Wildsight Golden's

Community Invasive Plant Program

Annual Report 2025

wildsight
golden

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Figure 8. CIPP Coordinator posing with the volunteers and CSISS representatives at the second Community Weed Pull of 2025.

ACKNOWLEDGEMENTS

Wildsight Golden’s Community Invasive Plant Program (CIPP) gratefully acknowledges that the program operates within the traditional and unceded territory of the Ktunaxa and Secwépemc Nations, which is the current home to the Métis Nation Columbia River Society.

The CIPP also recognizes and appreciates our partners within the community including the Columbia Shuswap Invasive Species Society (CSISS), the Town of Golden, and the community members who supported the program by volunteering their time at the weed pulls. Thank you to the Town of Golden for continuing to fund this program, as well as for being a great help by picking up garbage bags full of invasive plants that the program coordinator collects. CSISS provided invaluable support to the 2025 coordinator through guidance on BC's new provincial mapping database (InvasivesBC), landowner outreach, species identification, community weedpulls, and participation at the Farmers Markets. Their presence was both knowledgeable and encouraging, helping to raise awareness about invasive species. The program’s success is also due to the dedication of all our wonderful volunteers, with a total of 12 individuals participating in the 2025 Community Weedpull Events.

The CIPP would also like to thank all of the Wildsight Golden staff, everyone was very helpful and great to communicate and coordinate with. Including the Get Wild! Kids Day Camp Coordinator Robyn Bowers, Wildsight Golden Branch Manager Monica Taylor, and the Invasive Plant Program Manager Rachel Darvill, the program wouldn't have been possible without their support.

1. INTRODUCTION

Invasive species are plants, animals, or other organisms that have been introduced either intentionally or accidentally from outside their natural range. Without the natural pathogens or predators that keep them in check in their native habitats, they can establish quickly and spread at alarming rates. Invasive plants often displace native vegetation by competing for water, nutrients, and space (Invasive Species Council of British Columbia, 2022).

Considered one of the greatest threats to biodiversity, second only to habitat loss, invasive species provide little food or shelter for native animals and increase grazing pressure on remaining native plants. They also threaten agriculture by outcompeting crops and disrupting forest regeneration. Their success lies in traits such as rapid growth, high reproductive capacity, and an absence of natural controls. Left unmanaged, they can cause major ecological, economic, and social damage (Invasive Species Centre, n.d.).

Invasive plants in crops and pastures cost an estimated $2.2 billion each year by reducing crop yields and quality, and increasing costs of weed control and harvesting (Canadian Food Inspection Agency, 2025). They degrade soil and water quality, harm wildlife habitat, alter fire regimes, introduce diseases, and often cause permanent environmental damage. Social impacts range from health risks and reduced property values to infrastructure damage, restricted recreation, higher management costs, and trade limitations (Sea to Sky Invasive Species Council, 2024).

Human activity is the main driver of their spread. Moving plants, seeds, root fragments, contaminated machinery, and vehicles can transport invasive species from one place to another. Soil erosion, overgrazing, off-roading, and other disturbances create ideal conditions for them to thrive. They can also spread naturally via wind, water, wildlife, livestock, and even on footwear, clothing, and pets. Prevention is key cleaning equipment, minimizing soil disturbance, and following best practices can help reduce the risk (Invasive Species Strategy for British Columbia, n.d.).

Public education campaigns like Clean Drain Dry, PlantWise, and Play Clean Go encourage prevention and responsible choices. Wildsight Golden's Community Invasive Plant Program (CIPP) plays a crucial role in managing the impacts of invasive plants in the Town of Golden.. Through education, hands-on removal,

and promotion of non-toxic management methods, CIPP targets and removes over a dozen invasive species each year helping to protect the health and biodiversity of our ecosystems.

2. PROGRAM OVERVIEW

Wildsight Golden's Community Invasive Plant Program (CIPP) has been active since 2010, making 2025 its 16th season. This year, the program ran from May 12 to August 15, and the program coordinator worked a total of 420 hours. This schedule closely aligned with the 2024 season which ran from May 13 - August 16. The 2025 Invasive Plant Program Coordinator, Ashley Lang, completed her second year in the role. The program focused on removing invasive plant species throughout the Town of Golden using non-toxic methods, raising public awareness through community outreach, assisting residents in managing invasive plants on private property, and organizing community weed pulls. In 2025, invasive plant removal took place at 22 designated Priority Sites. A total of 142 bags of invasive plant material were removed with assistance from community volunteers and the Columbia Shuswap Invasive Species Society (CSISS). This brings the program's cumulative total to 2,850 bags as of August 15, 2025. During early to mid-season, plant stems and roots of species like Diffuse and Spotted Knapweed, Mullein, and Common Burdock were left on site to decompose. These species spread only by seed, not by roots or rhizomes. Since they had not yet gone to seed at the time of removal, they were left to dry out in the sun. This strategy, carried over from last year, was used to minimize plastic bag use.

3. INVASIVE PLANT MANAGEMENT

3.1 Priority Sites

The CIPP has 22 Priority Sites located mostly in public parks and around walking trails and roadways in the Town of Golden (see App*endix B)*. A new site (Site 22) was added along the riverside to prevent the establishment of Spotted Knapweed, Common Tansy, and Western Goatsbeard, as these species had not been observed there in previous years. A few plants were beginning to sprout, and managing this area early will help prevent their establishment and further spread.

3.2 Priority Invasive Species

The 2025 Coordinator used the Plant Priority List of the Golden Invasive Plant Management Area (IPMA), provided by the Columbia Shuswap Invasive Species Society (CSISS), to guide invasive plant species management in priority sites. This list supported the inventory, treatment, monitoring, and data collection related to invasive plants within the Columbia Shuswap Regional District (see Appendix C).

Site 19: The walking trail from the traffic bridge remains closed due to ongoing construction and therefore was not accessible for treatment. This section of the site was also inaccessible in 2024. Regional Early Detection and Rapid Response (EDRR) plant species: Black Henbane (*Hyoscyamus niger*) was observed and removed from site 19 in 2024. In 2025, Black Henbane was not present. However if Black Henbane should be spotted again, an observation report should be sent immediately to ReportInvasives. You can report the plant species; online through the Report Invasive BC mobile app or by emailing (invasive.plants@gov.bc.ca). This ensures the province receives these reports on these high priority species reports immediately. A photo allows Provincial specialists to confirm the identification and be able to accurately record the information that is submitted (Government of British Columbia, 2019).

Higher priority species that were removed at all sites include: Common Tansy (*Tanacetum vulgare*), Diffuse Knapweed (*Centaurea diffusa*), and Leafy Spurge (*Euphorbia esula*). Lower priority species that were removed; Spotted Knapweed (*Centaurea stoebe*), Orange Hawkweed (*Pilosella aurantiaca),* Bull Thistle (*Cirsium vulgare*), Common Burdock (*Arctium minus*), Canada Thistle (*Cirsium arvense*), Common Comfrey (*Symphytum officinale*), Hounds Tongue (*Cynoglossum officinale*), Western Goat's Beard (*Tragopogon dubius*), Wormwood (*Artemisia absinthium*), Dame's Rocket (*Hesperis matronalis*), Dalmatian Toadflax (*Linaria dalmatic*) and Yellow Toadflax (*Linaria vulgaris*).

Creeping Bellflower (*Campanula rapunculoides)* is not currently listed as an invasive species in British Columbia, as it's mostly found in residential gardens and back alleys. However, Creeping Bellflower is listed as a noxious weed in the nearby province of Alberta (Alberta Invasive Species Council, n.d.). it has been rapidly spreading over the past decade in the Town of Golden.

3.3 Invasive Plant Surveys and Invasives BC

The online provincial government program used to record invasive plant species distribution and treatment methods changed in 2023, transitioning from the Invasive Alien Plant Program (IAPP) to InvasivesBC. In 2025, the CIPP Coordinator conducted invasive plant surveys on paper for each priority site prior to removal, recording the density and distribution of each invasive species. This information, along with the corresponding treatment methods, was entered into InvasivesBC at the end of the season. The species Creeping Bellflower (*Campanula rapunculoides)* is not yet listed in the InvasivesBC database. As a result, no data was entered for sites 6, 15, and 21 where this species was observed and treated.

3.4 Removal Strategies

The CIPP uses only non-toxic techniques for invasive plant management. The 2025 CIPP Coordinator utilized the Removal and Disposal Strategies Guide, developed by the 2022 Coordinator, to effectively manage the removal and disposal of invasive plant species (see Appendix E). The primary treatment methods used were manual, consisting mainly of digging, along with hand-pulling and deadheading. The choice of manual removal method was based on the plant species and whether it had begun to seed. For example, plants that spread via roots, such as Knapweed, were dug up, while seed-spreading plants like Common Burdock had their burrs collected and bagged. Biennial species that had not yet seeded, such as Burdock rosettes, were often left in place to be deadheaded the following year.

Following the advice of the 2024 Coordinator, the 2025 Coordinator was able to reduce plastic waste by prioritizing the removal of non-seeding plants, such as Knapweed, earlier in the season. These plants were dug up and left on site to decompose. Once plants began to seed, all parts of the invasive species were bagged and removed to prevent further spread.

A natural herbicide was also used to treat Orange Hawkweed and Creeping Bellflower, consistent with the approach taken by previous Coordinators (see *Section 3.6*). Tarps were additionally used as a management method (see *Section 3.5*).

3.5 Tarps

Tarped sites were used to suppress the growth of isolated infestations of invasive plant species. Cypress Spurge, Creeping Bellflower, and Dalmatian Toadflax are among the invasive species currently managed with tarping throughout town. Tarping works by blocking sunlight that is essential to plant growth and by maintaining moisture, which can stimulate seed germination. When the plants germinate under the tarp, the resulting seedlings are deprived of light and die thereby reducing the population in the soil seed bank. The tarps are left in place for months to years, depending on the species being treated and its ability to grow.

The tarp at Alexander Park (Site 1) which was installed in 2023 and used to control Dalmatian Toadflax, was completely removed in 2025. The vegetation underneath the tarp was fully suppressed. The CIPP tilled up the area and planted grass seed and mountain avens ahead of a heavy rainfall event. Some Dalmatian Toadflax was sprouting around the area; however, there has been significant improvement in controlling the spread compared to 2023. It is recommended to continue monitoring this area for the long term effectiveness of tarping and control any Dalmatian Toadflax that appears (see *Figure 1*).

At Site 15, tarps were placed on the ground in 2023 to control a Cypress Spurge infestation. Those tarps remained secure over winter and appeared effective at limiting the spread of the species. The tarp on the east end of the site was fully removed in 2025. The exposed area was hand tilled and planted with grass seed and Mountain Avens (native plant that likes gravel-like soil conditions) previously collected by the Coordinator. This site was marked with stakes and rocks to help monitor the effectiveness of this restoration technique in the future, including the growth of grass and Mountain Avens. A new sign explaining this restoration project was installed at the site and secured for the 2025-26 winter (see *Figure 2*).

The larger tarped area on the west end of the Cypress Spurge infestation had its small front tarp removed, hand tilled, and planted with grass seed and Mountain Avens. The area around the tarp appears to have been taken over by an introduced plant, Snow-in-Summer (*Cerastium tomentosum*) which is classified as an exotic species in British Columbia. We only removed the small front tarp to see if the grass seed and Mountain Avens will grow or if the other plant will take over the area (see *Figure 3*). It is recommended to remove the remaining tarp in the summer of 2026 and to contact the homeowners

adjacent to the site, as they have shown a strong interest in helping and planting native seeds in that area.

At Site 2, a tarp was installed in 2024 to address a small infestation of Creeping Bellflower. In the spring of 2025, the tarp was repositioned and re-secured, as it had shifted. Some Creeping Bellflower was observed sprouting around the tarp edges. A natural herbicide (Appendix F) was applied to manage the sprouting plants, and the area was re-tarped to suppress further growth (see *Figure 4*). The main patches of Creeping Bellflower underneath the tarp are dying. It is recommended that this site be monitored through 2026, with full tarp removal planned for Summer 2027.

***Figure 1*. Tarp removal of Dalmatian Toadflax on Site 1.**

Figure 2: **Area of the Tarp Removed From the Cypress Spurge Site 15a.**

Figure 3**: Area of the Tarp Removed From the Cypress Spurge Site 15b.**

Figure 4: **Creeping Bellflower tarp re-adjusted.**

3.6 Orange Hawkweed Treatment Method Using Natural Herbicide

A natural herbicide to treat Orange Hawkweed (Appendix F) has been used by previous Coordinators. However, they had not recorded the long-term effectiveness of the natural Orange Hawkweed herbicide. At Site 7, some Orange Hawkweed was observed sprouting along the riverbank. An area was staked off so that effectiveness can be monitored. One section was dug up, removing the entire plant and attempting to extract as much of the root system as possible. The remaining Orange Hawkweed in that area was treated with the natural herbicide. This area was documented, and two applications of the herbicide were applied throughout the summer. After these applications, the Orange Hawkweed appeared to stop flowering and showed signs of dieback. The goal had been to apply the herbicide every two weeks and monitor the results. However, due to lots of rain over the summer, applications were reduced, as rain would dilute the herbicide and make it ineffective. It is recommended that in the summer of 2026, herbicide applications and monitoring be conducted consistently and that data be recorded to determine whether the natural Orange Hawkweed herbicide is effective over the long term.

The natural herbicide was also applied to a Creeping Bellflower infestation at Site 21 to test its effectiveness on other invasive species. In May, the Coordinator staked off the area. The right-hand side was treated with the natural herbicide, while the left-hand side was managed through hand-pulling (See *Figure 5*). The site was revisited, and the herbicide was applied four times throughout the summer. By the third application, most of the leaves in the treated area were dead, and no new growth was observed indicating a potential halt in the spread. By the fourth application, only 10 small Creeping Bellflower leaves were sprouting from the soil. These were coated again with the natural herbicide. No other growth was observed in the treated area, suggesting the herbicide may be effective in suppressing the plant. It is recommended to continue monitoring this area and reapply the herbicide as needed to evaluate the natural herbicide's effectiveness in controlling the spread of Creeping Bellflower.

Figure 5: **Effectiveness monitoring of the natural Orange Hawkweed herbicide being used on Creeping Bellflower.**

3.7 Restoration

The CIPP's restoration techniques focused on controlling invasive species and reintroducing native vegetation. Sites were treated using digging, tarping, and natural herbicide applications. Following treatment, disturbed areas were hand tilled and seeded with grass seed and Mountain Avens (*Dryas drummondii*) collected from Sites 1, 11, and 12. Sowing native species helps prevent invasive recolonization by stabilizing disturbed soil. Restoration areas were marked for monitoring, and regrowth was assessed throughout the season. The Mountain Avens began to go to seed in mid-to-late June, and seeds were collected by hand, placing the fluffy seed heads into both plastic and paper bags. It is recommended to continue to collect the Mountain Avens to re-plant in restoration areas and rocky areas where invasive plants were removed.

3.8 Biological Control Agents

At least two biological control agents have been monitored by the CIPP in the Town of Golden; however, no monitoring was conducted by CIPP during the 2025 season. The first is the root-feeding weevil (*Cyphocleonus achates*), located at Site 11 along the Kicking Horse River between the Oso Building and the CP train bridge. That species targets the roots of Spotted and Diffuse Knapweed. The second is the stem-mining weevil (*Mecinus janthinformis*), which has been used to control Dalmatian Toadflax at Site 1.

3.9 Overlap of Areas Treated with Spectrum

In previous years there was overlap between CIPP work areas and pesticide treatment by Spectrum Resource Group Inc. (SRGI). SRGI is a private contractor hired by the Town of Golden to mechanically/chemically treat invasive plant species. With good communication at the start of the year with Spectrum's Project Manager there was no overlap this year. The CIPP Coordinator used the detailed map and key of the CIPP (see Appendix B) work areas to send to SRGI so they could see what areas to avoid in their work. It is recommended to make early contact with Spectrum in 2026.

4. PUBLIC OUTREACH

4.1 Online Outreach

The CIPP Coordinator helped promote the program and educational information about invasive plants through online outreach, including weekly 'Weedy Wednesday' posts on the Wildsight Golden Facebook and Instagram pages (see Appendix H), and by answering any comments left on CIPP social media posts. E-blasts were also sent out monthly to the Wildsight Golden email list. The content included various information on invasive plant species and how to remove them, work updates from the CIPP program, and promotion of upcoming events such as Community Weed Pulls.

4.2 In-Person Outreach

The 2025 Coordinator took part in three Golden Farmers' Markets in June and July. CSISS attended two of the three markets. The CSISS staff were extremely valuable to have at the Farmers' Markets as they are very knowledgeable on invasive species and included information about whirling disease and watercrafts. CSISS brought an American Bullfrog in a jar, along with toy models of Zebra Mussels and Goldfish. These props were highly effective at attracting people to the booth. Informational pamphlets on invasive species, including identification and removal methods, were also available. At the one Farmers' Market that CSISS did not attend, the CIPP Coordinator set up a display featuring common invasive plant species found in Golden, a flower bouquet made of invasive plants (with no seeds), and more informational pamphlets. This display effectively engaged visitors, encouraged them to sign up for Community Weed Pulls, and prompted questions about invasive species and their removal. (see *Figure 6*). Visitors at the market expressed concern about Orange Hawkweed in their yard. A few people mentioned that they had tried the natural hawkweed herbicide and observed that it appeared to help reduce the plant's spread.

The CIPP Coordinator attended a free Invasive Plant Walk and Bioblitz in Golden, hosted by CSISS during Invasive Species Action Month in May. The event took place at Maple Drive Keith King Memorial Park and had three participants. Attendees were guided on a walk and introduced to common invasive species found in the Golden area. The group also learned how to report sightings using iNaturalist and discussed ways to help protect local biodiversity. During the walk, participants observed species such as Hound's Tongue, Common Burdock, Mullein, and Spotted Knapweed, along with native wildflowers.

***Figure 6*. CIPP Display at the Golden Farmer's Market.**

4.3 Private Landowner Outreach

The CIPP Coordinator emphasized offering free invasive plant inventories for private landowners within the Town of Golden. This was promoted through posters around town, social media posts, and a display at the weekly Farmers' Markets (see Appendix L). This season, three landowners signed up for the private landowner plant inventory. The CIPP Coordinator walked with each homeowner through their property and helped identify any invasive plant species present. Homeowners were then given advice on how to manage or remove these species using non-toxic methods such as hand-pulling, digging, or tarping, followed by proper disposal in garbage bags. All homeowners were very knowledgeable about the invasive plants on their properties. Common species identified included Western Goatsbeard, Creeping Bellflower, Orange Hawkweed, and Common Burdock. After the visit, each homeowner was emailed a summary outlining how to identify the plants, how they spread, and the effectiveness of various non-toxic control methods.

4.4 GET WILD! Kids Camp

The CIPP Coordinator spent one morning with Wildsight Golden’s GET WILD! Kids Day Camp, facilitating fun and educational games and activities focused on invasive plants. During the ‘Stop the Spread Freeze Tag’ game, children learned how invasive species have adaptations that help them spread quickly and dominate ecosystems (e.g., sticky seed burs on Common Burdock). The Coordinator emphasized the importance of early detection and rapid response and explored how the spread of invasive species is affected by variables like exposure time, number of invaders, and early intervention. In the ‘Here or Away’ game, kids were shown pictures of plants and animals and had to guess whether they were native or invasive. They also played ‘Invasive Species Prime Suspect,’ matching species descriptions with images placed around the park. These activities helped the children learn about local invasive species and how to identify them. The session concluded with a demonstration of PlayCleanGo principles, where the kids practiced removing plant material and mud from their boots and gear to prevent the spread of invasive species.

4.5 Signage

Any damaged or outdated signs from previous years were replaced with new signage to help inform the public. "No Dumping" signs were replaced at Site 13 behind the Dojo Center, Site 1 at Alexander Park Drive, and Site 2 by 14th Street on the Rotary Trail (see Appendix K). Restoration signs were also added or updated. The Cypress Spurge restoration area signs at Site 15 were replaced, as well as the Dalmatian Toadflax restoration sign at Site 1 and the Creeping Bellflower restoration sign at Site 2 (see Appendix G).

4.6 Media

One advertisement promoting the Community Weed Pull event was placed in the Golden Star Newspaper (see Appendix M).

5. Community Weed Pulls

Wildsight hosted two Community Weed Pull events that were held during the summer of 2025, at the same locations as the 2024 season. The CIPP also supported the Golden Cycling Club in hosting its own weed pull at Snake Hill. Events were promoted through posters (see Appendix N), a Golden Star ad, social media posts, e-blasts, and at the Farmers' Market.

The first Community Weed Pull took place at Alexander Park Drive (Site 1) on Saturday, July 12th from 10:00 am to 2:00 pm. Seven volunteers attended (see *Figure 7*). Twenty-two bags of invasive plants were removed, including Western Goatsbeard, Wormwood, Common Burdock, Dalmatian Toadflax, Mullein, Canada Thistle, and Spotted and Diffuse Knapweed. Wildsight Golden provided free pizza for all volunteers, purchased from a local restaurant (The Turning Point).

Figure 7: Volunteers Posing With Bags of Pulled Weeds After the First Community Weed Pull Event.

The weed pull with the Golden Cycling Club (GCC) at Snake Hill was very productive. It was held on Wednesday, July 16th, from 9:00 to 11:00 a.m. The event brought together five volunteers, Kelly the Executive Director of the GCC and one representative from the Columbia Shuswap Invasive Species Society (CSISS). Together, participants removed nineteen bags of invasive plants, including Spotted and Diffuse Knapweed, Western Goatsbeard, and Common Burdock. Following the weed pull, volunteers enjoyed cold water and snacks generously provided by CSISS.

The second Community Weed Pull occurred on Saturday, August 9th from 10:00 am to 2:00 pm at the Golden Disc Golf Course (Site 16). This event was a great success. Five volunteers participated, two representatives from CSISS in attendance for a total of eight people, including the CIPP Coordinator (see *Figure 8*). Most invasive plants except Burdock rosettes were removed, the Burdock seeds were cut from the plant and immediately bagged. We were able to collect twenty-nine bags of invasive plants including Common Burdock, Canada and Bull Thistle, Mullein, Sulfur Cinquefoil, Western Goatsbeard, Hounds Tongue and Spotted and Diffuse Knapweed. After the weed pull, volunteers were treated to burritos provided by Wildsight Golden and made by Reposados.

Figure 8: CIPP Coordinator posing with the volunteers and CSISS representatives at the second Community Weed Pull of 2025.

6. FUTURE RECOMMENDATIONS

6.1 Work Term and Hours

The work terms for the 2025 CIPP Coordinator was 14 weeks (420 hours), the same as the previous Coordinator. The previous CIPP Coordinator recommended hiring a summer CIPP assistant to support the program by assisting the CIPP Coordinator in the field a few hours each week. This additional help could make it easier to remove more invasive plant species at both high-priority and lower-priority sites. However, due to a lack of funding, Wildsight Golden was unable to hire an Office Assistant in 2025. The role could include assisting with plant removal at various sites, supporting outreach and education efforts, and providing general assistance to the Coordinator. Having two people in the field would allow the program to tackle more invasive plants throughout the Town of Golden, improve control in key areas, and expand outreach opportunities such as working with local schools and hosting additional community weed pulls.

6.2 Public Outreach

The CIPP Coordinator attended the Golden Farmers' Market three times throughout the summer. Public outreach at the market is a great opportunity to educate the community about invasive plant species and to encourage participation in Community Weed Pulls. It is recommended that the CIPP continues to attend future Golden Farmers' Markets, as they are one of the most effective ways to engage with the public. The CIPP should also aim to stay in contact with CSISS and invite them to join whenever possible. Their presence enhanced the booth's visibility, and they are very knowledgeable on invasive species. If CSISS is not available, the CIPP Coordinator should plan to create eye-catching props to help draw attention to the booth. In previous markets, a simple display featuring common invasive plant specimens and a bouquet made from invasive flowers proved to be an effective and engaging way to start conversations and raise awareness. Ensure that any invasives brought do not have seeds or root fragments that can spread.

The Golden Star is a good way to get the word out about invasive plant species. Social media posts were also very successful and had many Facebook and Instagram comments asking more about invasive plants. Free food for Community Weed Pull volunteers was a great way to draw people in to join.

6.3 Encouraging Management of Invasive Plants on Private Property

The CIPP program has been limited to managing invasive plants on Town of Golden property, not private land, and is not funded to go into CSRD rural areas. Unfortunately, this means that some infestations in the Town of Golden cannot be addressed if they are located on private land. This is particularly difficult when these infestations are adjacent to CIPP priority sites and contribute to the spread of invasive species. For example, directly across the road from Site 11 is a private property with a large infestation of Spotted and Diffuse Knapweed. The seeds from these plants spread across the road, undermining the removal efforts at Site 11.

The Orange Hawkweed outbreak along 9th Street South is a new area of concern and should be revisited next year as part of the private landowner outreach program. Additionally, Orange Hawkweed around 13th Avenue South, as well as Common Tansy and Common Burdock on private property near Site 6, were observed. These infestations are not being actively managed by landowners. A large amount of Creeping Bellflower was also noted along 14th Street South and should be included in the Coordinator's site visits for the 2026 season.

Although no letters were sent to landowners this year regarding invasive plant removal, multiple letters had been sent in past years by previous Coordinators with little success. While there is a bylaw in Golden that can enforce the management of noxious weeds on private property (see Appendix J), not all invasive plants are currently listed under the bylaw. For instance, although Common Tansy is classified as a Regional Noxious Weed under the BC Weed Control Act, it is not recognized as such in the local bylaw. It is recommended that the CIPP request that Common Tansy (*Tanacetum vulgare*) get added to the bylaw in 2026. Despite previous outcomes, it is also recommended that the 2026 Coordinator send out another round of letters to affected properties, as continued outreach may eventually yield results.

By effectively spreading the word about Wildsight Golden offering free invasive plant inventories on private property, we were able to complete three private property inventories. During these visits, we walked the landowners through their yards, taught them about the different invasive species growing

there, and shared non-toxic methods to remove them. This was a great way to support invasive plant management on private property within the Town of Golden. It is recommended that the 2026 CIPP Coordinator continue this outreach to get more people to sign up to make a difference.

6.4 Volunteer Engagement

The Community Weed Pull Events were very effective in both educating the public about invasive plant species and supporting the removal of large infestations at priority sites. A total of 51 garbage bags of invasive plants were collected across the two events in 2025, with a turnout of 12 volunteers overall. Most volunteers signed up at the Golden Farmers Market, reinforcing the importance of attending market days close to the weed pull events for effective outreach.

It is recommended that a third Community Weed Pull be added to the season schedule. This would allow for the removal of invasive plants at a third priority site. Site 7 is a strong candidate, as it has a significant infestation of Western Goatsbeard. Hosting this event in early June would be ideal, and could be turned into an educational opportunity by inviting local schools such as Golden Secondary, Alexander Park Elementary, and Lady Grey Elementary School. Western Goatsbeard is easy to pull, making it a great species for youth involvement and for hands-on learning. The event could include a fun competition to engage students. Another option is to collaborate with Get Wild! Day Camp and host a child-friendly weed pull one morning.

6.5 Future Community Weed Pull Routes

In 2025, the CIPP Coordinator used the same locations as the previous season for Community Weed Pull Events: Alexander Drive Park and Hole #1 at the Golden Disc Golf Course. Prior to the events, other previous weed pull sites (Sites 17,18,19) were surveyed, but had minimal invasive plant presence. Sites 2 and 13 were also considered, but Alexander Park and the Disc Golf Course had the highest densities of invasive plants, making them the most suitable for the events.

Alexander Park proved to be an excellent choice. It had sufficient infestations to engage volunteers throughout the event and offered a variety of species to educate the public. The public could also learn about CIPP's restoration efforts with the tarps used on Dalmatian Toadflax. The presence of picnic tables and shaded areas also contributed to the comfort of participants. Alexander Park should be considered

again for a 2026 Community Weed Pull event. The main species present at the site were Common Burdock, Spotted and Diffuse Knapweed, Canada Thistle, Western Goatsbeard, Wormwood, and Dalmatian Toadflax.

The Golden Disc Golf Course was also a great location for a weed pull, with nearby facilities providing added convenience. Invasive species collected at this site included Spotted and Diffuse Knapweed, Mullein, Canada Thistle, and Sulfur Cinquefoil. However, the majority of the work focused on Common Burdock, particularly rosettes and mature seed heads. Volunteers concentrated on cutting and bagging the seed heads immediately to prevent further spread. The Burdock rosettes were left in place for next year's Coordinator, as there were so many rosettes. It is recommended to try and host two weedpulls in that area. The first one early focused on digging up the Common Burdock rosettes and the 2nd weed pull cutting the seeds you missed as well and pulling the other invasive species in that area.

This year, the CIPP Coordinator collaborated with Kelly, the Executive Director of the Golden Cycling Club, who showed great interest in learning about invasive plant species. By coordinating with her early in the season, we successfully hosted a Community Weed Pull event at Snake Hill. Following the success of that event, Kelly independently organized another weed pull with the Golden Cycling Club at the bike jumps near Keith King Memorial Park, where volunteers collected 25 bags of invasive species. It is recommended that the 2026 Coordinator maintain contact with Kelly and continue partnering with the Golden Cycling Club to host future weed pull events.

6.6 Plastic Bags

During the 2025 season, the CIPP Coordinator acquired additional plastic garbage bags supplied by the Town of Golden. However, by the end of the season, the program was running low on bags Future Coordinators should plan to source more bags at the beginning of the work term to ensure sufficient supplies.

6.7 Future Sites

In 2025, the CIPP Coordinator also focused on establishing restoration and effectiveness monitoring reporting at select sites where tarping and natural herbicide applications were used. It is strongly recommended that these sites continue to be monitored and revisited multiple times throughout the

season and documented to assess long-term success. The tarped restoration sites include Sites 1,2, and 15 while herbicide applications were conducted at Sites 7 and 21.

There are homeowners near Site 15 who expressed interest in restoring the tarped area previously infested with Cypress Spurge. They would like to take the lead in replanting the site using native plant seeds. It is recommended that the 2026 CIPP Coordinator reach out to these homeowners at the start of the season to support their efforts and record details about the restoration process.

Mountain Avens was collected during the 2025 season in mid-late June at priority sites 1, 11, 12 about 2 large Ziploc bags were collected and used as part of restoration efforts, planted alongside grass seed at the tarped sites. It is recommended that more Mountain Avens be collected during the 2026 season. Additionally, seeds collected in 2025 should be used in areas with rocky soil where invasive plant species have been removed, such as Sites 7, 11, 12, 15, and 19.

At Site 19, a portion of the walking trail is currently closed due to bridge construction. During a site visit, mature Knapweed was observed growing along the riverbank. If the trail is reopened in the 2026 season, it is recommended that the site be monitored and visited multiple times throughout the year. Since the area has been largely untouched for two seasons, early and consistent management will be important to control the spread of invasive species.

Site 4 should also continue to be monitored. While Himalayan Balsam was not observed this year, some Burdock rosettes were found. Continued vigilance is recommended to ensure no invasive plants become established at this location.

Site 22 was added as a new priority site for the 2025 season. It is recommended that this site be revisited in 2026 to continue removing the Spotted Knapweed, Western Goatsbeard, and Common Tansy observed during initial visits.

7. CONCLUSION

Overall, the 2025 CIPP season was a success. The program effectively removed a significant amount of invasive plants using non-toxic methods, while also engaging with the community and raising awareness about invasive species. Outreach and education took place through multiple methods, including the Golden Farmers Markets, Get Wild! Kids Day Camp, Community Weed Pull Events, door-to-door outreach on private properties, and conducting plant inventories for interested landowners. Community members also frequently stopped by to ask questions and learn more while the CIPP Coordinator was working in the field. In addition to in-person engagement, awareness was further spread through social media posts, emails, and newspaper articles. Thanks to the support of many dedicated volunteers, the program successfully removed 142 bags of invasive plants during the 2025 season.

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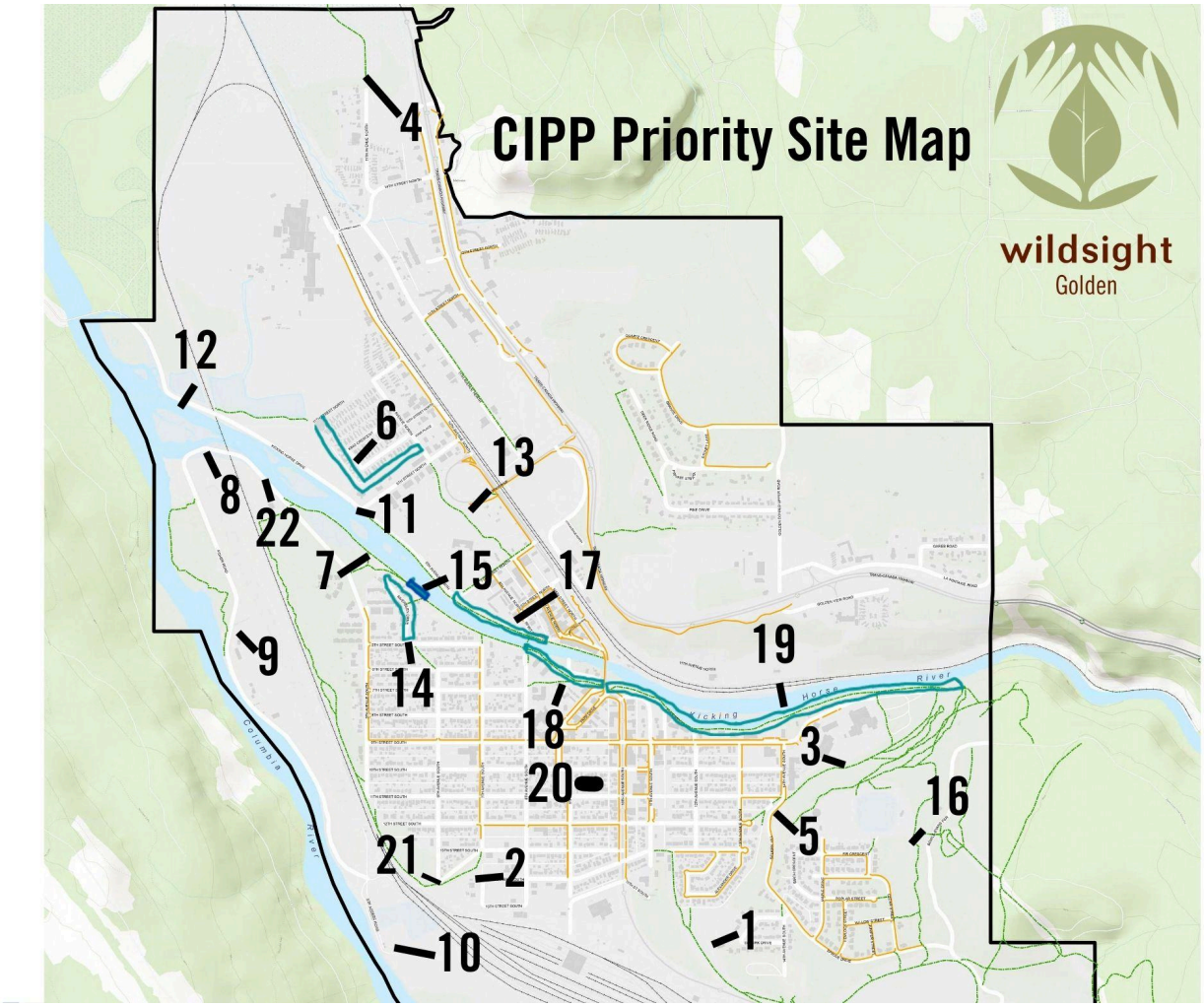
9. Appendix A. 2025 CIPP Invasive Plant Removal Locations and Number of Bags Pulled

Site Number	Location	Invasive Plants Removed	# of bags
1	Alexander Drive Park	Spotted Knapweed, Wormwood, Mullein, Common Burdock, Dalmatian Toadflax, Mullein, Western Goatsbeard, Canada Thistle, Sulfur Cinquifoil	23
2	Rotary Trail, 14th St S to 6th Ave S	Burdock, Western Goatsbeard, Dames Rocket, Canada Thistle, Common Tansy	11
3	Rotary Trail and area behind High School	N/A	0
4	Edelweiss Slough, along the parking lot and the trail	Canada Thistle	0
5	Rotary Trail, 11th St S by Well #3	Spotted and Diffuse Knapweed, Western Goatsbeard	2
6	Alleyway and walking path behind King Crescent	Common Tansy, Burdock, Spotted/Diffuse Knapweed, Mullein	18
7	Rotary Trail, (south side of river), CP Bridge to Pedestrian Bridge	Leafy Spurge, Spotted and Diffuse Knapweed, Common Tansy, Bull Thistle, Mullein, Orange Hawkweed, Yellow/Common Toadflax, Common Burdock	7.5
8	CP Bridge to Confluence, on the River side of the road	Spotted/Diffuse Knapweed, Mullein, Western Goatsbeard	2.5
9	Confluence to the Airport, along Fisher Rd	Burdock, Western Goatsbeard, Spotted/Diffuse Knapweed, Hounds Tongue	3
10	From the Little Mittens building to the Barn Swallow building, between the Private Driveway and the Columbia River	Canada Thistle, Western Goatsbeard, Burdock, Common Tansy	6.5
11	Kicking Horse Drive, 9th St N to CP Bridge, the side of the road by the river	Spotted/Diffuse Knapweed, Western Goatsbeard, Mullein, Yellow Toadflax, Hounds Tongue, Canada Thistle, and Burdock	8.5
12	Kicking Horse Drive, CP Bridge to the Ski Hill Bridge, the side of the road by the river	Spotted/Diffuse Knapweed, Western Goatsbeard, and Mullein	4
13	Walking Trail, from behind the Dojo to 7th St N	Canada Thistle, Burdock, Western Goatsbeard	16.5

14	Riverglen Drive	Creeping Bellflower, Orange Hawkweed, Western Goatsbeard, and Baby's Breath	1
15	South bank of the Rotary Trial, encompasses the backs of the first 3 houses in from the Riverglen Drive pathway	Creeping Bellflower, Orange Hawkweed, Western Goatsbeard	0.5
16	Golden Disc Golf Course, area around Hole #1	Common Burdock, Spotted/Diffuse Knapweed, Sulfur Cinquefoil, Hounds Tongue, Canada Thistle, and Mullein	29
17	Spirit Square to Oso Building, along Kicking Horse River	Western Goatsbeard, Spotted/Diffuse Knapweed	1
18	Pedestrian Bridge to Traffic Bridge, along Kicking Horse River	Western Goatsbeard, Burdock, Mullien	1
19	Traffic Bridge to Municipal Campground (end of trail), along Kicking Horse River	Spotted Knapweed, Diffuse Knapweed, Common Burdock, Bull Thistle, Mullien, Canada Thistle, Western Goatsbeard, Baby's Breath	4
20	Alleyways between 12th Street S and 9th Street S	Common Burdock	2
21	Rotary Trail, on the corner of 14th Street South and 6th Avenue South.	Creeping Bellflower	0.5
22	The east side of the Fisher Rd. From the Golden Transfer building (end of Rotary trail) to CP Bridge.	Spotted/Diffuse Knapweed, Western Goatsbeard	0.5
		Total # bags	142

Appendix B. 2025 CIPP Priority Site Map and Key



Appendix C. 2025 Golden IPMA Priority Plant List

Golden IPMA Priority Plant List

PREVENT – High priority species not currently known in the IPMA and/ or within the region. Management objective is to prevent the introduction and establishment.

- Bighead knapweed	- Greater knapweed	- Russian knapweed
- Black knapweed (BC)	- Himalayan blackberry	- Scotch broom
- Brown knapweed	- Himalayan knotweed	- Scotch thistle
- Buffalobur	- Japanese butterbur	- Spurge laurel
- Bur chervil	- Longspine sandbur	- Tansy ragwort
- Colt's foot	- Marsh plume thistle	- Teasel
- Field scabious	- Nodding thistle	- Tree of heaven
- Garlic mustard	- North Africa grass	- Wild chervil
- Giant hogweed	- Plumeless thistle	- Wood sage
- Giant knotweed	- Puncturevine	- Yellow archangel
- Gorse	- Rush skeletonweed (BC)	- Yellow flag iris

REGIONAL EDRR – High priority species extremely limited in extent (less than 10 very small sites) within the Columbia Shuswap Regional District boundary. Management objective is eradication.

- Common bugloss	- Hoary cress	- Wild parsnip
- Cypress spurge	- Short-fringed knapweed	

ANNUAL CONTROL – Species with limited extent and/ or significant potential to spread. Management objective is to prevent further expansion into new areas with the ultimate goal of reducing the overall extent.

- Baby's breath	- Diffuse knapweed (BC)	- Meadow knapweed (BC)
- Blueweed	- Hoary alyssum	- Poison hemlock
- Bohemian knotweed	- Japanese knotweed	- Policeman's helmet
- Common Tansy	- Leafy spurge (BC)	- Scentless chamomile (BC)

CONTAINMENT – Species is established or with high potential for spread. Management objective is to prevent further expansion into new areas within the region through establishment of containment lines and identification of occurrences outside the line to control.

Contain to gardens:	- Goutweed	**Contain to northern portion of IPMA - treat south of containment line:**
- Butterfly bush	- Mountain bluet	- Spotted knapweed (BC)
- Common periwinkle	- Myrtle spurge	
- English holly	- Russian olive	
- English ivy	- Salt cedar/ Tamarisk	
- Garden yellow loosestrife	- Siberian elm	

MANAGEMENT – Species is more widespread but may be of concern in specific situations with certain high values - e.g., conservation lands, specific agriculture crops. Management objective is to reduce the invasive species impacts locally or regionally, where resources are available.

- Bull thistle (BC)	- Dalmatian toadflax (BC)	- St. John's Wort (BC)
- Burdock	- Hound's tongue (BC)	- Western goat's beard
- Canada thistle (BC)	- Meadow buttercup	- Wormwood
- Caraway	- Orange Hawkweed	- Yellow hawkweed spp.
- Cheatgrass/downy brome	- Oxeye daisy	- Yellow toadflax (BC)
- Chicory	- Purple loosestrife (BC)	
- Common comfrey		

INSUFFICIENT INFORMATION – Species have insufficient information on their distribution, impacts, potential for spread and/or feasibility of control. Further information is required.

- Bachelor's button	- Flat peavine	- Meadow goat's beard
- Black locust	- Fragrant water lily	- Nightshade
- Carpet burweed	- Greater celandine	- Queen Anne's Lace
- Creeping buttercup	- Green foxtail	- Russian thistle
- Curly leaf pondweed	- Jewelweed	- Sulphur cinquefoil
- Dame's rocket	- Jimsonweed	- Sweet fennel
- Eurasian water milfoil	- Kochia	- Wild four o'clock
- Eyebright	- Lady's thumb	- Woolly vetch
- Field bindweed		

BC – biocontrol

Revised April 2025

Appendix D. CIPP Priority Sites Crossed-Referenced with 2025 Golden IPMA Priority Plant List

IPMA Color Codes:

Prevent, Regional EDRR, Eradication/Annual Control, Containment, Management, Insufficient Information

Site Number	Location	Invasive Plants Found
1	Alexander Drive Park	Spotted and Diffuse Knapweed, Common Burdock, Western Goatsbeard, Wormwood, Dalmatian Toadflax, Canada Thistle, Mullein
2	Rotary Trail, 14th St S to 6th Ave S	Common Tansy, Common Burdock, Western Goatsbeard, Canada Thistle, Dame's Rocket
3	Rotary Trail and area behind High School	N/A
4	Edelweiss Slough, along the parking lot and the trail	Common Burdock, Canada Thistle
5	Rotary Trail, 11th St S by Well #3	Spotted Knapweed and Diffuse Knapweed, Western Goatsbeard
6	Alleyway and walking path behind King Crescent	Common Tansy, Spotted/Diffuse Knapweed, Canada Thistle, Common Burdock, Common Comfrey, Creeping Bellflower
7	Rotary Trail, CP Bridge to Pedestrian Bridge	Leafy Spurge, Spotted and Diffuse Knapweed, Common Tansy, Orange Hawkweed, Western Goatsbeard, Mullein
8	CP Bridge to Confluence, on the River side of the road	Spotted/Diffuse Knapweed, Common Tansy, Mullein
9	Confluence to the Airport, along Fisher Rd	Spotted/Diffuse Knapweed, Western Goatsbeard, Common Comfrey, Canada Thistle, Mullein
10	From the Little Mittens building to the Barn Swallow building, between the Private Driveway and the Columbia River	Common Tansy,Common Burdock, Yellow/Common Toadflax, Canada Thistle,
11	Kicking Horse Drive, 9th St N to CP Bridge, the	Spotted and Diffuse Knapweed, Western Goatsbeard, Canada Thistle, Common Burdock, Yellow Toadflax, Hounds Tongue, Mullein

	side of the road by the river	
12	Kicking Horse Drive, CP Bridge to the Ski Hill Bridge, the side of the road by the river	Spotted/Diffuse Knapweed, Western Goatsbeard, Mullein
13	Walking Trail, from behind the Dojo to 7th St N	Canada Thistle, Common Burdock
14	Riverglen Drive	Orange Hawkweed, Creeping Bellflower
15	South bank of the Rotary Trial, encompasses the backs of the first 3 houses in from the Riverglen Drive pathway	Cypress Spurge, Glandular Baby's Breath, Orange Hawkweed, Western Goatsbeard, Creeping Bellflower, Mullein,
16	Golden Disc Golf Course, area around Hole #1	Spotted Knapweed, Common Burdock, Western Goatsbeard, Canada Thistle, Sulphur Cinquefoil, Mullein
17	Spirit Square to Oso Building, along Kicking Horse River	Spotted/Diffuse Knapweed, Canada Thistle, Western Goatsbeard, Mullein
18	Pedestrian Bridge to Traffic Bridge, along Kicking Horse River	Common Burdock, Canada Thistle, Western Goatsbeard, Mullein
19	Traffic Bridge to Municipal Campground (end of trail), along Kicking Horse River	Spotted Knapweed, Common Burdock, Bull Thistle, Western Goatsbeard, Canada Thistle, Wormwood, Mullein, Glandular Baby's Breath
20	Alleyways between 12th Street S and 9th Street S	Common Burdock
21	Rotary Trail, on the corner of 14th Street South and 6th Avenue South.	Creeping Bellflower
22	The east side of the Fisher Rd. From the Golden Transfer building (end of Rotary trail) to CP Bridge.	Spotted and Diffuse Knapweed, Western Goatsbeard

Appendix E. Removal Strategies Guide

Wildsight Golden's Community Invasive Plant Program - Invasive Plant Removal Strategies
August 2022

Invasive Species	Spreads By:	CIPP Removal Strategies	Treatment Effectiveness	Disposal Strategies
Baby's Breath	Seed	Hand pull - grab the whole plant from the crown to remove the whole root. Loosen the ground with a pitchfork before pulling, if necessary.	Hand pulling is very effective - the site must be returned to yearly due to the seed bank	Dispose of the entire plant to ensure no flowers or seeds have been left behind.
Bull Thistle	Seed	Cut the tap root just below the root crown, ideally before it has bolted and flowered.	Cutting below the root crown is effective for permanent removal.	Dispose of any flowers or seed heads. The whole plant may be left out to decompose if it hasn't flowered or gone to seed.
Dalmatian Toadflax	Seed Root Rhizomes	Hand pull before it flowers.	Handpulling does not remove the plant - it only stops seed production.	Dispose of the entire plant.
Dames Rocket	Seed	Hand pull.	Hand pulling is very effective - the site must be returned to yearly due to the seed bank	Dispose of flowers and seed heads.
Canada Thistle	Seed Root Rhizomes	Repeated hand cutting. Hand pulling may increase infestations.	Cutting does not remove the plant permanently - it only stops seed production.	Dispose of the entire plant.
Common Burdock	Seed	Cut the plant down after it has bolted and produced purple	Both cutting the plant down after it has	Dispose of the seeds / burs.

Wildsight Golden's Community Invasive Plant Program - Invasive Plant Removal Strategies
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		flowers (burs). Only second year plants produce seeds. The plant can be dug up if it has not yet flowered. Remove the entire tap root or it will regrow.	flowered and digging the plant up are very effective ways of removing Burdock. Waiting to cut plants down seems to be more efficient than digging them up.	
Common Comfrey	Seed Root	Dig out the entire root system.	Removing all the roots is effective in removing Common Comfrey. Leaving the roots in the ground will allow new plants to sprout.	Dispose of the entire plant.
Common Tansy	Seed Root Rhizomes	Dig out the entire root system. There taproots as well as creeping roots and rhizomes. Return several times a season since regrowth is rapid.	Removing all the roots is effective in removing Common Tansy. Leaving any roots in the ground will allow new plants to sprout.	Dispose of the entire plant.
Cypress Spurge	Seed Root	Dig the plant and it's roots up. Lay a tarp over an infestation for long term removal. **Wear gloves** - Cypress Spurge can cause skin irritation (rashes, blisters) and blindness if it gets in your eyes. Return several times a summer.	Digging only helps to stop the spread of the plant as it's roots can grow up to several metres deep.	Dispose of the entire plant.

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Diffuse Knapweed	Seed	Hand pull to remove the entire tap root. Best to manage early season before it flowers - that way you don't have to dispose of any part of the plant. Bio-agent - root-feeding weevil (*Cyphocleonus achates*)	If the whole root is removed, the treatment is very effective. Areas will still have to be treated yearly due to the seed bank.	Dispose of any flowers or seed heads. The whole plant may be left out to decompose if it hasn't flowered or gone to seed.
Glandular Baby's Breath	Seed	Hand pull. Remove as much root as possible.	Hand pulling is very effective for removal. Areas will still have to be treated yearly due to the seed bank.	Dispose of the entire plant.
Hound's Tongue	Seed	Hand pull. Remove as much of the root as possible to prevent regrowth. **Wear gloves** to prevent skin irritation.	Hand pulling is very effective for removal. Areas will still have to be treated yearly due to the seed bank.	Dispose of burr-like nutlets (seeds). The rest of the plant can be left to decompose.
Himalayan Balsam	Seed	Hand pull. If it has already gone to seed, put a bag over the plant before you pull it as the seed pods can explode and spread seeds several metres.	Hand pulling is very effective for removal as the root system is very shallow. Areas will still have to be treated yearly due to the seed bank.	Dispose of the entire plant to ensure no seeds are being spread.

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August 2022

Leafy Spurge	Seed Root	Dig the plant and it's roots up. **Wear gloves** - Leafy Spurge can cause skin irritation (rashes, blisters) and blindness if it gets in your eyes. Return several times a summer.	Digging only helps to stop the spread of the plant as it's roots can grow up to several metres deep.	Dispose of the entire plant.
Mullein	Seed	Hand pull. Remove the entire tap root.	Hand pulling is very effective.	Dispose of the yellow flower stalk. The rest of the plant can be left to decompose.
Orange Hawkweed	Seed Root Rhizomes	Cut flower heads and use a natural herbicide on the rest of the plant. OR dig up the plants and the roots. Return several times a summer. Natural Orange Hawkwe…	The herbicide treatment seems to be effective in killing the foliage of the plants. More data is needed to measure the long term effectiveness. Digging is effective as long as all of the roots are removed.	Dispose of the entire plant.
Oxeye Daisy	Seed Root Rhizomes	Hand pull to reduce the spread of seeds, however to remove the plant entirely the whole root system must be dug up (it is possible to get most of the roots by hand pulling depending on the density and moisture level of the soil).	Removing the entire roots system seems to be effective.	Dispose of the entire plant.
Spotted Knapweed	Seed	Hand pull to remove the entire tap root. Best to manage early	If the whole root is removed, the treatment	Dispose of any flowers or seed heads. The whole

Wildsight Golden's Community Invasive Plant Program - Invasive Plant Removal Strategies
August 2022

		season before it flowers - that way you don't have to dispose of any part of the plant. Bio-agent - root-feeding weevil (*Cyphocleonus achates*)	is very effective. Areas will still have to be treated yearly due to the seed bank.	plant may be left out to decompose if it hasn't flowered or gone to seed.
Sulphur Cinquefoil	Seed	Hand pull. Remove the entire root.	Hand pulling for small infestations is effective.	Dispose of any flower/seed heads.
Western Goatsbeard	Seed	Hand pull.	Hand pulling is effective as long as the root is removed (they come out very easily).	Dispose of any flower/seed heads.
Wormwood	Seed Root	Hand pull or dig out (depending on the soil).	Removing all of the roots is very effective.	Dispose of any roots or flower/seed heads.
Yellow Hawkweed	Seed Root Stolons	Hand pull the entire plant including stolons (above ground runners).	Hand pulling is effective to prevent seed production, however it does not prevent the plant from growing back the following year.	Dispose of the entire plant.
Yellow Toadflax	Seed Root Rhizomes	Hand pull before it flowers. Bio-agent - stem-mining weevil (*Mecinus janthinformis*)	Hand pulling will prevent seed production. Repeated hand pulling can be effective if done for up to 10 years.	Dispose of the entire plant.

Appendix F. Natural Orange Hawkweed Recipe

wildsight golden

Community Invasive Plant Program

Natural Orange Hawkweed Herbicide

This is an easy recipe you can make at home to combat Orange Hawkweed infestations on your property.

This natural herbicide was made by infusing orange peels in concentrated vinegar cleaner, adding some dish soap and applying directly to the orange hawkweed. This recipe takes two weeks to complete. If you are interested in making and applying this herbicide but orange hawkweed has already flowered on your property, while you are waiting for the herbicide to be ready to apply, cut off the flower heads and dispose of them, double bagged, to the landfill. For any questions or comments, please email wildsightweedprogram@gmail.com

Ingredients:

- 2.5L 10% Concentrated vinegar cleaner (Allen's Double Strength Cleaning Vinegar available at home hardware)
- 10-15 Citrus peels (orange, lemon, lime, grapefruit - citrus peels contain the naturally occurring terpene compound D-Limonene that is extracted by the vinegar) **or** use 1 oz D-Limonene, if available.
- 1/4C Dish Soap

Directions:
Soak citrus peels in vinegar solution for up to 2 weeks. Skip this step if you have access to D-Limonene.

After two weeks of infusing orange peels in vinegar, strain out peels and with gloves, pour vinegar into a spray bottle. Add dish soap to solution. The dish soap will help the herbicide "stick" to the orange hawkweed.

Spray on orange hawkweed and use care as the vinegar will also kill any other plants it comes into direct contact with. Keep out of reach of children and use gloves to avoid any skin irritation the vinegar solution may cause.

Left: Orange peels soaking in vinegar. Top to Bottom Right: Before and After images of where Herbicide was applied on Orange Hawkweed. T. Hackett -June, 2020

Appendix G. Dalmatian Toadflax Restoration Sign

wildsight
Golden

RESTORATION SITE

This site is currently undergoing invasive plant control to help restore the native plant ecology.

At this location: Dalmation Toadflax

Tarps have been staked down in an effort to permanently remove Dalmation Toadflax in this area. Dalmation Toadflax is a noxious invasive plant that is very high on our priority list for removal. If you see Dalmation Toadflax in other areas, please report it to wildsightweedprogram@gmail.com.

Learn more at
www.wildsight.ca/invasivespecies

CSISS
COLUMBIA SHUSWAP INVASIVE SPECIES SOCIETY

Appendix H. Weedy Wednesday Facebook/Instagram Post

Wildsight Golden
May 28 ·

When preparing and planting your garden, it's important to avoid introducing or spreading invasive plant species. Invasive plants can have harmful effects on humans, animals, and ecosystems. They can establish and spread quickly, overrunning native plant species and become a biodiversity hazard.

To prevent this:

🌱 Choose native or non-invasive introduced plants. Native plants don’t require extra watering, pesticides, or fertilizers.

🧐 Do your research before purchasing plants. Some plant nurseries and garden centers may unknowingly sell invasive plants.

🌺 Use caution with wildflower mixes. Wildflower seed mixes can disguise invasive plants. Read the species on the label and be familiar with common and specific names. Be particularly cautious if the species are not named on the package.

Some invasive species that commonly occur in wildflower seed mixes include, oxeye daisy (Chrysanthemum leucanthemum), blueweed (Echium vulgare), baby’s breath (Gypsophila paniculata), knapweed species (Centaurea spp.), purple loosestrife (Lythrum salicaria), creeping bellflower (Campanula rapunculoides), and orange hawkweed (Hieracium aurantiacum).

Check out PlantWise and Grow Me Instead resources for a list of commonly sold invasive species and alternatives to plant instead.

Appendix I. Landowner Outreach Letter - Orange Hawkweed

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Wildsight Golden's Community Invasive Plant Program

CSISS

Dear Landowner,

Please find enclosed information about an invasive plant of concern in your area. We have noticed that you have **Orange Hawkweed** on your property and have provided information below on how to control this plant effectively. Please contact wildsightweedprogram@gmail.com if you need more information on where the plant is located on your property and how to treat it effectively. A full invasive plant survey of your property is also available upon request.

As you may know, a few garden ornamental species are known to escape cultivated areas and may move into native ecosystems such as river edges, wetlands and grasslands. Without natural predators to keep them under control, these plant species can form dense monocultures and negatively impact habitat for native plants, fish, birds, amphibians and other animals. Once established, these plants are extremely difficult – if not impossible – to eradicate. In addition, invasive species can have detrimental impacts on our economies, including the agricultural industry, land values, and social/recreational values.

There are several ways of removing **Orange Hawkweed**. If it is a small infestation digging up the plant can be successful. Make sure all of the roots are removed as the plant will come back the following year if they are not. For a dense infestation, the best option is to cut all the flower heads off and put a tarp over the affected area for the whole summer. This will remove the seeds and kill the plants. A third option is to make your own natural herbicide to control the plant. If you'd like the recipe please contact us. The last option is to simply cut all of the flower heads off before they go to seed. This will not remove the plant, as it will still spread by it's roots, but it will help to control the spread.

We encourage you to separate invasive plant waste from your compost waste, double bag, and dispose of it accordingly at the local CSRD landfill or transfer station. As of 2018, it is now free to dispose of yard waste and weeds. Please inform the landfill attendant that you have invasive/noxious plant material to ensure proper disposal in deep burial. Do not compost or yard waste invasive plants.

If you have any further questions or concerns, please do not hesitate to contact us.

Sincerely,

Invasive Plant Program Coordinator
wildsightweedprogram@gmail.com

Appendix J. Schedule A, from the Property Maintenance Bylaw 1287, 2011

PROPERTY MAINTENANCE BYLAW NO.1287, 2011

SCHEDULE A

The following plants are noxious weeds:

Annual Sow Thistle	(Sonchus oleraceus)
Blueweed	(Echium vulgare)
Burdock	(Arctium spp.)
Canada Thistle	(Cirsium arvense)
Common Crupina	(Crupina vulgaris)
Common Toadflax	(Linaria vulgaris)
Dalmatian Toadflax	(Linaria dalmatica)
Diffuse Knapweed	(Centaurea diffusa)
Dodder	(Cuscuta spp.)
Gorse	(Ulex europaeus)
Hoary Cress	(Cardaria spp.)
Hound's-tongue	(Cynoglossum officinale)
Jointed Goatgrass	(Aegilops cylindrica)
Leafy Spurge	(Euphorbia esula)
Meadow Knapweed	(Centaurea pratensis)
Orange Hawkweed	(Hieracium aurantiacum)
Perennial Sow Thistle	(Sonchus arvensis)
Purple Nutsedge	(Cyperus rotundus)
Rush Skeletonweed	(Chondrilla juncea)
Scentless Chamomile	(Matricaria maritima)
Spotted Knapweed	(Centaurea maculosa)
Sulphur Cinquefoil	(Potentilla recta)
Tansy Ragwort	(Senecio jacobaea)
Velvetleaf	(Abutilon theophrasti)
Wild Oats	(Avena fatua)
Yellow Nutsedge	(Cyperus esculentus)
Yellow Starthistle	(Centaurea solstitialis)

Appendix K. No Dumping Sign

Appendix L. Private Property Landowner Free Invasive Plant Inventory Poster

Appendix M. Golden Star Newspaper Ad For Community Weed Pull

What's happening in Golden this week

SATURDAY, AUGUST 9

COMMUNITY WEED PULL

SATURDAY, AUG 9 FROM 10:00AM - 2:00PM

LOCATION: CONTACT BELOW

Free lunch will be provided for all volunteers! Email wildsightweedprogram@gmail.com to RSVP.

Appendix N. Community Weed Pull Poster