## **OKANAGAN SIMILKAMEEN STEWARDSHIP SOCIETY**

Property Site Plan & Management Recommendations



NI.	Okanagan Similkameen Stewardship biologists	
Name:	prepare a tailored property/site plan with	
Civic Address:	management plan for each landowner who requests one, provided their property is >5 acres,	
Mailing Address (if different):  Phone:	has important wildlife habitats and or Critical	
E-mail:	Habitat for species at risk, & sensitive	
Preferred method of contact:	ecosystems. These are kept confidential between	
Property Identifier (PID):	the landowner and OSS unless the landowner	
Approximate size:	agrees to sharing of information.	
Property Location (directions & o	overview map):	
Description of the stewarded are	ea:	
Habitat type(s):		
Land Use:		
Landowner interest in habitat en	hancement projects:	
☐ Riparian restoration- re-v	egetation of natural buffer	
☐ Riparian restoration- lives	stock exclusion fencing	
☐ Invasive Plant Manageme	ent- develop management plan	
<ul> <li>Turtle habitat enhancement</li> </ul>	ent- improvements to nesting areas, installation of basking	ng platforms
	provements to habitat where natural cavities not present	
swallow boxes for mosqu	·	
☐ Elimination of rodenticide		
☐ Develop grazing manager		
☐ Improve tree-spacing in lo		
	redatory fish (eg. Goldfish)	
- Removal of Introduced, p	reducery rish (eg. dolumsh)	

ump house etc.)	

# Potential wildlife and/or species-at-risk occurrences/observations

Species Name	Federal & Provincial at-risk status	Observer & Date or potential/Critical Habitat Present	Management Recommendations
American Badger	F: Endangered P: Red List		<ul> <li>Maintain large tracts of key habitat, particularly open grassy areas with soils suitable for excavating burrows.</li> <li>Employ grazing management practices that promote the growth of healthy native grassland communities.</li> <li>Carefully monitor the use of rodenticides.</li> <li>Support prescribed burning programs.</li> <li>Encourage landowners to adopt a more sympathetic attitude towards Badgers and ground squirrels.</li> <li>Report any observations of shooting, trapping, or harassment.</li> </ul>
Blotched Tiger Salamander	F: Endangered P: Red List		<ul> <li>Fence ponds and lakes to exclude livestock</li> <li>Maintain water levels of ponds and irrigation reservoirs whenever possible</li> <li>Create ponds to compensate for loss of natural breeding habitat</li> <li>Protect riparian areas and shrub-grasslands to provide migration corridors and feeding areas</li> <li>Do not stock salamander breeding ponds/lakes with any fish</li> <li>Ensure irrigation intake lines are screened</li> </ul>
Great Basin Spadefoot	F: Threatened P: Blue List		<ul> <li>Protect major breeding sites and surrounding foraging habitat.</li> <li>Fence ponds and lakes to exclude livestock.</li> <li>Maintain water levels whenever possible.</li> <li>Create ponds to compensate for loss of natural breeding habitat.</li> <li>Install culverts under roads and amphibian fences along roads near areas with high numbers of toads.</li> <li>Do not stock ponds or lakes with game fish.</li> </ul>

Species Name	Federal & Provincial at-risk status	Observer & Date or potential/Critical Habitat Present	Management Recommendations
Western Painted Turtle	F: Special Concern P: Blue List		<ul> <li>Protect key habitat including remaining wetlands, ponds and other small waterbodies.</li> <li>Restrict the development of roads, trails, beaches and campgrounds in key turtle habitat.</li> <li>Observe turtle basking sites from a distance and avoid nest sites.</li> <li>Keep dogs leashed near turtle habitat and don't pick up turtles.</li> <li>Restore degraded wetlands, provide basking logs and create nesting sites.</li> <li>Erect fences around wetlands and known nesting habitat to prevent trampling by livestock and damage by all-terrain vehicles.</li> <li>Take unwanted, non-native turtles to the SPCA; do not release them into the wild.</li> </ul>
Great Basin Gopehersnake	F: Threatened P: Blue List		<ul> <li>Identify and protect dens and nesting sites whenever possible.</li> <li>Leave 1 km buffer zone around known den sites and critical habitats.</li> <li>Avoid road construction near talus slopes and around known snake dispersal routes.</li> <li>Avoid disturbing rock and woody debris in potential snake habitat.</li> <li>Maintain good range condition in grasslands for cover and habitat for prey species.</li> </ul>
Western (Northern Pacific) Rattlesnake	F: Threatened P: Blue List		<ul> <li>Leave 1 km buffer zone around known den sites and critical habitats.</li> <li>Avoid road and skid trail construction near potential den sites such as rock outcroppings and talus slopes, and around known snake dispersal routes.</li> <li>Avoid disturbing rock and woody debris in potential snake habitat.</li> <li>Maintain good range condition in grasslands for cover and prey species.</li> </ul>

Species Name	Federal & Provincial at-risk status	Observer & Date or potential/Critical Habitat Present	Management Recommendations
Yellow-bellied Racer	F: Threatened P: Blue list		<ul> <li>Identify and protect dens and nesting sites whenever possible.</li> <li>Leave 1 km buffer zone around known den sites and critical habitats.</li> <li>Avoid road construction near talus slopes and around known snake dispersal routes.</li> <li>Avoid disturbing rock and woody debris in potential snake habitat.</li> <li>Maintain good range condition in grasslands for cover and habitat for prey species.</li> </ul>
Tiny: about the size of a mason jar	F: Threatened P: Blue List		<ul> <li>Maintain patches of mature forest 5-10 hectares in size.</li> <li>Retain large, standing coniferous and deciduous trees in riparian habitats.</li> <li>Where large, standing deteriorating trees have been felled, allow a new generation of trees to develop; in the meantime, construct and erect owl boxes to provide suitable nesting sites.</li> </ul>
Flammulated Owl  Tiny: about the size of a mason jar	F: Special Concern P: Blue List		<ul> <li>Protect remaining old-growth ponderosa pine and Douglas-fir forests.</li> <li>Leave snags and some large pines and firs when selectively logging a site; this can be done by choosing wildlife tree patches that contain suitable nesting snags.</li> <li>Set up nest boxes in forests that have few or no suitable nest sites.</li> <li>Avoid use of pesticides in Flammulated Owl habitat</li> </ul>

Species Name  Yellow-breasted Chat	Federal & Provincial at-risk status	Observer & Date or potential/Critical Habitat Present	Maintain and enhance remaining riparian habitat including cottonwoods, aspen, rose thickets and snowberry.     Avoid clearing or thinning shrubs and thickets in riparian areas.     Fence riparian areas to prevent livestock from trampling bushes or
	F: Endangered P: Red list		<ul> <li>employ a carefully managed grazing strategy.</li> <li>Prevent off-road vehicles from disturbing and degrading stream-side vegetation.</li> <li>Protect known breeding sites from human disturbance.</li> </ul>
Williamson's Sapsucker  Male  Female	F: Endangered P: Blue List		<ul> <li>Retain dead and dying trees where it is safe to do so</li> <li>Avoid use of pesticides in Williamson Sapsucker habitat</li> <li>Do not harvest very large live or dead standing trees for firewood</li> </ul>
Lewis' Woodpecker	F: Threatened P: Blue Listed		<ul> <li>Avoid frequent or prolonged human disturbance at nest sites during the breeding season (May-August)</li> <li>Preserve and maintain ponderosa pine forests and black cottonwood stands.</li> <li>Protect known nest sites.</li> <li>Maintain dead or dying standing trees, especially soft, large diameter snags.</li> <li>Monitor and reduce the use of pesticides.</li> </ul>

Species Name	Federal & Provincial at-risk status	Observer & Date or potential/Critical Habitat Present	Management Recommendations
White-headed Woodpecker	F: Endangered P: Red list		<ul> <li>Encourage selective logging practices rather than clear-cutting; logging can serve to thin dense stands nearing maturity and remove competing trees.</li> <li>Improve and sustain old growth ponderosa pine forest.</li> <li>Allow successional forest stages to mature to old growth.</li> <li>Thin young stands to maximize growth and cone production.</li> <li>Retain dead or dying standing trees, especially soft, large diameter snags.</li> <li>Discourage use of forest insect pesticides in their habitat.</li> <li>Support prescribed burning programs</li> </ul>
Little Brown Myotis	F: Endangered P: Yellow List		<ul> <li>Avoid the use of pesticides, particularly near wetlands and riparian areas.</li> <li>Protect important habitat such as low elevation forest, grassland, and riparian areas.</li> <li>Establish a buffer zone of at least 100 metres around roosting sites.</li> <li>Preserve old mine shafts, but erect gates to prevent human access to caves and mine sites.</li> <li>Refrain from entering caves or mine shafts, particularly during winter months when bats are hibernating.</li> </ul>
Pallid bat	F: Threatened P: Red list		<ul> <li>Avoid the use of pesticides, particularly near wetlands and riparian areas.</li> <li>Protect known roosting sites from disturbance.</li> <li>Preserve old mine shafts, but erect gates to prevent human access to caves and mine shafts.</li> <li>Maintain water levels in ponds as sources of drinking water and foraging areas.</li> <li>Discourage, free-roaming domestic cats, especially near potential bat habitat.</li> </ul>

Species Name	Federal & Provincial at-risk status	Observer & Date or potential/Critical Habitat Present	Management Recommendations
Half-moon Hairstreak	F: Endangered P: Red list		<ul> <li>Protect host plants where found (lupine)</li> <li>Avoid use of insecticides wherever possible, especially in close proximity to known populations</li> <li>Support prescribed burns/ controlled burning to keep grasslands open</li> <li>Employ grazing management practices that promote the growth of healthy native grassland communities</li> </ul>
Behr's Hairstreak	F: Endangered P: Red List		<ul> <li>Retain antelope brush plant community</li> <li>Employ grazing management practices that promote the growth of healthy native grassland communities</li> <li>Manage invasive plants</li> <li>Reduce/eliminate use of pesticides</li> </ul>
Mormon metalmark	F: Endangered P: Red list		<ul> <li>Protect host plants where found (snow buckwheat)</li> <li>Avoid use of insecticides wherever possible, especially in close proximity to known populations</li> <li>Employ grazing management practices that promote the growth of healthy native grassland communities</li> <li>Manage invasive plants</li> <li>Avoid watering dry gravel areas where snow buckwheat is present</li> </ul>

**Invasive Species and Land Management Concerns and Recommendations:** 

Concern (eg. Invasive plants, etc)	Location & Description	Management Recommendations
Common Burdock (biennial to short lived perennial with first year rosette and second  year)	Infestation is approximately 0.5acres, located along shoreline of XYZ creek at east boundary of property.	Dig at least 6 inches of taproot and re-seed bare soil where possible to encourage desirable, competing vegetation. Plant can be composted but flowers and seeds should be bagged and buried at the landfill.
Hound's Tongue (Biennial. 3-4 ft. with first year rosette)	Description of infestation goes here	Hand pull or dig up at all stages ensuing most/all of root has been removed. Compost only if flower/seed is not present. Remove burrs from self & equipment before leaving site.
Purple Loosestrife (perennial 3-4 ft)	Description of infestation goes here	Biocontrol has been released in many places throughout Okanagan and Similkameen. Sign of biocontrol includes "shot-holes" through stem/leaves. If no biocontrol present and plants are not in standing water, dig to remove root. Otherwise cut flowering stalks near the base.
Siberian (Russian) Elm (Tree growing up to 25m)	Description of infestation goes here	Hand pull saplings. Cut down or girdle mature trees and apply systemic herbicide to the stump.

Comfrey (perennial up to 4 ft)	Description of infestation goes here	Mow or hand pull as much as possible then cover with landscape fabric and leave covered at least 2 growing seasons. Landscape fabric should be overlapped at seams or comfrey will grow through.
Yellow flag iris (perennial up to 5 feet)	Description of infestation goes here	Permits may be required due to plants growing in or near water bodies. Repeated cutting or pulling can be effective over time.  Digging can be effective but portions of root left behind can spread the plant, ensure you remove as much of the plant as possible.
Sulfur Cinqufoil (perennial 1-2.5 feet tall)	Description of infestation goes here	Hand pulling can be effective on small infestations. Make sure to get at least the first few inches of root. Mowing is not an effective form of control. With large infestations use of herbicides may be required.
Hoary Alyssum (annual to short-lived perennial 1 – 2.5 feet tall)	Description of infestation goes here	Hand pull ensuring entire root is removed. Cut and bag seed heads of mature plants before pulling.
Yellow Salsify (Yellow Goatsbread annual 1-2 feet_	Description of infestation goes here	Annual weed, not highly concerning. Hand pull before plants go to seed. It becomes more difficult to remove the entire root as the plant matures. Once the plant has gone to seed bag seed head prior to pulling.

Livestock access to creek	Cattle are currently allowed free access to creek.	Livestock exclusion fencing with nose-in to allow for limited access along creek recommended leaving a minimum 30m buffer. If void of all riparian vegetation, may recommend planting of native species in fenced area.
Trespass.	Description of trespass goes here	Trespass by unauthorized ATV users, dirt bikers, hunters, hikers, naturalists or others can cause damage to sensitive ecosystems. Fencing access areas and signage may be appropriate.
Excessive Trail creation	Description of trail network goes here	A few trails to access/enjoy your property. Creating trails through sensitive habitats can limit damage to soil crusts and sensitive plants. Too many trails especially parallel trails or very steep trails can cause unnecessary environmental damage closing certain trails may be appropriate, other restoration activities may be necessary.
Lack of Riparian Buffer	Lack of thick diverse buffer of native species along shorelines or watercourses	Planting native plants or establishing no mow zones may be recommended



## **OKANAGAN SIMILKAMEEN STEWARDSHIP SOCIETY**

## Habitat Enhancement & Maintenance Plan



Property Address: Landowner Phone / E-mail: Date visited (month, day, year):  Location of habitat enhancement or restoration project: (include map):  Goal of habitat enhancement: (e.g. increasing habitat for SAR, enhancing habitat for SAR, reducing invasiblent abundance, increasing biodiversity, addition of nectaring plants for pollinators, net gain of wetland habitats)  Type of habitat enhancement or restoration: (e.g. weeding, fencing, planting, nesting boxes, garbage removal, pond creation, installation of basking logs/coarse woody debris, nesting habitat enhancement, etc.  Approx. area of habitat enhanced per habitat type (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of weed / amount of weeds removed, number of bags of garbage removed)	Land- owner/manager Name:				
Landowner Phone / E-mail: Date visited (month, day, year):  Location of habitat enhancement or restoration project: (include map):  Goal of habitat enhancement: (e.g. increasing habitat for SAR, enhancing habitat for SAR, reducing invasplant abundance, increasing biodiversity, addition of nectaring plants for pollinators, net gain of wetland habitats)  Type of habitat enhancement or restoration: (e.g. weeding, fencing, planting, nesting boxes, garbage removal, pond creation, installation of basking logs/coarse woody debris, nesting habitat enhancement, etc.  Approx. area of habitat enhanced per habitat type (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of plants planted.	<b>Property Name</b> (if applicable):				
Date visited (month, day, year):  Location of habitat enhancement or restoration project: (include map):  Goal of habitat enhancement: (e.g. increasing habitat for SAR, enhancing habitat for SAR, reducing invasibility addition of nectaring plants for pollinators, net gain of wetland habitats)  Type of habitat enhancement or restoration: (e.g. weeding, fencing, planting, nesting boxes, garbage removal, pond creation, installation of basking logs/coarse woody debris, nesting habitat enhancement, etc.  Approx. area of habitat enhanced per habitat type (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of plants planted.	Property Address:				
Location of habitat enhancement or restoration project: (include map):  Goal of habitat enhancement: (e.g. increasing habitat for SAR, enhancing habitat for SAR, reducing invassible plant abundance, increasing biodiversity, addition of nectaring plants for pollinators, net gain of wetland habitats)  Type of habitat enhancement or restoration: (e.g. weeding, fencing, planting, nesting boxes, garbage removal, pond creation, installation of basking logs/coarse woody debris, nesting habitat enhancement, etc.  Approx. area of habitat enhanced per habitat type (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of	Landowner Phone / E-mail:				
Goal of habitat enhancement: (e.g. increasing habitat for SAR, enhancing habitat for SAR, reducing invasionant abundance, increasing biodiversity, addition of nectaring plants for pollinators, net gain of wetland habitats)  Type of habitat enhancement or restoration: (e.g. weeding, fencing, planting, nesting boxes, garbage removal, pond creation, installation of basking logs/coarse woody debris, nesting habitat enhancement, etc.  Approx. area of habitat enhanced per habitat type (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of plants planted.	Date visited (month, day, year):				
plant abundance, increasing biodiversity, addition of nectaring plants for pollinators, net gain of wetland habitats)  Type of habitat enhancement or restoration: (e.g. weeding, fencing, planting, nesting boxes, garbage removal, pond creation, installation of basking logs/coarse woody debris, nesting habitat enhancement, etc.  Approx. area of habitat enhanced per habitat type (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of plants planted.	Location of habitat enhancement	or restoration proj	ect: (include map	n):	
Type of habitat enhancement or restoration: (e.g. weeding, fencing, planting, nesting boxes, garbage removal, pond creation, installation of basking logs/coarse woody debris, nesting habitat enhancement, etc.  Approx. area of habitat enhanced per habitat type (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of planted, type of fencing installed, type of fencing install	Goal of habitat enhancement: ( $e.g$	g. increasing habita	t for SAR, enhanc	ing habitat for SAR, r	educing invasive
Approx. area of habitat enhanced per habitat type (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of plants planted.		ersity, addition of r	nectaring plants f	or pollinators, net gai	in of wetland
Approx. area of habitat enhanced per habitat type  (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of planted					
Approx. area of habitat enhanced per habitat type  (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of planted					
Approx. area of habitat enhanced per habitat type (m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of plants planted.					
(m² or ha) (show calculations if applicable):  Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of	removal, pond creation, installatio	n of basking logs/co	parse woody debr	is, nesting habitat en	hancement, etc
Species at risk / ecosystems / habitat type enhanced/link to SAR recovery strategy:  Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species of					
Other details: (anything else applicable – e.g. species of plants planted, type of fencing installed, species o	(m <sup>2</sup> or ha) (show calculations if ap	oplicable):			
	Species at risk / ecosystems / hab	itat type enhanced	/link to SAR reco	very strategy:	
	Other details: (anything else appli	cable – e.g. species	of plants planted	type of fencing instc	alled, species of
					, , -J
		i, ilullibel oj bugs oj	i garbage remove	?d)	
		i, number of bugs o	garbage remove	ed)	

**Value of Contributions**: Please include planning time, travel time, time on site, etc. If this turns into a long / complicated thing, use the excel spreadsheet template to do the calculations & paste the final result back into this document.

Contributor	Contribution	Contribution	Quantity	Cost per item	<b>Total Value</b>
	Туре	Detail			
Who paid for supplies/materials / provided the service?	e.g. Human resources, Tools/Supplies, Vehicle, etc	e.g. Staff name, volunteer name, name of	e.g. Hours, # of pieces of materials, # of plants – if this is	Estimate, or leave blank if unsure(no need to break down	i.e. Quantity * Cost per item (incl. taxes)
	vemile, etc	supplier	a big project just refer to invoice	per item if included on invoice)	(IIICI: LUXES)

#### **Maintenance Required to Ensure Success of Project**

Type of maintenance required	Frequency and seasonal detail	Who is responsible
Eg. Irrigation, invasive plant		
management, supplemental		
planting, fence repair,		

#### **Monitoring & Evaluation Plan**

At minimum, enhancement projects should be re-visited on an annual basis for at least 5 years to determine any changes to maintenance needs. In addition to monitoring maintenance needs, monitoring is to be tailored to goals of enhancement or restoration project as outlined above. Have the goals been met? What future action needs to be taken to meet goals of project. Eg. If goal of enhancement is to increase biodiversity of plants in the area, veg plots should be conducted prior to enhancement and each year for 5 years afterwards.

**Follow-up Required:** (*if applicable*)

Task	Who to do it?	Deadline	Completed?

**Pictures**: (Photo Point: before & after, action)