss cheatgrass compact selaginella Pole-Sapling Pole-Sapling parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella Poung Forests parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella Young Forests parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella Pouglas-fir big sagebrush ldaho fescue cheatgrass sarrow-leaved balsamroot desert-parsley Pouglas-fir big sagebrush ldaho fescue cheatgrass sandberg's bluegrass arrow-leaved balsamroot desert-parsley Mature Forests parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella Mature Forests parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella ldaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley Douglas-fir big sagebrush ldaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley Douglas-fir big sagebrush ldaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley Douglas-fir big sagebrush arrow-leaved balsamroot desert-parsley

Comments:

early successional stages will have similar range condition classes as the Bluebunch wheatgrass - selaginella shallow soil, cool aspect (WSc) habitat class

PSw	Ponderosa pine - selaginella shallow soil, warm aspect	Biogeoclimatic Unit PPxh1

Description: steep, warm southeast to west aspects; shallow (less than one metre) soils of various parent materials over bedrock; droughty sites

Map		Successional Trends			
Symbol	Stage	Dominants	Associates	Plots	
PSw1	Shrub-Herb	grass/steppe of: saskatoon bluebunch wheatgrasss cheatgrass compact selaginella	big sagebrush prickly phlox Sandberg's bluegrass arrow-leaved balsamroot desert-parsley		
PSw2	Pole-Sapling	parkland forest of: ponderosa pine bluebunch wheatgrass compact selaginella pinegrass	Douglas-fir Sandberg's bluegrass arrow-leaved balsamroot antelope brush saskatoon common snowberry mock-orange penstemon	91008 90004 91027 91026	
PSw3	Young Forests	parkland forest of: ponderosa pine bluebunch wheatgrass compact selaginella pinegrass	Douglas-fir Sandberg's bluegrass arrow-leaved balsamroot antelope brush saskatoon common snowberry mock-orange penstemon		
PSw4	Mature Forests	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir prickly phlox big sagebrush cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley		
PSw5	Old-Growth	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella arrow-leaved balsamroot	Douglas-fir cheatgrass antelope brush common snowberry threetip sagebrush rabbit brush timber milk-vetch	91036 90027 92206 92211 91049	

Comments: early successional stages will have similar range condition classes as the Bluebunch wheatgrass - selaginella shallow soil, warm aspect (WSw) habitat class
Psw3 (Young forest) can be dominated by pinegrass

PW	Ponderosa pine - bluebunch wheatgrass mesic	Biogeoclimatic Unit PPxh1
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Description: steep, cool, northerly or easterly aspects; deep soils of various parent materials;

Map		Successional Trends			
Symbol	Stage	Dominants	Associates	Plots	
PW1	Shrub-Herb	grass/steppe of: snowbrush Idaho fescue	arrow-leaved balsamroot saskatoon silky lupine	91038	
PW2	Pole-Sapling	open to parkland forest of: ponderosa pine bluebunch wheatgrass Sandberg's bluegrass	Douglas-fir big sagebrush cheatgrass selaginella arrow-leaved balsamroot Idaho fescue		
PW3	Young Forests	open to parkland forest of: ponderosa pine bluebunch wheatgrass Sandberg's bluegrass	Douglas-fir big sagebrush cheatgrass selaginella arrow-leaved balsamroot Idaho fescue		
PW4	Mature Forests	open to parkland forest of: ponderosa pine bluebunch wheatgrass Sandberg's bluegrass	Douglas-fir big sagebrush cheatgrass selaginella arrow-leaved balsamroot Idaho fescue		
PW5	Old-Growth	open to parkland forest of: ponderosa pine bluebunch wheatgrass	Douglas-fir big sagebrush cheatgrass arrow-leaved balsamroot Idaho fescue saskatoon rough fescue Sandberg's bluegrass	91020 92239 90037	

Comments:

early successional stages will have range condition classes similar to the Bluebunch wheatgrass - Sandberg's bluegrass deep soil, cool aspect (WBc) habitat class

PWc	Ponderosa pine - bluebunch wheatgrass mesic, cool aspect	Biogeoclimatic Unit PPxh1		
Description: steep, cool, northerly or easterly aspects; deep soils of various parent materials;				

Map Successional Trends				
Symbol	Stage	Dominants	Associates	Plots
PWc1	Shrub-Herb	grass/steppe of: bluebunch wheatgrass snowbrush saskatoon pinegrass kinnikinick	ponderosa pine Douglas-fir junegrass trembling aspen	92210
PWc2	Pole-Sapling	open to parkland forest of: ponderosa pine rough fescue bluebunch wheatgrass	Douglas-fir squaw current Scouler's Hawkweed	
PWc3	Young Forests	open to parkland forest of: ponderosa pine rough fescue bluebunch wheatgrass	Douglas-fir squaw current Scouler's Hawkweed	92223
PWc4	Mature Forests	open to parkland forest of: ponderosa pine Douglas-fir pinegrass	saskatoon choke cherry common snowberry bluebunch wheatgrass fescue penstemon	91013
PWc5	Old-Growth	open to parkland forest of: ponderosa pine bluebunch wheatgrass	Douglas-fir arrow-leaved balsamroot antelope brush pinegrass rough fescue timber milk-vetch	92209 91018

PWf	Ponderosa pine - bluebunch wheatgrass mesic, fan	Biogeoclimatic Unit PPxh1

Description:

Map		Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
PWc1	Shrub-Herb	Ponderosa pine bluebunch wheatgrass	Douglas-fir saskatoon umber pussytoes	91001
PWc2	Pole-Sapling	Ponderosa pine bluebunch wheatgrass stiff needle-grass	common snowberry saskatoon big sagebrush rough fescue timber milk-vetch umber pussytoes	91001 92224 92223 91052
PWc3	Young Forests	Ponderosa pine bluebunch wheatgrass stiff needle-grass	common snowberry saskatoon big sagebrush rough fescue timber milk-vetch umber pussytoes	
PWc4	Mature Forests	Ponderosa pine Douglas-fir	common snowberry saskatoon snowbrush birch-leaved spirea bluebunch wheatgrass pinegrass	92207 92251
PWc5	Old-Growth	Ponderosa pine arrow-leaved balsamroot	saskatoon pinegrass timber milk-vetch Meadow death camas	92212

RM	Western redcedar - Douglas maple riparian			Biogeoclimatic Unit PPxh1	
Descriptio	n:		,		
Map		Succ	cessional Trends		
Symbol	Stage	Dominants		ociates	Plots
RM1	Shrub-Herb				
RM2	Pole-Sapling				
RM3	Young Forests				
RM4	Mature Forests	western redcedar mountain alder Douglas-fir red raspberry common snowberry Douglas maple red-osier dogwood	black cottonwood fringed aster star-flowered Solomon's seal		92248
RM5	Old-Growth				
Comments	:				

SB	Silverweed - bulrush meadow			Biogeoclimatic Unit BGxh1			
Descriptio	Description: pondside area subject to high water table for much of the year; very poorly drained lacustrine material						
Map		Succession	onal Trends				
Symbol	Stage	Dominants	As	sociates	Plots		
SB	Edaphic Climax	graminoid-forb cover of: bulrush silverweed	weeping swamp s	Associates common spike-rush weeping alkaligrasss swamp smartweed shore buttercup			
Comments	:						

SOc	Saskatoon - mock-orange talus, cool aspect			Biogeoclimatic Unit PPxh1	
Description aspect	n: steep sites of rubb	y or blocky colluvial material at the bas	e of rock outcrops	; cool northern ar	nd eastern
Map		Succe	essional Trends		
Symbol	Stage	Dominants	Associates		Plots
SOc	Edaphic Climax	sparse shrub cover of: sumac ocean-spray big sagebrush poison-ivy white clematis	antelope bluebund cheatgra Oregon	ch wheatgrass ss	
Comments:	sparsely vegetated ur	nit often mixed with unvegetated talus			

SOw	Saskatoon - mock-orange talus, warm aspect		Biogeoclimatic Unit PPxh1		
Descriptio	on: steep sites of rubbl	y or blocky colluvial material at the bas	e of rock outcrops	; southeast to wes	terly aspect
Map		Succe	essional Trends		
Symbol	Stage	Dominants	A	ssociates	Plots
SOw	Edaphic Climax	sparse shrub cover of: sumac ocean-spray big sagebrush poison-ivy white clematis	antelope bluebun cheatgra Oregon	ch wheatgrass ass	
Comments	s: sparsely vegetated un	it often mixed with unvegetated talus			

SN	Big sagebrush - needle-and-thread grass coarse textured soil			Biogeoclimatic Unit PPxh1	
Descriptio	n:				
Map		Suc	ccessional Trends		
Symbol	Range condition	Dominants		sociates	Plots
SN:P	Poor				
SN:F	Fair	threetip sagebrush	big sage bluebun	g's bluegrass brush ch bluegrass bluegrass	91031
SN:G	Good			V	
SN:E	Excellent				
Comments	<u> </u>				

SOc	Saskatoon - mock-orange talus, cool aspect			Biogeoclimatic Unit PPxh1	
Descriptio	n;				
Map		Succe	ssional Trends		
Symbol	Stage	Dominants	Ass	sociates	Plots
SOc1	Shrub-Herb				
SOc2	Pole-Sapling				
SOc3	Young Forests				
SOc4	Mature Forests				
SOc5	Old-Growth	Douglas-fir common snowberry compact selaginella moss (dicranium)		nountain er ch wheatgrass ch buttercup nountain	92204
Comments	: '		ı		

Sow	Saskatoon - mock-orange talus, cool aspect			Biogeoclimatic Unit PPxh1	
Description	on:				
Map	G.		cessional Trends	.,	DI 4
Symbol SOw1	Stage Shrub-Herb	Dominants	Assoc	ciates	Plots
SOw2	Pole-Sapling				
SOw3	Young Forests				
SOw4	Mature Forests				
SOw5	Old-Growth	Ponderosa pine saskatoon mock-orange bluebunch wheatgrass compact selaginella	sumac choke cher shrubby pe Douglas m arrow-leav balsamr	enstemon aple ed	92255
Comments	: :		Calsum		

SP Common snowberry - pinegrass moist Biogeoclimatic Unit
PPxh1

Description: moisture receiving sites in lower slope positions; often gulleys; rich soil

Map		Successional Trends			
Symbol	Stage	Dominants	Associates	Plots	
SP1	Shrub-Herb				
SP2	Pole-Sapling	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass		
SP3	Young Forests	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass		
SP4	Mature Forests	closed forests of Douglas-fir common snowberry Ponderosa pine	tall Oregon-grape birch-leaved spirea pinegrass	91022	
SP5	Old-Growth	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass		
Comments:					

SS	Big sagebrush - selaginella very shallow soil	Biogeoclimatic Unit PPxh1

Description: drained

gentle to moderate sloping areas of very shallow soil over rock outcrops; droughty sites that are rapidly

Map		Successional Trends			
Symbol	Stage	Dominants Associates		Plots	
SS:P	Poor	sparse shrub/steppe of: big sagebrush cheatgrass needle-and-thread grass compact selaginella	rabbit-brush sand dropseed Indian-wheat line-leaved fleabane		
SS:F	Fair	sparse shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass compact selaginella	rabbit-brush sand dropseed bluebunch wheatgrass line-leaved fleabane Sandberg's bluegrass brittle prickly-pear cactus		
SS:G	Good	sparse shrub/steppe of: bluebunch wheatgrass compact selaginella	Ponderosa pine	91021	
SS:E	Excellent	sparse shrub/steppe of: big sagebrush bluebunch wheatgrass needle-and-thread grass compact selaginella	rabbit-brush sand dropseed Sandberg's bluegrass line-leaved fleabane cheatgrass brittle prickly-pear cactus		

SWI	Big sagebrush - bluebunch	n wheatgrass mesic, lacstrine		Biogeoclima PPxh	tic Unit 1
Descriptio	n:				
Map		Suc	cessional Trends		
Symbol	Stage	Dominants		sociates	Plots
SW1:P	Poor				
SWI:F	Fair				
SWI:G	Good	bluebunch wheatgrass	Ponderos thread-le	ved phlox sa pine saved fleabane a bladder-pod	92215
SWIE	Excellent				
Comments	:	.1	1		

WA	Bluebunch wheatgrass - arrow-leaved balsamroot deep soil		Biogeoclimatic Unit PPxh1a		
Descriptio	n:				
Map		Succe	essional Trends		
Symbol	Stage	Dominants		sociates	Plots
WA:P	poor				
WA:F	fair				
WA:G	good	bluebunch wheatgrass Sandberg;s bluegrass cheatgrass arrow-leaved balsamroot	six-week big sagel parsnip-f bucky compact	brush flowered	90079 90011
WA:E	excellent				
Comments		.l			1

WAc	Bluebunch wheatgrass - arrow-leaved balsamroot deep soil, cool aspect	Biogeoclimatic Unit PPxh1a
Description	n: steep, cool, northerly or easterly aspects; deep soils of various parent materi	als

Map	Range	Successional Trends		
Symbol	Condition	Dominants	Associates	Plots
WAc:P	Poor	shrub/steppe of: big sagebrush cheatgrass Sandberg's bluegrass	needle-and-thread grass six-weeks fescue silky lupine	
WAc:F	Fair	shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass Sandberg's bluegrass	bluebunch wheatgrass six-weeks fescue arrow-leaved balsamroot parsnip-flowered buckwheat silky lupine	
WAc:G	Good	shrub/steppe of: bluebunch wheatgrass Ponderosa pine rough fescue	cheatgrass arrow-leaved balsamroot three-tip sagebrush big sagebrush sand dropseed junegrass diffuse knapweed	92243
WAc:E	Excellent	grass/steppe of: bluebunch wheatgrass threetip sagebrush Idaho fescue	arrow-leaved balsamroot threetip sagebrush junegrass rough fescue silky lupine	92222

		Biogeoclimatic Unit
WAw	Bluebunch wheatgrass - arrow-leaved balsamroot deep soil, war, aspect	PPxh1a

Description: steep, warm, southeast to west aspects; deep soils of various parent materials

Map	Range	Successional Trends			
Symbol	Condition	Dominants	Associates	Plots	
WAw:P	Poor	shrub/steppe of: big sagebrush cheatgrass Sandberg's bluegrass	prickly phlox needle-and-thread grass six-weeks fescue silky lupine		
WAw:F	Fair	shrub/steppe of: red three-awn diffuse knapweed	Sandberg's bluegrass needle-and-thread grass cheatgrass compact selaginella sand dropseed pasture sage	92241	
WAw:G	Good	shrub/steppe of: three-tip sagebrush bluebunch wheatgrass	rabbit brush arrow-leaved balsamroot silky lupine diffuse knapweed cheatgrass brittle prickly-bear cactus	92221	
WAw:E	Excellent	grass/steppe of: big sagebrush bluebunch wheatgrass Idaho fescue	arrow-leaved balsamroot junegrass Sandberg's bluegrass low pussytoes	91044	

		Biogeoclimatic Unit
WF	Bluebunch wheatgrass - Idaho fescue coarse-textured soil	PPxh1a
		and PPxh1

Description: gentle to moderate sloping areas; coarse-textured soils of glaciofluvial material; rapidly drained soil

Мар	Range	Succe	essional Trends	
Symbol	Condition	Dominants	Associates	Plots
WF:P	Poor	shrub/steppe of: big sagebrush cheatgrass Indian-wheat	threetip sagebrush Sandberg's bluegrass needle-and-thread grass six-weeks fescue low pussytoes	
WF:F	Fair	shrub/steppe of: big sagebrush needle-and-thread grass Sandberg's bluegrass	threetip sagebrush bluebunch wheatgrass silky lupine parsnip-flowered buckwheat cheatgrass	90057 90078
WF:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass threetip sagebrush	Sandberg's bluegrass pasture sage cheatgrass	91030
WF:E	Excellent	grass/steppe of: bluebunch wheatgrass Idaho fescue big sagebrush	Sandberg's bluegrass threetip sagebrush antelope brush cheatgrass silky lupine compact selaginella	90058 90080

WFf	Bluebunch wheatgrass - Idaho fescue coarse-textured soil, fan	Biogeoclimatic Unit PPxh1a

Description: gentle to moderate sloping areas; coarse-textured soils of glaciofluvial material; rapidly drained soil

Map	Range	Succ	essional Trends	
Symbol	Condition	Dominants	Associates	Plots
WFf:P	Poor	shrub/steppe of: big sagebrush cheatgrass Indian-wheat	threetip sagebrush Sandberg's bluegrass needle-and-thread grass six-weeks fescue low pussytoes	
WFf:F	Fair	shrub/steppe of: big sagebrush Sandberg's bluegrass	six-weeks fescue sand dropseed needle-and-thread grass cheatgrass Thompson's paintbrush	92237
WFf:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass Idaho fescue	threetip sagebrush Sandberg's bluegrass needle-and-thread grass junegrass silky lupine lemonweed moderate cryptogam cover	
WFf.E	Excellent	grass/steppe of: bluebunch wheatgrass Idaho fescue good cryptogam cover	big sagebrush Sandberg's bluegrass junegrass lemonweed	

WJ Bluebunch wheatgrass - junegrass mesic Biogeoclimatic Unit PPxh1a
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Description: gentle to moderate sloped areas of morainal material; deep, well drained soil

Map	Range	Successio	nal Trends	
Symbol	Condition	Dominants	Associates	Plots
WJ:P	Poor	shrub/steppe of: big sagebrush cheatgrass Indian-wheat	threetip sagebrush needle-and-thread grass Sandberg's bluegrass six-weeks fescue low pussytoes	
WJ:F	Fair	shrub/steppe of: needle-and-thread grass	threetip sagebrush big sagebrush junegrass mock-orange pasture sage cheatgrass	92250 92247
WJ:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass Sandberg's bluegrass	junegrass silky lupine long-leaved phlox slender hawksbeard swale desert-parsley	90055
WJ:E	Excellent	grass/steppe of: bluebunch wheatgrass Idaho fescue good cover of cryptogams	big sagebrush junegrass Sandberg's bluegrass	

WSc Bluebunch wheatgrass - selaginella shallow soil, cool aspect	Biogeoclimatic Unit PPxh1
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Description: steep, cool, northerly or easterly aspects; shallow (less than one metre) soils of various parent materials over bedrock; droughty sites

Map		Succ	essional Trends	
Symbol	Stage	Dominants	Associates	Plots
WSc:P	Poor	shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass	rabbit-brush sand dropseed pasture sage compact selaginella bluebunch wheatgrass	
WSc:F	Fair	shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass bluebunch wheatgrass compact selaginella	rabbit-brush sand dropseed Sandberg's bluegrass snow buckwheat pasture sage	
WSc:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass compact selaginella	rabbit-brush Sandberg's bluegrass needle-and-thread grass cheatgrass sand dropseed snow buckwheat	
WSc:E	Excellent	shrub/steppe of: big sagebrush bluebunch wheatgrass Sandberg's bluegrass compact selaginella	rabbit-brush needle-and-thread grass cheatgrass sand dropseed snow buckwheat	

WSw Bluebunch wheatgrass - selaginella shallow soil, warm aspect	Biogeoclimatic Unit PPxh1
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Description: steep bedrock; droughty sites steep, warm southeast to west aspects; shallow (less than one metre) soils of various parent materials over

Map		Succe	essional Trends	
Symbol	Stage	Dominants	Associates	Plots
WSw:P	Poor	shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass	rabbit-brush sand dropseed pasture sage compact selaginella bluebunch wheatgrass	
WSw:F	Fair	shrub/steppe of: cheatgrass bluebunch wheatgrass sand dopseed antelope brush	sumac arrow-leaved balsamroot needle-and-thread grass long-leaved phlox	91016 92202
WSw:G	Good	shrub/steppe of: bluebunch wheatgrass arrow-leaved balsamroot	saskatoon birch-leaved spirea Sandberg's bluegrass compact selaginella Idaho fescue junegrass	91034 91043
WSw:E	Excellent	shrub/steppe of: big sagebrush bluebunch wheatgrass Sandberg's bluegrass compact selaginella	rabbit-brush needle-and-thread grass cheatgrass sand dropseed snow buckwheat	

HABITAT CLASSES

OF THE IDFxh1

ASg Trembling aspen - common snowberry moist, gully

Biogeoclimatic Unit
IDFxh1

Description: moist gully areas, sometimes with seasonal creeks; often rich soils due to a buildup of broad-leaved litter; may be steep-sided slopes into the gully;

Map		Succession	onal Trends	
Symbol	Stage	Dominants	Associates	Plots
ASg1	Shrub-Herb	shrub/herb dominated cover of: Nootka rose common snowberry trembling aspen Kentucky bluegrass	choke cherry water birch saskatoon Douglas maple red-osier dogwood common hound's-tongue	
ASg2	Pole-Sapling	broad-leaved forest of: trembling aspen common snowberry Douglas maple	Nootka rose mountain sweet-cicely common hound's-tongue blue stickweed Kentucky bluegrass	92219
ASg3	Young Forests	broad-leaved forest of: trembling aspen common snowberry Douglas maple	Nootka rose mountain sweet-cicely common hound's-tongue blue stickweed Kentucky bluegrass bullhead waterleaf western meadowrue	
ASg4	Mature Forests	broad-leaved forest of: trembling aspen Nootka rose common snowberry trembling aspen Kentucky bluegrass	choke cherry water birch saskatoon Douglas maple red-osier dogwood common hound's-tongue	
ASg5	Old-Growth	closed forest of: Douglas-fir Nootka rose common snowberry trembling aspen Kentucky bluegrass	choke cherry water birch saskatoon Douglas maple red-osier dogwood common hound's-tongue	

Comments:

the old-growth stage may not occur, however these sites may eventually be dominated by Douglas-fir with no disturbance; rich forest floor material of deciduous leaves

Biogeoclimatic Unit

Biogeoclimatic Unit

IDFxh1

Description: moist, receiving gully areas usually of fluvial materials; rich top layers of soil due to thick deciduous litter

Map	Map	Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
BS1	Shrub-Herb	dense shrub cover of: paper birch Douglas maple red-osier dogwood	showy aster Scouler's willow black gooseberry star-flowered false Solomon's-seal heart-leaved arnica	90070
BS2	Pole-Sapling	dense broad-leaved cover of: paper birch Scouler's willow common snowberry Douglas maple heart-leaved arnica	Douglas-fir ponderosa pine mountain alder Nootka rose saskatoon thimbleberry showy aster	
BS3	Young Forests	dense broad-leaved forest of: paper birch Scouler's willow common snowberry Douglas maple heart-leaved arnica	Douglas-fir ponderosa pine Nootka rose saskatoon thimbleberry showy aster star-flowered false Solomon's-seal	
BS4	Mature Forests	dense broad-leaved forest of: paper birch Douglas-fir common snowberry Douglas maple heart-leaved arnica	ponderosa pine Nootka rose saskatoon thimbleberry showy aster star-flowered false Solomon's-seal	
BS5	Old-Growth	dense forest of: Douglas-fir common snowberry Douglas maple heart-leaved arnica	paper birch Douglas-fir Nootka rose saskatoon thimbleberry showy aster star-flowered false Solomon's-seal	

Comments: western larch may occur in these units on the east side of Okanagan Valley;

CT	Common cattail marsh			Biogeoclima PPxh	
Descriptio	n:				
Map		Su	ccessional Trends		
Symbol	Stage	Dominants	As	sociates	Plots
СТ	Edaphic climax	great bulrush	water bi bluebell bull this	S	92225
Comments	May be dominated by either	er cattail or bulrush.	·		

 DP
 Douglas-fir - pinegrass mesic
 Biogeoclimatic Unit IDFxh1

 Description:
 gentle to moderate sloped areas of morainal material; deep, well drained soil

Map			ssional Trends	
Symbol	Stage	Dominants	Associates	Plots
DP1	Shrub-Herb	shrub-herb cover of: redstem ceanothus saskatoon ocean-spray pinegrass bluebunch wheatgrass	common snowberry heart-leaved arnica yarrow Idaho fescue pussytoes	
DP2	Pole-Sapling	cover of Douglas-fir birch-leaved spirea common snowberry pinegrass	ponderosa pine redstem ceanothus ocean-spray saskatoon showy aster heart-leaved arnica bluebunch wheatgrass	
DP3	Young Forests	closed forests of: Douglas-fir birch-leaved spirea common snowberry pinegrass	ponderosa pine redstem ceanothus ocean-spray saskatoon showy aster heart-leaved arnica bluebunch wheatgrass	
DP4	Mature Forests	closed forests of: Douglas-fir birch-leaved spirea common snowberry pinegrass	ponderosa pine ocean-spray saskatoon showy aster heart-leaved arnica	
DP5	Old-Growth	closed forests of: Douglas-fir birch-leaved spirea pinegrass heart-leaved arnica sakatoon	ponderosa pine common snowberry soopalalie snowbrush dwarf blueberry kinnikinnick	92217 92227

Comments: the understory may be quite sparse in later successional stages

Biogeoclimatic Unit DPc Douglas-fir - pinegrass mesic, cool aspect IDFxh1 **Description:** steep, cool, northerly or easterly aspects; usually deep soils of various parent materials **Successional Trends** Map Symbol Plots **Dominants** Stage Associates DPc1 Shrub-Herb shrub-herb cover of: common snowberry heart-leaved arnica redstem ceanothus saskatoon yarrow Idaho fescue ocean-spray pinegrass pussytoes bluebunch wheatgrass cover of DPc2 Pole-Sapling ponderosa pine 92244 Douglas-fir 90053 ocean-spray pinegrass saskatoon 92205 showy aster heart-leaved arnica bluebunch wheatgrass Scouler's willow Rocky mountain woodsia arrow-leaved balsamroot timber milk-vetch DPc3 Young Forests cover of ocean-spray Douglas-fir saskatoon pinegrass showy aster bluegrass birch-leaved spirea Scouler's willow Rocky mountain woodsia DPc4 Mature Forests closed forests of: ponderosa pine Douglas-fir ocean-spray birch-leaved spirea saskatoon common snowberry showy aster pinegrass heart-leaved arnica DPc5 Old-Growth closed forests of: ponderosa pine 90025 Douglas-fir ocean-spray 90050 common snowberry saskatoon showy aster heart-leaved arnica the understory may be quite sparse in later successional stages Comments:

DPf	Douglas-fir - pinegrass mesic, fluvial			Biogeoclimatic Unit IDFxh1	
Descriptio	on: gentle to moderate	sloped areas of fluvial material; deep,	well drained, coarse-textured soi	I	
Map		Succ	essional Trends		
Symbol	Stage	Dominants	Associates	Plots	
DPf1	Shrub-Herb	shrub-herb cover of: redstem ceanothus saskatoon ocean-spray pinegrass bluebunch wheatgrass	common snowberry heart-leaved arnica yarrow Idaho fescue pussytoes		
DPf2	Pole-Sapling	cover of Douglas-fir birch-leaved spirea common snowberry pinegrass	ponderosa pine redstem ceanothus ocean-spray saskatoon showy aster heart-leaved arnica bluebunch wheatgrass		
DPf3	Young Forests	closed forests of: Douglas-fir birch-leaved spirea common snowberry pinegrass	ponderosa pine redstem ceanothus ocean-spray saskatoon showy aster heart-leaved arnica bluebunch wheatgrass		
DPf4	Mature Forests	closed forests of: Douglas-fir birch-leaved spirea common snowberry pinegrass	ponderosa pine ocean-spray saskatoon showy aster heart-leaved arnica		
DPf5	Old-Growth	closed forests of: Douglas-fir common snowberry ocean-spray	pinegrass yellow violet	9007	

DWd Douglas-fir - bluebunch wheatgrass warm aspect, deep soil	geoclimatic Unit IDFxh1
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Description: steep, warm, southeast to west aspects; deep soils of various parent materials;

Map		Succe	essional Trends	
Symbol	Stage	Dominants	Associates	Plots
DWd1	Shrub-Herb	open forests of: Douglas-fir arrow-leaved balsamroot common snowberry rough fescue	birch-leaved spirea Idaho fescue saskatoon junegrass slender hawksbeard	91042
DWd2	Pole-Sapling	shrub-herb cover of: saskatoon snowbrush bluebunch wheatgrass	arrow-leaved balsmroot parsnip-flowered buckwheat yarrow cheatgrass pussytoes	
DWd3	Young Forests	open forests of: Douglas-fir ponderosa pine saskatoon bluebunch wheatgrass pinegrass	snowbrush birch-leaved spirea arrow-leaved balsmroot parsnip-flowered buckwheat yarrow	
DWd4	Mature Forests	open forests of: Douglas-fir ponderosa pine saskatoon bluebunch wheatgrass pinegrass	snowbrush birch-leaved spirea arrow-leaved balsmroot parsnip-flowered buckwheat yarrow	
DWd5	Old-Growth	open forests of: Douglas-fir ponderosa pine saskatoon bluebunch wheatgrass pinegrass	snowbrush birch-leaved spirea arrow-leaved balsmroot parsnip-flowered buckwheat yarrow	

DWs	Douglas-fir - bluebunch wh	heatgrass warm aspect, shallow (less than	n one metre)	Biogeoclimat IDFxhl	
Description: steep, warm, southeast to west aspects; deep soils of various parent materials;					
Map		Succe	ssional Trends		
Symbol	Stage	Dominants	As	sociates	Plots
DWs1	Shrub-Herb	shrub-herb cover of: saskatoon snowbrush bluebunch wheatgrass	parsnip-buckwhe	aved balsmroot flowered eat f phacelia ss	
DWs2	Pole-Sapling	open forests of: Douglas-fir ponderosa pine saskatoon bluebunch wheatgrass pinegrass	snowbru arrow-le compact parsnip- buckwhe	sh aved balsmroot selaginella flowered eat f phacelia	
DWs3	Young Forests	open forests of: Douglas-fir ponderosa pine saskatoon bluebunch wheatgrass pinegrass	compact parsnip- buckwhe	aved balsmroot selaginella flowered	
DWs4	Mature Forests	open forests of: Douglas-fir ponderosa pine saskatoon bluebunch wheatgrass pinegrass	compact parsnip- buckwhe	aved balsmroot selaginella flowered	
DWs5	Old-Growth	open forests of: Douglas-fir bluebunch wheatgrass arrow-leaved balsamroot compact selaginella	parsnip- buckwhe umber pi cheatgra	eat ussytoes	90026 90069

Idaho fescue - bluebunch	wheatgrass steep, warm aspect		Biogeoclimati IDFxh1	c Unit
Description: very steep, warm, southeast to west aspects; deep soils of colluvial material; rapidly drained soils				ls
Range	Succe	essional Trends		
Condition	Dominants	A	ssociates	Plots
Poor	grass/steppe of: cheatgrass pasture sage	arrow-le silky lup	aved balsamroot	
Fair	grass/steppe of: Kentucky bluegrass cheatgrass arrow-leaved balsamroot pasture sage	Vasey's silky lup	big sagebrush ine	
Good	grass/steppe of: Idaho fescue bluebunch wheatgrass junegrass	arrow-le cheatgra silky lup meadow	aved balsamroot ss ine death-camas	
Excellent	grass/steppe of: Idaho fescue bluebunch wheatgrass junegrass	arrow-le cheatgra silky lup	aved balsamroot ss ine	90066
s: similar community t	o South Slope in the Ashnola; check the	ir info Ted		
	Range Condition Poor Fair Good Excellent	Range Condition Poor grass/steppe of: cheatgrass pasture sage Fair grass/steppe of: Kentucky bluegrass cheatgrass arrow-leaved balsamroot pasture sage Good grass/steppe of: Idaho fescue bluebunch wheatgrass junegrass Excellent grass/steppe of: Idaho fescue bluebunch wheatgrass junegrass	Range Condition Dominants A Poor grass/steppe of: cheatgrass pasture sage silky lup meadow Fair grass/steppe of: Kentucky bluegrass cheatgrass silky lup arrow-leaved balsamroot pasture sage silky lup arrow-leaved balsamroot pasture sage silky lup meadow Good grass/steppe of: threetip: arrow-leaved balsamroot meadow pasture sage silky lup arrow-leaved balsamroot cheatgras silky lup meadow pasture sage silky lup meadow silky lup meadow	Idaho fescue - bluebunch wheatgrass steep, warm aspect Very steep, warm, southeast to west aspects; deep soils of colluvial material; rapidly drained soil Range Condition Dominants Associates Foor grass/steppe of:

ow	Shallow open water	ter		Biogeoc ID	limatic Unit Fxh1
Description	on:				
Map		Ves	getation		
Symbol	Stage	Dominants		sociates	Polygons
OW					
Comments	X.				

PS Ponderosa pine - selaginella shallow soil Biogeoclimatic Unit
PPxh1

Description: gentle to moderately sloping areas; shallow (less than one metre) soils of various parent materials over bedrock; droughty sites

Map			cessional Trends	
Symbol	Stage	Dominants	Associates	Plots
PS1	Shrub-Herb	grass/steppe of: saskatoon bluebunch wheatgrasss cheatgrass compact selaginella	big sagebrush Idaho fescue Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PS2	Pole-Sapling	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PS3	Young Forests	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PS4	Mature Forests	parkland forest of: ponderosa pine Douglas-fir	arrow-leaved balsamroot bluebunch wheatgrass common juniper pinegrass tall oregon-grape rough fescue birch-leaved spirea	92246
PS5	Old-Growth	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	

Comments:

early successional stages will have similar range condition classes as the Bluebunch wheatgrass - selaginella shallow soil, cool aspect (WSc) habitat class

PSc	Ponderosa pine - selaginella shallow soil, cool aspect	Biogeoclimatic Unit IDFxh1
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Description: steep, cool, northerly or easterly aspects; shallow (less than one metre) soils of various parent materials over bedrock; droughty sites

Map		Succ	cessional Trends	
Symbol	Stage	Dominants	Associates	Plots
PSc1	Shrub-Herb	grass/steppe of: saskatoon bluebunch wheatgrasss cheatgrass compact selaginella	big sagebrush Idaho fescue Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PSc2	Pole-Sapling	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PSc3	Young Forests	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PSc4	Mature Forests	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PSc5	Old-Growth	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir big sagebrush Idaho fescue cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	

Comments:

early successional stages will have similar range condition classes as the Bluebunch wheatgrass - selaginella shallow soil, cool aspect (WSc) habitat class

PSw	Ponderosa pine - selaginella shallow soil, warm aspect	Biogeoclimatic Unit IDFxh1

Description: steep, warm southeast to west aspects; shallow (less than one metre) soils of various parent materials over bedrock; droughty sites

Map		Successional Trends		
Symbol	Stage	Dominants	Associates	Plots
PSw1	Shrub-Herb	grass/steppe of: saskatoon bluebunch wheatgrasss cheatgrass compact selaginella	big sagebrush prickly phlox Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PSw2	Pole-Sapling	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir prickly phlox big sagebrush cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PSw3	Young Forests	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir prickly phlox big sagebrush cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PSw4	Mature Forests	parkland forest of: ponderosa pine saskatoon bluebunch wheatgrass compact selaginella	Douglas-fir prickly phlox big sagebrush cheatgrass Sandberg's bluegrass arrow-leaved balsamroot desert-parsley	
PSw5	Old-Growth	parkland forest of: ponderosa pine bluebunch wheatgrass compact selaginella cheatgrass	Douglas-fir common snowberry spreading dogbane	90073 92218

Comments:

early successional stages will have similar range condition classes as the Bluebunch wheatgrass - selaginella shallow soil, warm aspect (WSw) habitat class

Map Successional Trends Symbol Stage Dominants Associates Plots	SB	Silverweed - bulrush mea	dow	Biogeoclima IDFxh	
Symbol Stage Dominants Associates Plots SB Edaphic graminoid-forb cover of: common spike-rush Climax bulrush weeping alkaligrasss silverweed swamp smartweed	Descriptio	on: pondside area sub	ject to high water table for much of the ye	ear; very poorly drained lacustrine n	naterial
SB Edaphic graminoid-forb cover of: common spike-rush Climax bulrush weeping alkaligrasss silverweed swamp smartweed	Map		Succes	sional Trends	
Climax bulrush weeping alkaligrasss silverweed swamp smartweed	Symbol	Stage	Dominants	Associates	Plots
	SB	Climax	bulrush	weeping alkaligrasss swamp smartweed	

SOc	Saskatoon - mock-orange talus, cool aspect		Bioge	oclimatic Unit IDFxh1
Description aspect	n: steep sites of rubb	ly or blocky colluvial material at the base of rock o	utcrops; cool north	nern and eastern
Map		Successional Tr	ends	
Symbol	Stage	Dominants	Associates	Plots
SOc	Edaphic Climax	sumac b c c	ntelope-brush luebunch wheatgra heatgrass Oregon woodsia	iss
Comments	: sparsely vegetated u	nit often mixed with unvegetated talus		

SOw	w Saskatoon - mock-orange talus, warm aspect			Biogeoclima IDFxh	
Description	on: steep sites of rubb	bly or blocky colluvial material at the base of	of rock outcrops	; southeast to west	terly aspect
Map		Success	sional Trends		
Symbol	Stage	Dominants	A	ssociates	Plots
SOw	Edaphic Climax	sparse shrub cover of: sumac ocean-spray big sagebrush poison-ivy white clematis	antelope bluebun cheatgra Oregon	ch wheatgrass ss	
Comments	: sparsely vegetated ι	unit often mixed with unvegetated talus			

SP Common snowberry - pinegrass moist Biogeoclimatic Unit IDFxh1

Description: moisture receiving sites in lower slope positions; often gulleys; rich soil

	Suc			
Stage	Dominants	Associates	Plots	
Shrub-Herb				
Pole-Sapling	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass		
Young Forests	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass		
Mature Forests	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass		
Old-Growth	closed forests of Douglas-fir common snowberry Wood's rose pinegrass	ponderosa pine trembling aspen tall Oregon-grape Douglas maple Kentucky bluegrass		
	Shrub-Herb Pole-Sapling Young Forests Mature Forests	Stage Shrub-Herb Pole-Sapling Closed forests of Douglas-fir common snowberry Wood's rose pinegrass Young Forests Closed forests of Douglas-fir common snowberry Wood's rose pinegrass Mature Forests Closed forests of Douglas-fir common snowberry Wood's rose pinegrass Old-Growth Closed forests of Douglas-fir common snowberry Wood's rose pinegrass	Pole-Sapling Closed forests of Douglas-fir common snowberry Wood's rose pinegrass Poung Forests Closed forests of Douglas-fir common snowberry Wood's rose pinegrass Closed forests of Douglas-fir common snowberry Wood's rose pinegrass Mature Forests Closed forests of Douglas-fir common snowberry Wood's rose pinegrass Mature Forests Closed forests of Douglas-fir common snowberry Wood's rose pinegrass Closed forests of Douglas-fir common snowberry Wood's rose pinegrass Old-Growth Closed forests of Douglas-fir common snowberry Wood's rose pinegrass Closed forests of Douglas-fir common snowberry Wood's rose Douglas-fir common snowberry Wood's rose Douglas-fir common snowberry Wood's rose Douglas maple trembling aspen tall Oregon-grape Douglas maple	

VKw	Vasey's big sagebrush - Ke	entucky bluegrass grassland, warm aspect	Biogeoclim IDFx	atic Unit h1	
Descriptio	Description:				
Map		Successional T	rends		
Symbol VKw:P	Stage	Dominants	Associates	Plots	
VKw:P	Poor				
VKw:F	Fair				
VKw:G	Good				
VKw:E	Excellent				
Comments	:			ı	

				Biogeoclim	natic Unit
WA	Bluebunch wheatgrass - a	rrow-leaved balsamroot deep soil		IDFx	th1
Descriptio	steep, cool, northe	erly or easterly aspects; deep soils of vario	ous parent materi	als	
Map	Range	Success	sional Trends		
Symbol	Condition	Dominants		sociates	Plots
WA:P	Poor				
WA:F	Fair				
WA:G	Good	big sagebrush Sandberg's bluegrass bluebunch wheatgrass cheatgrass	arrow-le	n brush snowberry aved umroot	90033 90072
WA:E	Excellent		omy rap		
Comments	:				

WAa	Physhungh wheetgrees arrow leaved helsemreat doop sail and senset	Biogeoclimatic Unit
WAc	Bluebunch wheatgrass - arrow-leaved balsamroot deep soil, cool aspect	IDFxh1

Description: steep, cool, northerly or easterly aspects; deep soils of various parent materials

Map	Range	Succession	onal Trends	
Symbol	Condition	Dominants	Associates	Plots
WAc:P	Poor	shrub/steppe of: big sagebrush cheatgrass Sandberg's bluegrass	needle-and-thread grass six-weeks fescue silky lupine	
WAc:F	Fair	shrub/steppe of: needle-and-thread grass Bbluebunch wheatgrass junegrass	Douglas-fir pasture sage	92236
WAc:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass Sandberg's bluegrass junegrass	needle-and-thread grass Idaho fescue cheatgrass arrow-leaved balsamroot parsnip-flowered buckwheat silky lupine	
WAc:E	Excellent	grass/steppe of: bluebunch wheatgrass Sandberg's bluegrass junegrass	big sagebrush needle-and-thread grass Idaho fescue cheatgrass arrow-leaved balsamroot parsnip-flowered buckwheat	

WAw	Bluebunch wheatgrass - arrow-leaved balsamroot deep soil, war, aspect	Biogeoclimatic Unit
VVZ	Bracounten wheatgrass arrow reaved outsumfoot deep son, war, aspect	IDFxh1

Description: steep, warm, southeast to west aspects; deep soils of various parent materials

Map	Range	Succ	essional Trends	
Symbol	Condition	Dominants	Associates	Plots
WAw:P	Poor	shrub/steppe of: big sagebrush cheatgrass Sandberg's bluegrass	prickly phlox needle-and-thread grass six-weeks fescue silky lupine	
WAw:F	Fair	shrub/steppe of: big sagebrush needle-and-thread grass cheatgrass Sandberg's bluegrass	prickly phlox bluebunch wheatgrass six-weeks fescue arrow-leaved balsamroot parsnip-flowered buckwheat silky lupine	
WAw:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass Sandberg's bluegrass junegrass	prickly phlox needle-and-thread grass Idaho fescue cheatgrass arrow-leaved balsamroot parsnip-flowered buckwheat silky lupine	
WAw:E	Excellent	grass/steppe of: bluebunch wheatgrass big sagebrush Idaho fescue stiff neddlegrass	three-tip sagebrush junegrass thread-leaved sedge	92220

		Biogeoclimatic Unit
WJ	Bluebunch wheatgrass - junegrass mesic	IDFxh1

Description: gentle to moderate sloped areas of morainal material; deep, well drained soil

Map	Range	Succe	ssional Trends	
Symbol	Condition	Dominants	Associates	Plots
WJ:P	Poor	shrub/steppe of: big sagebrush cheatgrass Indian-wheat	threetip sagebrush needle-and-thread grass Sandberg's bluegrass six-weeks fescue low pussytoes	
WJ:F	Fair	shrub/steppe of: big sagebrush needle-and-thread grass Sandberg's bluegrass cheatgrass	threetip sagebrush six-weeks fescue bluebunch wheatgrass Idaho fescue long-leaved phlox silky lupine Indian-wheat	
WJ:G	Good	shrub/steppe of: big sagebrush bluebunch wheatgrass Idaho fescue	threetip sagebrush junegrass Sandberg's bluegrass cheatgrass moderate cryptogam cover	
WJ:E	Excellent	grass/steppe of: bluebunch wheatgrass Idaho fescue good cover of cryptogams	big sagebrush junegrass Sandberg's bluegrass	

HABITAT CLASSES

OF THE IDFdk1

ASg Trembling aspen - common snowberry moist, gully

Biogeoclimatic Unit
IDFdk1

Description: moist gully areas, sometimes with seasonal creeks; often rich soils due to a buildup of broad-leaved litter; may be steep-sided slopes into the gully;

Map		Successional Trends			
Symbol	Stage	Dominants	Associates	Plots	
ASg1	Shrub-Herb	shrub/herb dominated cover of: Nootka rose common snowberry trembling aspen Kentucky bluegrass	choke cherry water birch saskatoon Douglas maple red-osier dogwood common hound's-tongue		
ASg2	Pole-Sapling	broad-leaved forest of: trembling aspen Nootka rose common snowberry trembling aspen Kentucky bluegrass	choke cherry water birch saskatoon Douglasmaple red-osier dogwood common hound's-tongue		
ASg3	Young Forests	broad-leaved forest of: trembling aspen Nootka rose common snowberry trembling aspen Kentucky bluegrass	choke cherry water birch saskatoon Douglas maple red-osier dogwood common hound's-tongue		
ASg4	Mature Forests	broad-leaved forest of: trembling aspen Nootka rose common snowberry trembling aspen Kentucky bluegrass	choke cherry water birch saskatoon Douglas maple red-osier dogwood common hound's-tongue		
ASg5	Old-Growth	closed forest of: Douglas-fir Nootka rose common snowberry trembling aspen Kentucky bluegrass	choke cherry water birch saskatoon Douglas maple red-osier dogwood common hound's-tongue		

Comments:

the old-growth stage may not occur, however these sites may eventually be dominated by Douglas-fir with no disturbance; rich forest floor material of deciduous leaves

Description:				
Map	Stare	Suc	ecessional Trends	Dia
Symbol	Stage Shrub-Herb	Dominants	Associates	Plo
	Pole-Sapling			
	Young Forests			
	Mature Forests			
	Old-Growth			
	Old-Growth			

LP				Biogeoclimatic	Unit	
Description:			l			
Map	_	Successional Trends				
Symbol	Stage Shrub-Herb	Dominants	Ass	sociates	Plots	
	Shruo-Hero					
	Pole-Sapling					
	Young Forests					
	Mature Forests					
	Old-Growth					
Comments:	<u> </u>					

VKc	Vasey's big sagebrush - Ke	entucky bluegrass grassland, cool aspect		Biogeoclimat IDFdk1	ic Unit		
Description	n:						
Map		Successional Trends					
Symbol	Stage Poor	Dominants	Ass	ociates	Plots		
	Poor						
	Fair						
	Good						
	Excellent						
Comments	:						

VKw	Vasey's big sagebrush - Ke	entucky bluegrass grassland, warm aspect		Biogeoclimat IDFdk1	ic Unit
Descriptio	n:				
Map		Succession	al Trends		
Symbol	Stage	Dominants	As	sociates	Plots
VKw:P	Poor				
VKw:F	Fair				
VKw:G	Good				
VKw:E	Excellent				
Comments					

HABITAT CLASSES

OF THE MSxk

Stage Shrub-Herb Fole-Sapling oung Forests	Dominants Si	Associate Associate	es Plots
Shrub-Herb Pole-Sapling	Dominants	Associate	es Plots
oung Forests			
oung Forests			
oung Forests			
ature Forests			
Old-Growth			
	Dld-Growth		

HABITAT CLASSES OF THE IDFdm1

DT	Douglas-fir - twinflower m	Biogeoclimatic Unit IDFdm1					
Descriptio	n:						
Map		Successional Trends					
Symbol	Stage	Dominants	As	sociates	Plots		
DT1	Shrub-Herb						
DT2	Pole-Sapling						
DT3	Young Forests						
DT4	Mature Forests						
DT5	Old-Growth	Douglas-fir Ponderosa pine pinegrass dwarf blueberry	western kinnikini twinflow timber m grousebe	nick ⁄er nilk-vetch	91040		
Comments	:		1		1		

DTc	Douglas-fir - twinflower m	Biogeoclimatic Unit IDFdm1			
Descriptio	on:				
Map		Su	iccessional Trends		
Symbol	Stage	Dominants		sociates	Plots
DTc1	Shrub-Herb				
DTc2	Pole-Sapling	Douglas-fir pinegrass	Ponderor western birch-lea sedge Bebb's v	larch wed spirea	
DTc3	Young Forests	Douglas-fir pinegrass	Ponderos western birch-lea sedge Bebb's v	larch wed spirea	91041
DTc4	Mature Forests				
DTc5	Old-Growth				
Comments); ;;				1

WAw	Bluebunch wheatgrass - a	Biogeoclimatic Unit IDFdm1				
Descriptio	n:					
Map		Successional Trends				
Symbol	Stage	Dominants	As	Associates Plots		
WAw:P	Poor					
WAw:F	Fair					
WAw:G	Good					
WAw:E	Excellent	bluebunch wheatgrass Idaho fescue junegrass	Sandberg silky lup great mu		91039	
Comments			1		1	

			Biogeoclin	Biogeoclimatic Unit				
Description:	Description:							
Map		Successional Trends						
Symbol	Stage	Dominants	Associates	Plots				
	Poor							
	Fair							
	Good							
	Excellent							
Comments:	1			ı				

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				Biogeoclimat	ic Unit		
Description:							
Man	Range	Range Successional Trends					
Map Symbol	Range Condition	Dominants Associates			Plots		
	Poor						
	Fair						
	Good						
	Excellent						
Comments:							

Stage Shrub-Herb Fole-Sapling oung Forests	Dominants Si	Associate Associate	es Plots
Shrub-Herb Pole-Sapling	Dominants	Associate	es Plots
oung Forests			
oung Forests			
oung Forests			
ature Forests			
Old-Growth			
	Dld-Growth		

				Biogeocli	matic Unit
Description:					
Map		Ve	getation		
Symbol	Stage	Dominants		sociates	Plots
Comments:					L

Common name

antelope-brush

arrow-leaved balsam root

barren vulpia

Bebb's willow bentgrass

big sagebrush birch-leaved spirea

bittersweet

black cottonwood

black gooseberry black hawthorn

blue stickweed blue wildrye

bluebells

bluebunch wheatgrass

bull thistle

bullhead waterleaf

bulrush Canda thistle cheatgrass choke cherry

Columbia bladder-pod

common cattail common duckweed

common hound's-tongue

common juniper common snowberry common spike-rush compact selaginella

desert-parsley

diffuse knapweed Douglas maple Douglas-fir

dwarf blueberry evening primrose

field pussytoes graceful cinquefoil

great bulrush great mullein grouseberry

heart-leaved arnica

horsetail

Latin Name

Purshia tridentata

Balsamorhiza sagittata

Salix bebbiana

Agrostis

Artemisiatridentata Spirea betulifolia Solanum dulcamara

Populus balsamifera ssp. trichocarpa

Ribes lacustre Crataegus douglasii

Elymus glaucus

Mertensia

Agropyron spicatum Circium vulgare

Hydrophyllum capitatum

Scirpus Circium arvense Bromus tectorum

Prunus virginiana Lesquerella douglasii Ceanothus sanguineus

Lemna minor

Cynoglossum officinale Juniperus communis Symphoricarpos albus Eleocharis palustris Selaginella densa

Lomatium

Centaurea diffusa Acer glabrum

Pseudotsuga menziesii Vaccinium caespitosum

Oenothera

Antennaria neglecta Potentilla gracilis Scirpus lacustris Verbascum thapsus Vaccinium scoparium Arnica cordifolia

Equisetum

Idaho fescue Festuca Idahoensis Indian-wheat Stipa hymenoides Koeleria macrantha junegrass Kentucky bluegrass Poa pratensis kinnikinnick Arctostaphylos uva-ursi Chenopodium album lamb's quarters lemonweed Lithospermum ruderale line-leaved fleabane Erigeron linearis Erigeron corymbosus long-leaved fleabane Phlox longifolia long-leaved phlox low pussytoes Antennaria dimorpha meadow death-camas Zigadenus venenosus mock orange Philadelphus lewisii mountain alder Alnus incana *spp*. tenuifolia Osmorhiza chilensis mountain sweet-cicely needle-and-thread grass Stipa comata nodding onion Allium cernuum Nootka rose Rosa nutkana Holodiscus discolor ocean-spray Oregon woodsia Woodsia oregana paper birch Betula papyrifera parsnip-flowered buckwheat Eriogonum niveum pasture sage Artemisia frigida penstemon Penstemon Calamagrostis rubescens pinegrass pink wintergreen Pyrola asarifolia poison-ivy Toxicodendron rydbergii Pinus ponderosa ponderosa pine prickly phlox ???????? prickly-pear cactus Opuntia fragilis rabbit-brush Chrysothamnus nauseosus red clover Trifolium pratense Sambucus cerulea red elderberry red raspberry Rubus idaeus red three-awn Aristida longiseta red-osier dogwood Cornus sericea redstem ceanothus Ceanothus sanguineus reed canarygrass Phalaris arundinacea ringed aster Juniperus sscopulorum Rocky mountain Juniper rough fescue Festuca scabrella

sand dropseed Sporobolus cryptandrus Sandberg's bluegrass Poa Sandbergii

Juncus

Rannuculus glaverrimus

Calaochortus macrocarpus

rush

sagebrush buttercup

sagebrush mariposa lily

saskatoon Amelanchier anlifolia Hieracium scouleri Scouler's Hawkweed scouring-rush Equisetum shaggy fleabane Erigeron pumilus shore buttercup Rannulculus cymbalaria showy aster Aster conspicuus shrubby penstemon Penstemon fruticosus silky lupine Lupinus sericeus silverleaf phacelia Phacelia hastata silverweed Potentilla anserina six-weeks fescue Vulpia octoflora slender hawksbeard Crepis atrabarba Collinsia parviflora small-flowered blue-eved Mary snow buckwheat Erigonum Umbellatum snowbrush Ceanothus velutinus soft brome Bromus mollis soopalalie Shepherdia canadensis spreading dogbane Apocynum androsaemifolium squaw currant Ribes cereum star-flowered false Solomon's-seal Smilacina stellata stiff needle-grass Stipa occidentalis stinging nettle Urtica dioica Rhus glabra sumac swale desert-parsley Lomatium ambiguum swamp smartweed Polygonum hydropiperoides tall Oregon-grape Mahonia aquifolium thimbleberry Rubus parviflorus thistle Cirsium Castilleja thompsonii Thompson's paintbrush thread-leaved phacelia Phacelia linearis thread-leaved sedge Carex filfolia three-leaved sedge Carex ?????? three-tip sagebrush Artemisia tripartita timber milk-vetch Astragalus miser Populus tremuloides trembling aspen Antennaria umbrinella umber pussytoes upland larkspur Delphinium nuttallianum Vasey's big sagebrush

Betula occidentalis
Puccinellia distans
Larix occidentalis
Thalictrum occidentale
Thuja plicata
Agropyron

Clematis ligusticifolia

Salix

western larch western meadowrue western redcedar wheatgrass white clematis willow

weeping alkaligrasss

water birch

Wood's rose yarrow yellow violet Rosa woodsii Achillea millefolium Viola nuttalli