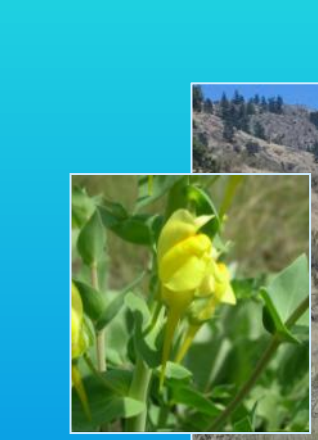
PRIORITY RANKING PROJECT:

An exercise in invasive plant management using land-based social values as a driver



Presented by: Lisa Scott

Okanagan and Similkameen Invasive Species Society

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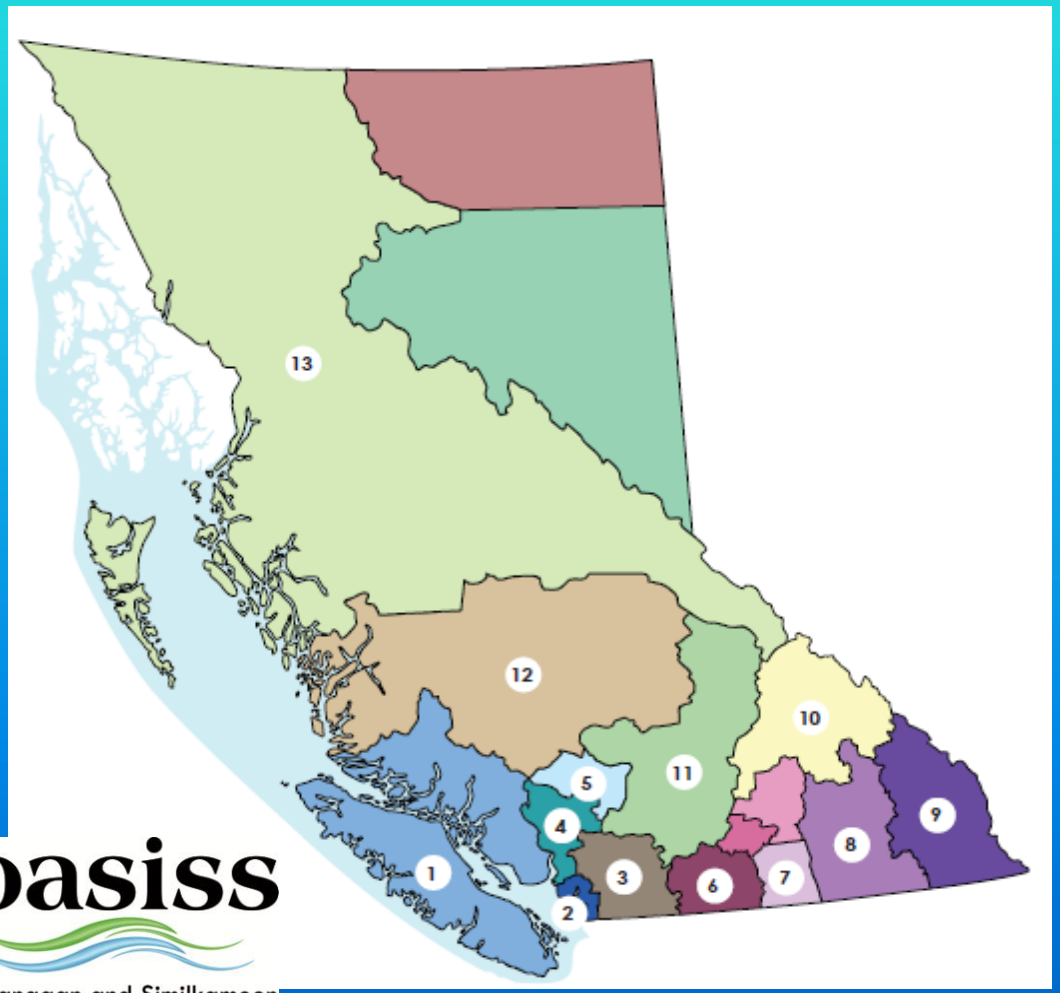
Organizations in BC



A unique network of regional invasive species organizations are located across BC

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Invasive Species

Species that are not native to the province or are outside of their natural distribution, and can negatively impact British Columbia's environment, people and/or economy

-Invasive Species Strategic Plan [for BC] 2014

Invasive Species

- Are the second biggest threat to species and ecosystems at risk in BC
- Threaten BC's diverse economy and society
- Can result in the loss of productivity in agriculture, aquaculture and forest industries, damage to infrastructure, hazard to human health and safety, degradation or loss of recreational areas or activities
- Can negatively impact natural resources with cultural and spiritual significance to Aboriginal peoples

-*Invasive Species Strategic Plan [for BC] 2014*

Biological invasions and climate change

Climatic changes are likely to produce invasive species' range shifts pushing some populations into new areas.

Biological invasions and climate change

Changes in temperature, atmospheric concentration of carbon dioxide and available nutrients will most likely stress the ecosystems and increase the chances of invasions.

Climate change will increase vulnerability to invasion because of a scarcity of resources and increased competition among native plants and animals.

PROBLEM: Too many invasive plants…not enough $$$ to treat everywhere

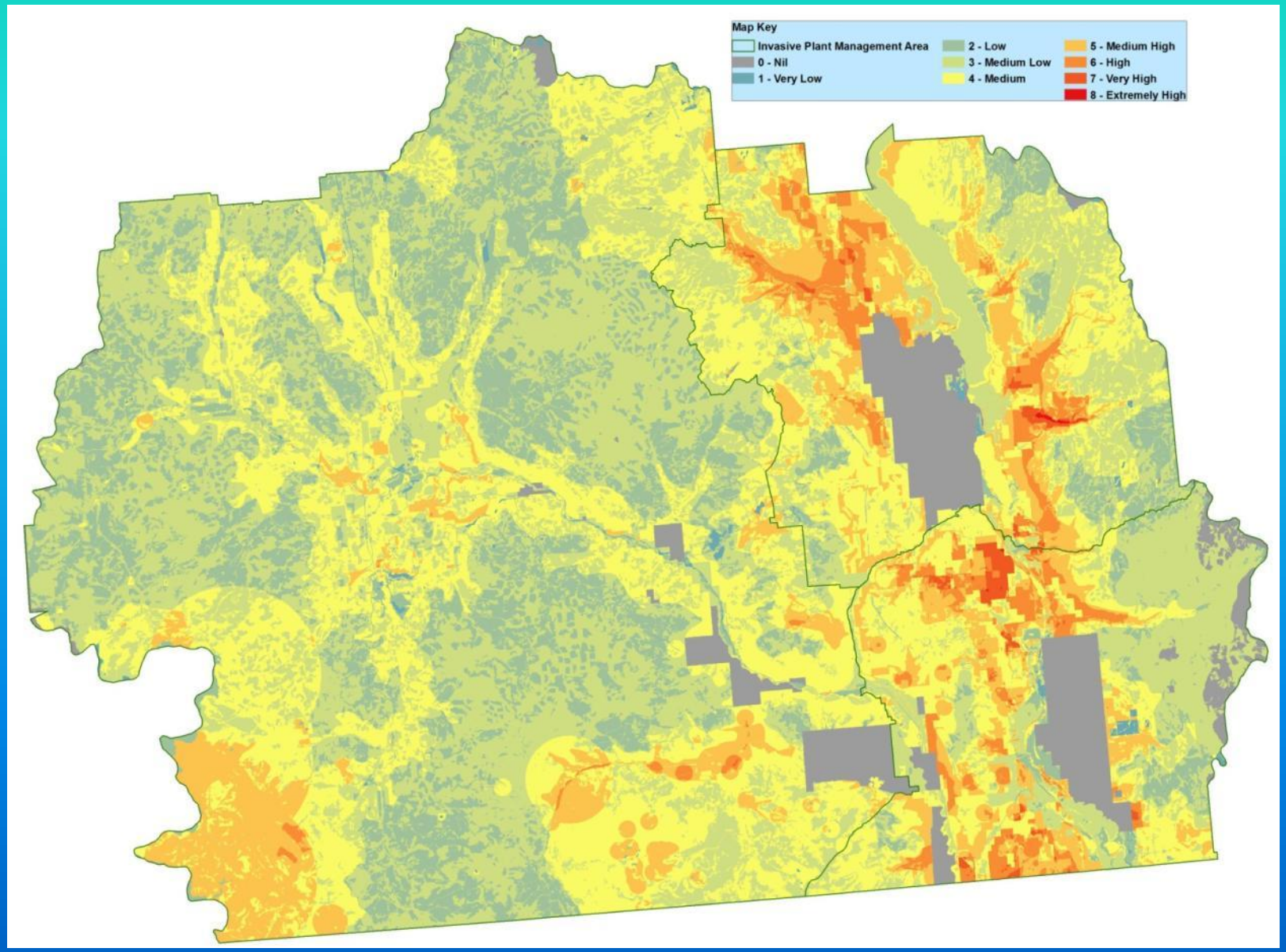




STEP 1: Identify spatial data layers with quantifiable social values

- Spring Range
- Parks, PAs, Conservation Lands & Ecological Reserves
- Wildlife Areas
- Ungulate Winter Range
- Community Watersheds
- Wildlife Management Areas
- Plant and Invertebrate Species at Risk
- Recreational Reserve Areas
- Ecosystem Restoration Projects
- Biodiversity Strategy Conservation Ranking

Priority Ranking Tool

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STEP 2: Rank the invasive plants

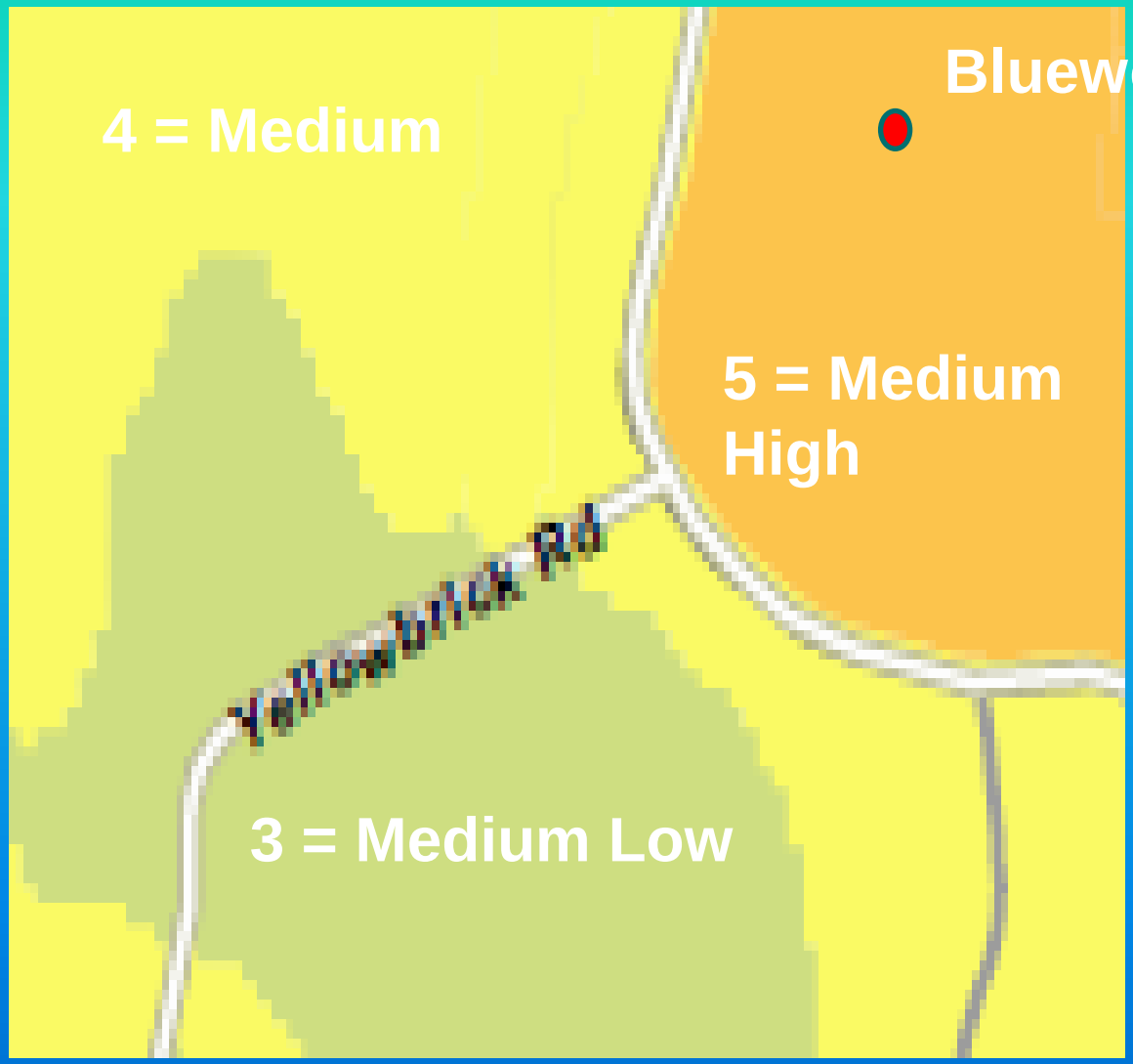
15	**Regional EDRR Species**	Poses a significant threat and is new to the area, eg brand new sites or high risk species that are limited in extent (i.e. less than 10 small sites). Mgt. objective - eradication. May include provincial prohibited species. *Treatment dollars can be pooled Crown dollars if species meets description above.*
7	**High Priority Species**	High risk/impact; limited population with significant potential to spread in the region. Mgt. objective – contain to prevent further expansion. If the population is low enough, the objective will be to control every site annually.
4	**Medium Priority Species**	Medium risk/impact; limited distribution – broader population distribution with potential to spread further in a region. Mgt. objective – control to prevent further expansion to protect unique habitats, agriculture, etc. – may mean establishing containment lines to identify sites outside the line for control.
1	**Low Priority Species**	Low risk; may be widespread or not, may be of concern in specific situations with certain high values – e.g. conservation lands, specific agriculture crops.
	Biocontrol	Invasive Plant Species is treated primarily with biocontrol agents or considered under successful biocontrol in the region (e.g. impacts are no longer significant).

STEP 3: Combine the results of the two ranking processes

Species Prioritization ► / Prioritization of Land base ▼	★ Regional EDRR Species (15)	High Priority Species (7)	Medium Priority Species (4)	Low Priority Species (1)
Extremely High (8)	15	15	12	9
Very High (7)	15	14	11	8
High (6)	15	13	10	7
Medium-High (5)	15	12	9	6
Medium (4)	15	11	8	5
Medium-Low (3)	15	10	7	4
Low (2)	15	9	6	3
Very Low (1)	15	8	5	2
Nil (0)	15	7	4	1

Matrix cell ranking (points)	Site Treatment priority
10-15 pts	1
6-9 pts	2
0-5	3

★ Any site with a Regional EDRR species was given an automatic rank of 15 points to ensure it was always at the top of any treatment plan.



TREATMENT RANK
5+7 =**12**

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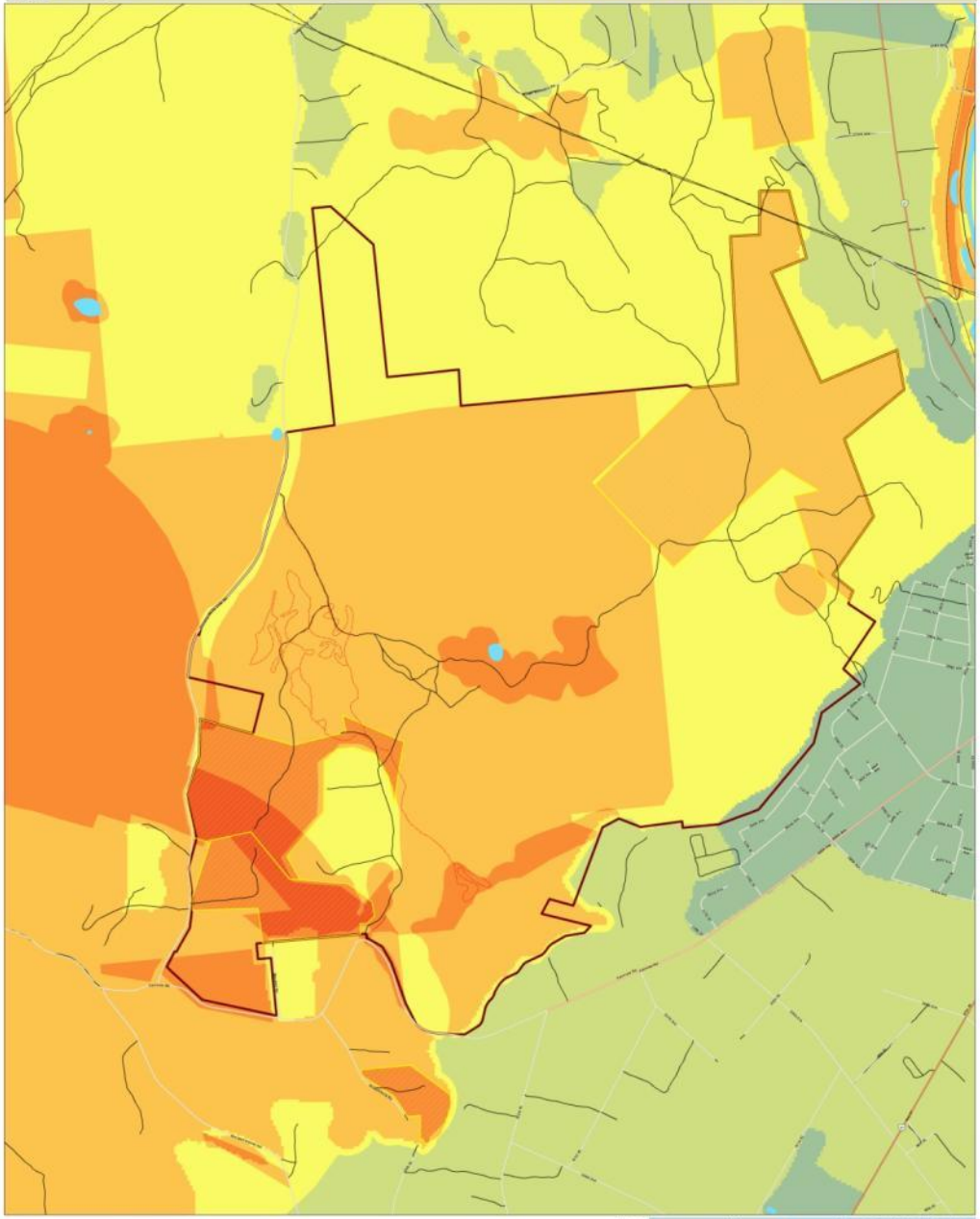
Oliver Mountain Pilot Management Area 2017 PRT Overview



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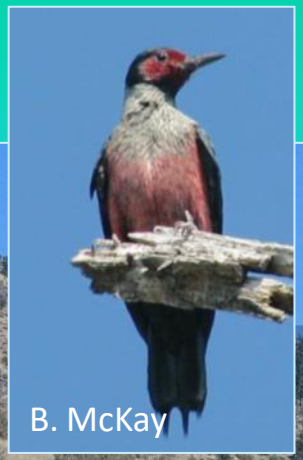
OLIVER MOUNTAIN
DAMAGE FROM OFF-ROAD VEHICLES
Oliver Mountain contains sensitive ecosystems and at-risk plant and animal species.
BEST PRACTICES for off-road motorized vehicles (ORVs):
Do not damage sensitive ecosystems.
Use established, less-sensitive recreation and trail sites such as the Bear Creek ORV trails near West Kelowna or the Okanagan Falls ORV trails east of Okanagan Falls.
UNDER PROVINCIAL LAW, it is illegal to:
Build a trail or roadway on Crown land without authority
Cause environmental damage on Crown land
A violation ticket may result in a $575 FINE. Serious cases could lead to penalties of up to $100,000 AND/OR A YEAR IN JAIL.
Everyone has a stake in protecting British Columbia's natural resources.
BRITISH COLUMBIA
Report environmental damage to the toll-free Natural Resource Violation reporting hotline:
1 844 NRO-TIPS (676-8477)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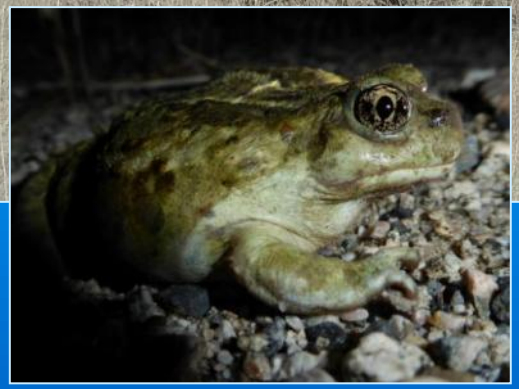


Landscape Features
Corral
Dump Site
Gate
Trail
Range Improvement
CORRAL
WATER DEVELOPMENT
Major Roads
Local Streets
Recreation Trail
Gravel Roads
Invasive Plant Management Area
Pilot Management Area
N


Landscape Features
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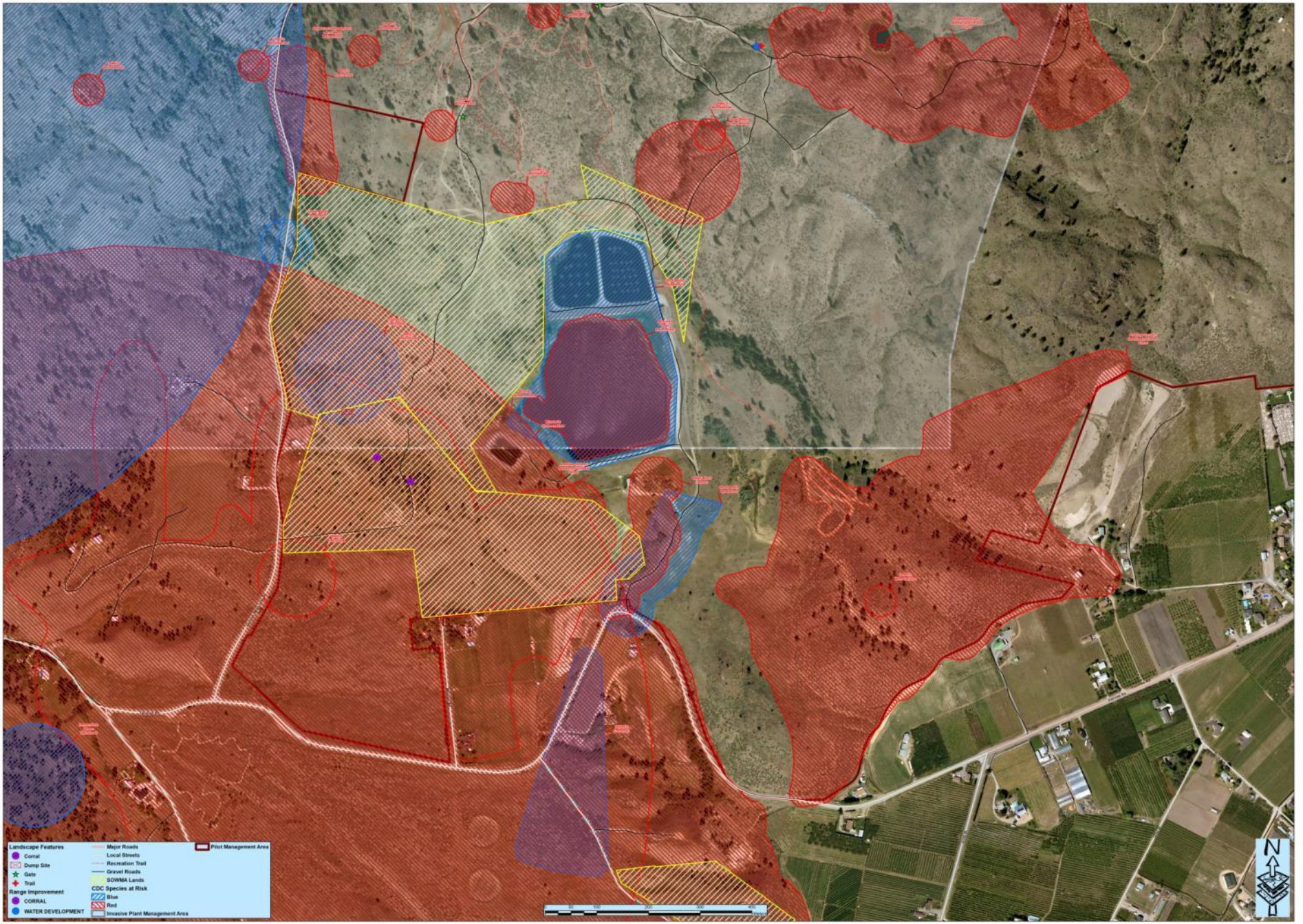
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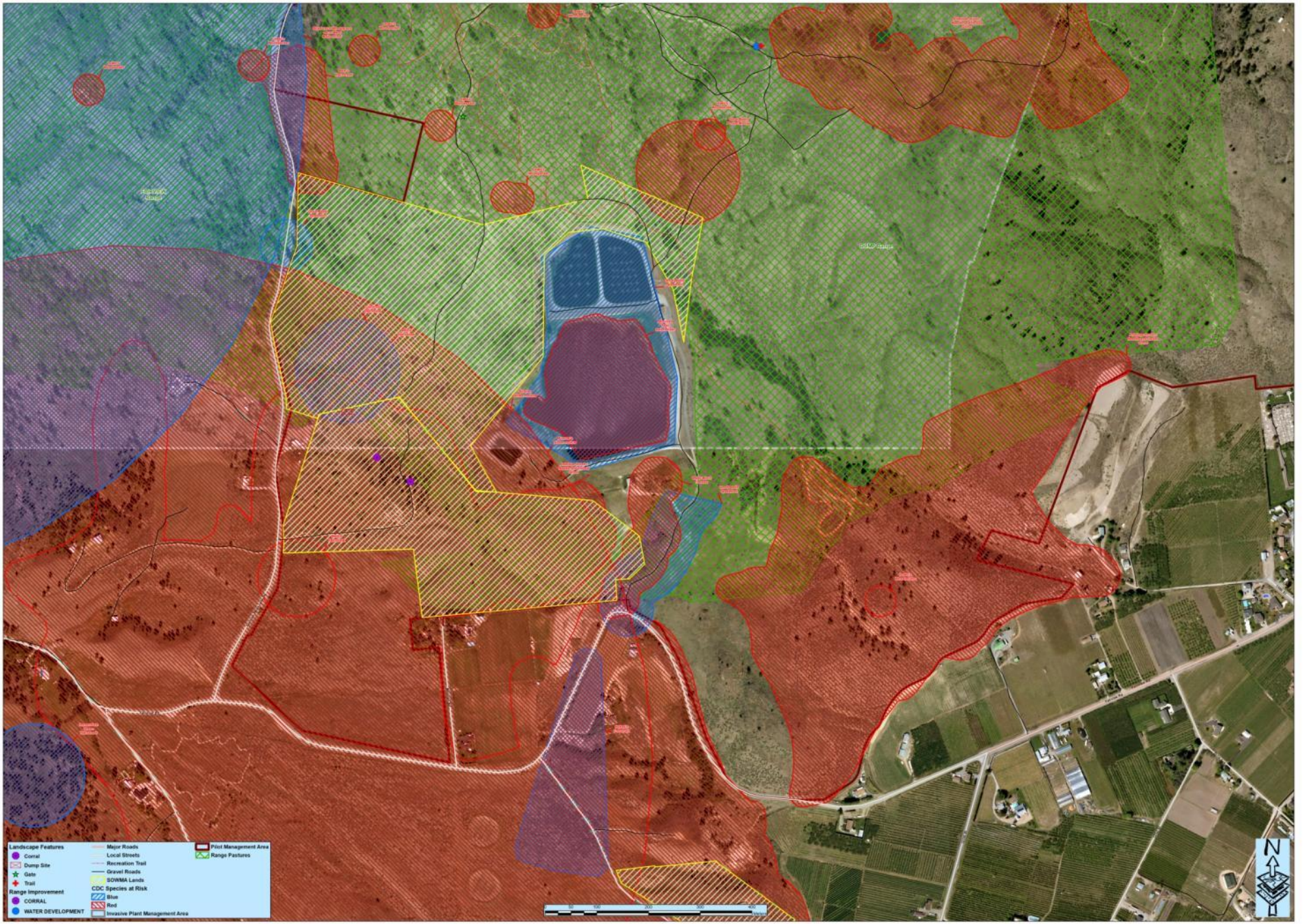
SOWMA Lands
CDC Species at Risk
Blue
Red
Invasive Plant Management Area
Pilot Management Area
N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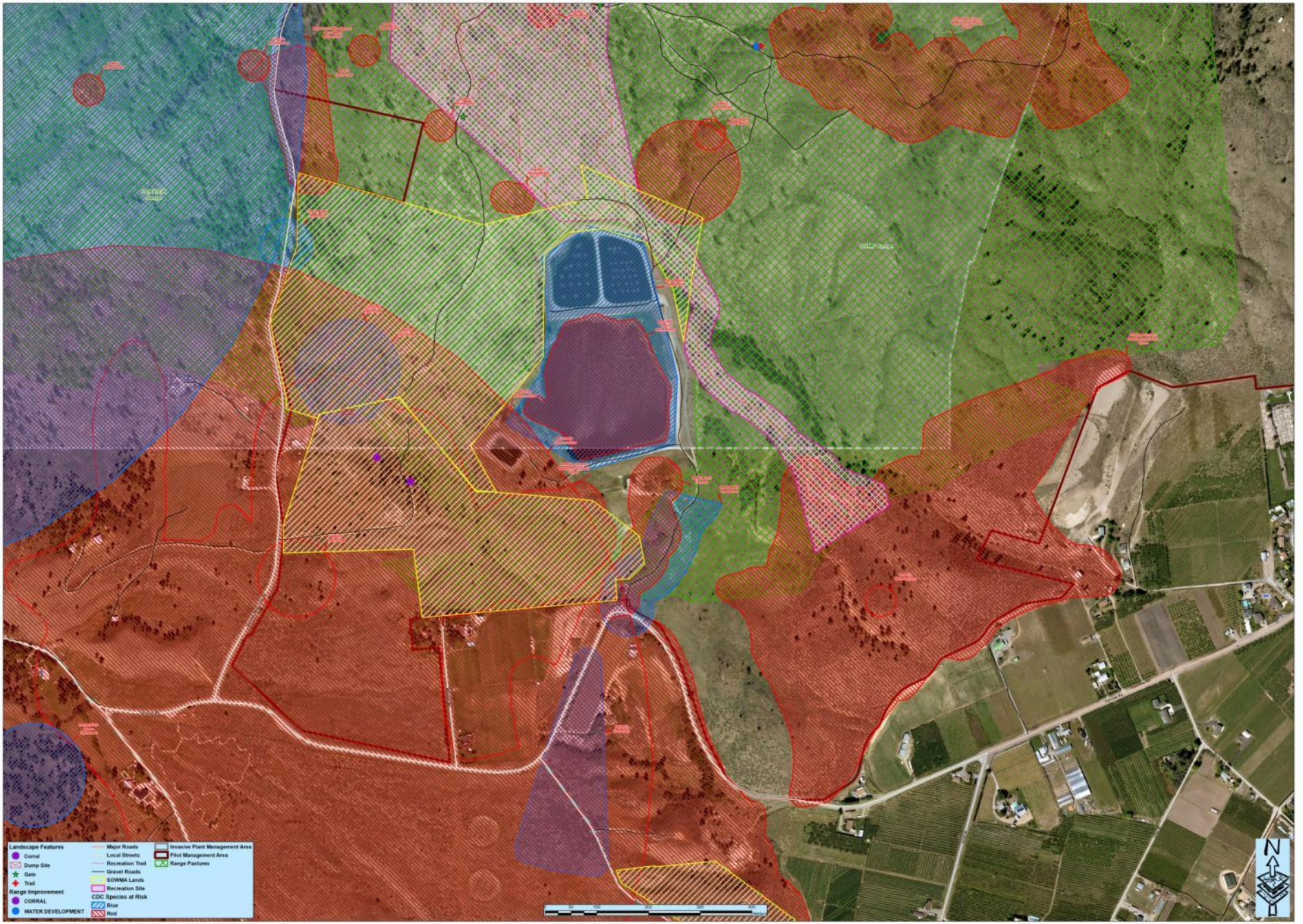
CDC Species at Risk
Blue
Red
Invasive Plant Management Area
Pilot Management Area
Range Pastures
N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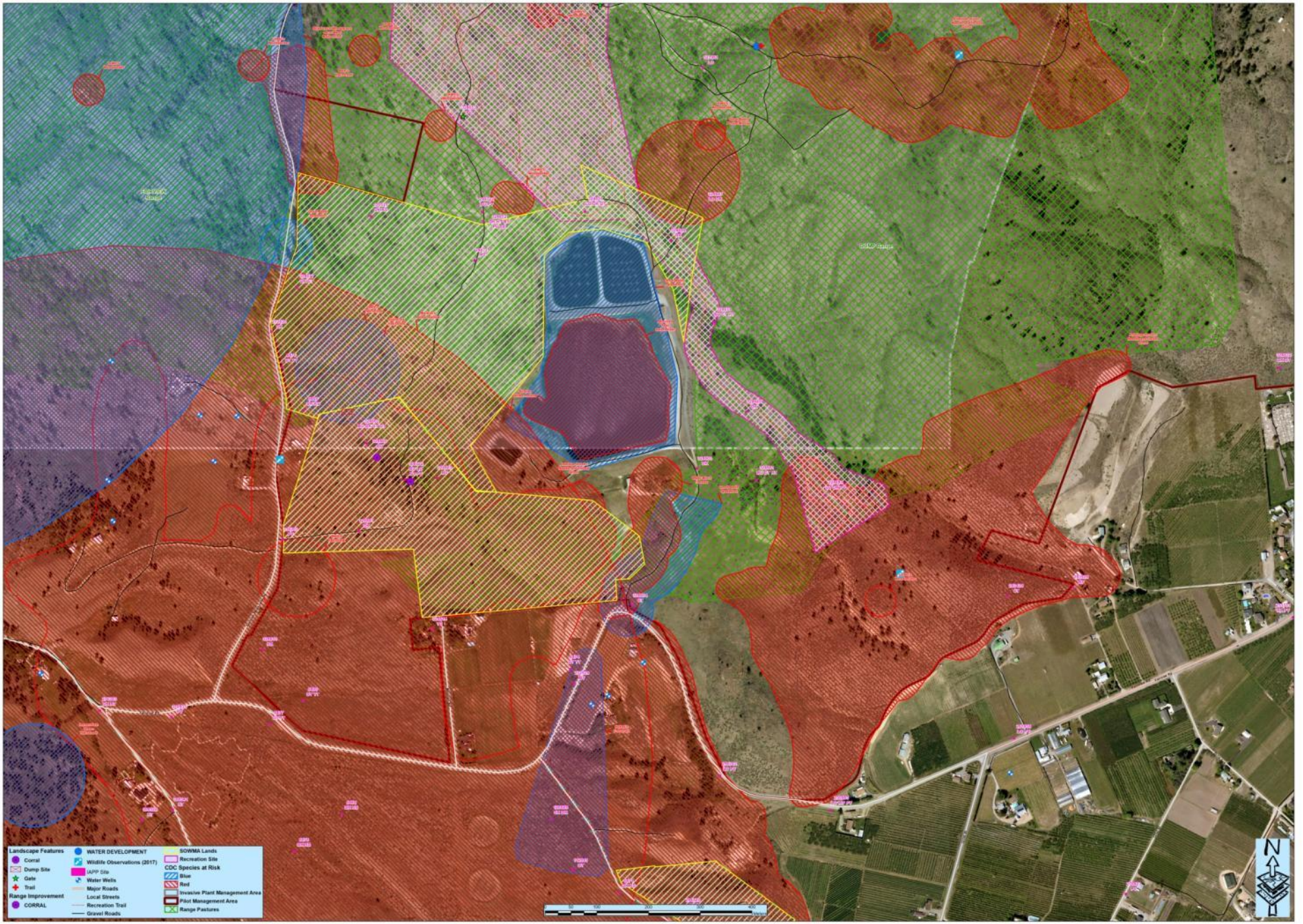
Landscape Features
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Dump Site
Gate
Trail
Range Improvement
CORRAL
WATER DEVELOPMENT
Wildlife Observations (2017)
IAPP Site
Water Wells
Major Roads
Local Streets
Recreation Trail
Gravel Roads
SOWMA Lands
Recreation Site
COC Species at Risk
Blue
Red
Invasive Plant Management Area
Pilot Management Area
Range Pastures
N

First year results

- Identified partners, stakeholders and environmental constraints
- Conducted field assessments with primary partners
- Completed detailed inventory and collected data using ArcGIS Collector
- Mechanically treated 4 species (1.5 ha)
- Chemically treated 4 species (0.5 ha)
- Treatment monitoring

Conclusion

- Priority ranking tool allows land managers to understand and justify decisions and allocation of resources
- Its an adaptive and flexible tool that provides an effective means of accomplishing restoration and maintenance goals, and assist in maximizing treatment impact under budget constraints
- Anticipate the holistic approach will improve stakeholder engagement and provide effective, long-term management for the highest value sites

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