UBC OUTDOOR ART COLLECTION
HOLLY SCHMIDT, ARTIST IN RESIDENCE

Fireweed Fields
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**HOLLY SCHMIDT, Fireweed Fields**

1. **PROJECT DESCRIPTION**

*Fireweed Fields* is part of *Vegetal Encounters*, a ‘durational’ residency in the Outdoor Art program with Vancouver-based artist Holly Schmidt. *Vegetal Encounters* is one of a number of Outdoor Art initiatives at the UBC Vancouver campus.

*Fireweed Fields* transforms a UBC lawn site into a fireweed meadow, encouraging increased biodiversity through gradual succession as a metaphor for the resurgence of life after a crisis. This installation acknowledges the global climate emergency: by tearing through the fabric of maintained lawns and colonial ideals, it plants the initial seeds for change and catalyzes dialogue, creative experimentation, and new biodiversity research and learning opportunities.

1.1 **Collaborators**

Conceived by Schmidt, the *Fireweed Fields* project is a collaboration between the Morris and Helen Belkin Art Gallery (the Belkin), Sustainability Initiative (USI), and the UBC Botanical Gardens (UBCBG) Horticulture Training Program (HTP). Respective project leads assisting the artist are Barbara Cole, Curator of Outdoor Art, Belkin Art Gallery; Linda Nowlan, Senior Director, UBC Sustainability Initiative; and Egan Davis, Principal Instructor, Horticulture Training Program, UBC Botanical Garden.

1.2 **Project Partners**

Project partners include Dean Gregory, Landscape Architect, Campus and Community Planning; Jeff Nulty, Municipal Landscape Architect & Soft-Landscape Team; Tara Ivanochko, Associate Professor of Teaching, Director of Environmental Science, Department of Earth Ocean and Atmospheric Science; Academic Director, UBC Sustainability Initiative, Linda Jennings, Collections Curator, Herbarium - Vascular Plants & Algae, Beaty Biodiversity Museum; Tara Moreau, Associate Director of Sustainability and Community Programs, UBC Botanical Garden, Marina Roy, Visual Arts Graduate Advisor, Associate Professor, Art History & Visual Arts, Chrystal Sparrow, Land-based Art + Culture Advisor, Land and Food Systems, Hannah Askew, Executive Director of the Sierra Club BC, Liam Orme, Coordinator of UBC Climate Hub and Charlotte Falk, Living Labs: Designing for Public Space.

1.3 **Artwork Components**

Artwork components include the planting of a fireweed meadow and installation of a boardwalk (Belkin) – see Appendix; “Forecast”, a poetic series of reflective vinyl text on windows (Belkin and CIRS building); a film/video series for the Belkin’s new outdoor screen and lobby screen at CIRS; and an extensive series of activities and programs in both locations, including a Summer Intensive led by Holly Schmidt and Visual Arts professor Marina Roy.

Adjacent Programming including discussions, workshops, research and fieldwork study will be developed in collaboration with the Sustainability Initiative, Botanical Gardens, Beaty Biodiversity Museum, Musqueam Garden, Sierra Club BC, and UBC Climate Hub. The meadow will be used as a site of research to record the impact of the plantings in relation to campus biodiversity.

“**The world’s 6th mass extinction is underway. If allowed to continue, humans will soon be deprived of biodiversity benefits such as crop pollination, water purification, food sources, ecosystem services and cultural benefits**” (Ceballos et. al. 2015).

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1 Durational artworks seek to direct unmediated relations between subjects where duration is understood as a continual process of change, allowing for different perceptions of time and ways of experiencing the world.
2. ARTIST BIO

Holly Schmidt is an artist, curator and educator that uses processes of embodied research and informal pedagogy to explore the multiplicity of human relations with the natural world. Her work involves the creation of temporary site-specific projects and residencies, along with material-based explorations in the studio. Her national and international exhibitions, projects and residencies include: COV Engineering Artist-in-Residence (2020-2023), The Future is Floating (2020) Sydney Festival & Other Sights, Mantle (2019) Art Gallery of Evergreen, Coquitlam, Vegetal Encounters Residency (2019-2021) UBC Outdoor Art Program, Vancouver, Quiescence (2019) Burrard Arts Foundation, Vancouver, Pollen Index (2016) Charles H. Scott Gallery, Vancouver, Till (2014/15) Santa Fe Art Institute, Santa Fe. Schmidt is grateful to live and work in Vancouver, Canada, the unceded territories of the xʷməθkʷəỵəm (Musqueam), Skwxwú7mesh (Squamish) and səl̓ilw̓ətaʔɬ (Tsleil-Waututh) Nations.

3. PURPOSE STATEMENT AND RATIONALE

Fireweed is a sign of resurgence and recovery after a crisis. Through the metaphor of fireweed, Schmidt’s project offers new ways to see, think, and feel the need for urgent climate action. Fireweed’s role in recovery points to a necessary politics of care as part of the climate response in order to “recognize the interdependencies of human and non-human beings, as well as our dependence on the systems and networks, animate and inanimate, that sustain life on this planet.”

In thinking with Potawatomi ethnobotanist, Robin Wall Kimmerer, fireweed is also an invitation to go beyond metaphor, by shifting our relationship to plants as objects of study to a meeting between beings. Plants have much to teach us about how to be in relation with the Earth in a way that is caring rather than extractive. Fireweed acts as an ecological restorative providing sustenance and habitat to many species including humans. This plant has use-value as food, medicine and fibre for many cultures across the temperate Northern Hemisphere, including the Musqueam Nation where weavers traditionally used fireweed seed for weaving textiles. This project invites intercultural and intergenerational exchange through an array of partnerships and programming initiatives.

Fireweed Fields is also a decolonizing gesture. The history of lawns begins with aristocratic British estates in the 18th century, inspiring American plantations and later proliferating in post-war North American suburbs. The lawn is a symbol of colonization as it suppresses ecological and cultural diversity while requiring significant resources such as water, fertilizer and labour. As an artist of settler colonial descent, Schmidt is contributing to the collective work of dismantling these colonial symbols and systems while working towards the creation of alternative futures.

“Reconciliation, as defined by [UBC’s] inquiries and the United Nations Declaration on the Rights of Indigenous Peoples, is now a collective responsibility of the entire University to play an active role in supporting the Indigenization of our university.”

UBC Indigenous Strategic Plan 2020

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4. MEASURES OF SUCCESS AND ASSESSMENT CRITERIA

From conversations with project collaborators and partners and in relation to the UBC Public Realm Plan and Public Art Strategy, Schmidt developed the following assessment guidelines to measure the field’s successes. A Risk and Mitigation strategy follows.

1. Create and maintain a healthy plant ecology that supports increased campus biodiversity using native plants for 3-5 years.

Egan Davis, Principal Instructor, Horticulture Training Program, UBC Botanical Garden will use a horticultural approach for “semi-natural” landscapes developed by renowned British landscape architect, James Hitchmough in the creation and maintenance of the field. Hitchmough recommends random plantings of sun and shade tolerant herbaceous species that respond to and express the variable conditions of the land and environment. These plantings allow for seasonal change and annual succession. For Schmidt’s project, fireweed will be the dominant plant as it outcompetes most plants in the first year, but overtime, other plantings such as lupins and yarrow will begin to overtake the meadow.

While the “semi-natural” landscape requires some human intervention and maintenance, it has the appearance of wildness that draws attention to natural cycles and the passage of time which is critical to the success of the project.

Assessment Criteria:
- The Fireweed Field’s meadow consists of healthy communities of plants that are responding well to the variable conditions of the site and the environment.
- The meadow has good coverage of plants that are maintained and thriving.
- Natural life cycles of plants and changing seasonal conditions are incorporated into artistic responses to the site and programming.

2. Communicate the intentions of the artist through site design, outdoor screen and signage.

Schmidt’s practice engages with the everyday to draw attention to taken for granted behaviours and surroundings. By creating subtle shifts or changes, she generates curiosity and prompts important questions about human relations with the natural world. This disruption of the familiar creates opportunities to build new understandings and ways of relating to plant life.

Fireweed Fields is delineated from the lawns of Main Mall through their aesthetic variability and difference. The meadow encompasses the entirety of the greenspaces up to the boundary of the paved walkways. This is to ensure it appears as a field rather than a flowerbed. The order of the paved sidewalks contrasts the disorder of the meadow.

An invitation to cross over this boundary is extended by a wooden boardwalk designed by Charlotte Falk in collaboration with the artist. The transition from pavement to wood signifies a shift in the landscape. The boardwalk leads the audience into the artwork and towards a series of platforms that allows them to stand amidst the plants and enter into a different kind of relationship with them. The platform nearest to the entrance of the Belkin will provide seating to view the outdoor digital screen. As repeated content within an ever-changing and ongoing reel, documentation of Fireweed Fields’ seasonal activities will be included on the screen to help communicate the life cycle of the meadow. For example, planting might be featured during the fall when seed collection is taking place.

At the edge of the site, there will be signage with a QR code that leads to additional information about the artist and her Vegetal Encounters residency on the Belkin website and social media.

Assessment Criteria:
- Easy access to materials and resources are provided to inform UBC faculty, staff, students and visitors’ engagement with Fireweed Fields.
- Different access points for engagement including the site design, outdoor screen, and interpretive materials are provided.

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\(^{1}\) For a list of plants, see page 8
3. **Activate the outdoor spaces of the Belkin providing informal learning & public programming opportunities.**

*Fireweed Fields* will activate the outdoor spaces of the Belkin through the seasonal changeability of the meadow, on-going artistic interventions and public programming. The presence of the artist and project partners participating in a range of activities such as planting, outdoor classes, collecting specimens for research, botanical monitoring, gathering seed pods, or forms of creative experimentation inspires curiosity and an interest in engagement.

Campus and community partners will create programs to engage the UBC community and the broader public in art, natural relationships with the world, including Musqueam ways of knowing, natural succession and climate action. Where possible these programs will take place outdoors in the field.

Beyond the activities of the artist and project partners there will be site features that invite passive interaction, such as the boardwalk platforms that offer seating and opportunities for informal socializing and appreciation of the plant-life. The outdoor screen will also host a curated program of related film and animation that extends the reach of this artwork.

**Assessment Criteria:**
- There is a consistent schedule of activities throughout the year demonstrating seasonal change and ways to engage with *Fireweed Fields*.
- Activities are documented and shared online and through social media.
- There are multiple ways for people to participate in site activations.

4. **Contribute to UBC’s research, teaching and learning mandates.**

This project is an important opportunity to systematically document changes in biodiversity on campus. Under the direction of Linda Jennings, Collections Curator for the BBM Herbarium, faculty in Botany and Zoology, the artist, and students will collect specimens at five intervals throughout the first year and three in the following years. Fieldwork for this research will be incorporated into the Environmental Science 200 curriculum and guided by the artist and Jennings. Graduate-level research will also be supported by the UBC Sustainability Initiative’s Sustainability Scholars program.

*Fireweed Fields* presents an experiential learning opportunity for UBCBG Horticulture students making an important connection between research and practice. Through direct experience with the planning, preparation, creation, and monitoring of a meadow’s life cycle, they gain valuable learning about sustainable low GHG landscaping.

**Assessment Criteria:**
- There is a research plan for documenting biodiversity that is implemented with support from faculty, staff, students, and the artist.
- Fieldwork is embedded in the curriculum of ENVR 200 courses and shared with the Horticulture Program.
- Campus gardeners are consulted and take part in regular monitoring of the meadow and its impact on their operations.

5. **Bring together artists and scholars across disciplines to address the climate emergency through creative experimentation and exchange.**

The Summer Intensive led by Schmidt in partnership with AHVA Professor, Marina Roy, invites artists and scientists to participate in dialogue and experimentation in relation to the meadow. Through readings, walks, meals, and engagement with plant life, participants will slow down and develop what anthropologist Anna Lowenhaupt Tsing calls the “art of noticing” as a way to respectfully acknowledge our entangled relations with the natural world.

**Assessment Criteria:**
- The Summer Intensive builds towards an ongoing creative research network that generates news research questions and interdisciplinary practices to address the climate emergency.
6. **Acknowledge presence on Musqueam Territory and collaborate with Indigenous led campus projects and initiatives.**

Chrsytal Sparrow, UBC Indigenous Land Based Art + Cultural Advisor, is offering advice and support for this project. Her experience establishing the Musqueam Garden at UBC Farm and coordinating support and participation in its activities will be a tremendous gift for this artwork.

Assessment Criteria:

- Protocols are identified and the relationship between *Fireweed Fields* and Musqueam Garden creates moments for intercultural and intergenerational exchange. For example, fireweed has many uses and an invitation could be extended to gather plants for food, medicine or fibre.

5. **SITE SELECTION DESCRIPTION**

*Fireweed Fields* engages the green space surrounding the Morris and Helen Belkin Art Gallery (1825 Main Mall) located in UBC’s Arts + Culture District.

The approximately 1,400 m² L shaped lawn is located at the northwest edge of Main Mall. The lawn is divided into three sections by two paved walkways that lead to the entrance. The first is a level rectangular section that offers points of entry to the meadow from the boardwalk and viewing points for the *Forecast* installation in the horizontal band of Gallery windows. The second section slopes towards the Gallery and the outdoor screen, providing a viewing corridor and platform to sit and view the screen. The third is a rectangular section facing north. Along the edge of Main Mall there is a series of red oaks (*Quercus rubra*) and along the northside there is a stand of mature Black Pines (*Pinus nigra)*.

5.1 **Overview**

- The site will be prepared and planted with native herbaceous plants including multiple early stages of ruderal succession.
- The approach to planting and maintenance will follow the ecological model for planting developed by Egan Davis, Principal Instructor of UBCBG Horticulture and inspired by James Hitchmough. This approach requires maintenance that supports natural succession.
- Davis will oversee construction of the meadow and its ongoing maintenance over the course of the first three years with his students (19 students enrolled for Spring 2021).[1]
- The first year will require maintenance and intensive monitoring – especially as the fireweed’s seed pods form. Subsequent years may require less maintenance but will still need to be monitored closely.
- The artist’s engagement with the meadow will be consistently active throughout the seasons, responding to the changing conditions through gentle interventions.
- In consultation with campus Soft Landscape staff, the Belkin Art Gallery will assess the success of the meadow in relation to criteria and resources, to determine if the sites should: 1. be restored to their previous conditions; 2. continue to manage and maintain their meadow-like conditions; or 3. proceed with the next stage of succession to gradually transition to a landscape of native shrubs and other herbaceous plants.
5.2 Campus Precedent
The landscape plan for Fireweed Fields is informed by the success of a recent meadow at UBCBG. This meadow involved seeding native plants and grasses into a pre-existing lawn. The field was not cut over the spring and summer months allowing the seeded plants to grow along with the grass. The resulting meadow increased biodiversity, provided consistent, attractive growth and cover throughout the summer and fall and required minimal maintenance.

6. PLANT SELECTION
A selection of native plants will be seeded along with the fireweed. Together they will form a healthy plant community as they adapt to the variable conditions of the sites. Fireweed will be the most dominant plant in the first year with other plants surpassing it in future years.

Fireweed, Great Willow Herb (*Chamaenerion angustifolium*)
- Native Range – Temperate Western Hemisphere including PNW.
- Perennial plant that grows to a height of 3-6 ft.
- Full sun to part shade, moist well-drained soil.
- Reproduces from rhizome and seed.
- Magenta blossoms from July to September.

Lupins (*Lupinus polyphyllus*)
- Native Range – North America.
- Perennial plant that grows to a height of 3-5 ft.
- Sun, part shade, with dry to moist soil.
- Clump forming perennial, produces seed.
- Purple flowers from May to June.

Yarrow (*Achillea millefolium*)
- Native Range – Temperate North America.
- Perennial plant that grows to a height of 1-3 ft.
- Sun, part shade with dry soil.
- Self-seeding.
- White and yellow flowers from May to September.

Idaho Fescue (*Festuca idahoensis*)
- Native Range – Western North America.
- Perennial plant that grows to a height of 2 ft.
- Full sun to light shade, avg. soil, drought tolerant.
- Self-seeding.
- Flowers from May to June.
7. MEADOW INSTALLATION PLAN

Egan Davis and Holly Schmidt will supervise 16 students from the Horticulture Training Program (HTP) to install the meadow over three, six-hour shifts.¹

Day 1: Prepare Site
- Cut grass as short as possible
- Identify and flag location of all irrigation heads and other infrastructure items

Equipment:
- 2 x mower - rental
- String Trimmer - rental
- Irrigation Flags

Day 2: Prepare Ground
- Scarify turf with power rake/de-thatcher machines
- Rake and remove thatch and grass from power raking

Equipment:
- 2 x power rake - rental
- Green waste container box – 10 cubic yards UBC Operations or rental
- Hand tools – rakes and wheelbarrows, brooms, blower supplied by HTP
- 12 safety cones

Day 3: Sow Seeds
- Top-dress site with compost
- Apply and rake in seed
- Roll surface to press in seed
- Identify and flag location of all irrigation heads and other infrastructure items
- Irrigate site: hand water with hose and wand
- Install perimeter fence to prevent people from walking on freshly seeded ground

Materials & Equipment
- Soil
- Seed
- Fencing material (posts and string)
- 12 safety cones
- Wheelbarrows, shovels, landscape rakes, watering wand supplied by HTP
- Hoses: 6 x 50’ garden hose
- 2 x lawn roller - rental

¹UBCBG Horticulture Program continues with in-person classes held outdoors due to Covid-19 regulations.
8. MEADOW MAINTENANCE AND MANAGEMENT PLAN

8.1 Responsibilities
First Point of contact regarding the maintenance of Fireweed Fields is the Belkin Art Gallery’s Curator of Outdoor Art. Decisions about the field will be made with the artist, Holly Schmidt, under the advisement of the Principal Instructor of the Horticulture Program and in agreement with Dale Low, Manager Soft-Landscape to ensure best practices are followed. Decisions will be made in a timely fashion as the condition of the landscape can change rapidly.

The site will be monitored for irrigation, weeds, seed production, fallen plants, and vandalism by the artist, curator, HTP Instructor and Belkin staff at varying levels of intensity throughout the year (see 8.4).

8.2 Relationship with Soft Landscape Staff
Addressing concerns raised by the Landscape Architects in relation to impact of seed dispersal on maintenance operations beyond the Belkin site, monthly site meetings will be conducted with Soft Landscape staff to assess current maintenance levels. Weekly images of the site will be emailed to the team to keep everyone informed of site conditions. A collaborative approach will be taken by the artist to ensure consistent communication and an exchange of information ensures the success of the project.

8.3 Maintenance
Maintenance activities will be undertaken by the following:
Leading:
- Curator of Outdoor Art Program, Barbara Cole
- Principal Instructor of the Horticulture Training Program, Egan Davis
- Artist-in-Residence, Outdoor Art Program, Holly Schmidt
Supporting:
- Horticulture Training Program (HTP): 16-19 students from September to June, lead Egan Davis, Principal Instructor of HTP
- Fireweed Fields Stewardship Group (FFSG): Rotating group of 8 students providing extra-curricular stewardship, Curator of Outdoor Art and Artist lead with coordinating support from Belkin interns (September – end of April)

8.4 Seasonal Management Plan

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Maintenance Activities</th>
<th>Responsible</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021 Spring</td>
<td>Irrigation for germination</td>
<td>HTP at time of planting, artist &amp; Davis at weekly intervals /as needed</td>
<td>60</td>
</tr>
<tr>
<td>April – June</td>
<td>Light weeding to reduce field disturbance</td>
<td>The artist leads FFSG – 16 students for 3 hours</td>
<td>48</td>
</tr>
<tr>
<td>2021 Summer</td>
<td>Track and Date the stages of fireweed development: vegetative, reproductive, bud formation, &amp; opening of flowers.</td>
<td>The artist under the advisement of Egan Davis and shared with Soft Landscape Staff</td>
<td>20</td>
</tr>
<tr>
<td>July – August</td>
<td>Weeding, tending to plants</td>
<td>Artist &amp; FFSG – 10 stewards for 3-hour bi-monthly</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Track and date the movement and distance of fireweed flower development up the raceme, petals dropping on oldest open flowers, swelling and growth of fruit capsules.</td>
<td>The artist under the advisement of Egan Davis and shared with Soft Landscape Staff. Once flowers open, monitoring shifts from weekly to daily in order to anticipate when the field requires mowing to prevent seed dispersal.</td>
<td>30</td>
</tr>
<tr>
<td>2021 Fall</td>
<td>Weeding</td>
<td>FFSG – 10 stewards for 3 hours</td>
<td>30</td>
</tr>
<tr>
<td>Sept – Nov</td>
<td>Strategic seed collection using practices that prevent seed drift</td>
<td>HTP – 16 student for 3 hours Artist &amp; FFSG – 10 stewards for 3 hours Musqueam Garden- 5 volunteers for 3 hours (TBD)</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Mowing</td>
<td>A determination of when to mow is made with Soft Landscape Staff. Mowing is carried out by HTP or Soft Landscape depending on the timing.</td>
<td>5</td>
</tr>
<tr>
<td>2021/22 Winter</td>
<td>Fallow period no maintenance, artist interventions</td>
<td>Artist – 5 hours, 8 intervals</td>
<td>40</td>
</tr>
<tr>
<td>Dec– Feb</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 8.5 Risks and Plans for Mitigation

<table>
<thead>
<tr>
<th>Potential Risks</th>
<th>Mitigation Plan</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drought conditions</strong></td>
<td>Monitor daily through phases of germination and early growth</td>
<td>Maintain moisture levels through irrigation</td>
</tr>
<tr>
<td></td>
<td>Monitor weekly during summer months. Assess, irrigate as needed</td>
<td>Apply moisture testing and check for plant stress, if beyond threshold irrigate 2 cm</td>
</tr>
<tr>
<td></td>
<td>Stress testing</td>
<td>Monitor, check for flagging for 2 consecutive days; any occurrence of wilting; yellowing or reddening of leaves</td>
</tr>
<tr>
<td></td>
<td>Soil moisture testing</td>
<td>Field test to determine moisture using look and feel observation methods and soil probes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plants will adapt to dry soil as they harden off through the summer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plants in drier areas such as under the pines may require localized irrigation</td>
</tr>
<tr>
<td><strong>Heavy summer rain or overhead irrigation causing mature height plants to fall over</strong></td>
<td>Sow diverse seed mix to encourage site specific species competition, plant community density and physical plant support</td>
<td>Only irrigate plants in case of extreme drought in summer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Do not over irrigate to keep plants soft and lush</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No supplementary fertilizer</td>
</tr>
<tr>
<td><strong>People and dogs knocking over plants</strong></td>
<td>Monitor and respond promptly</td>
<td>Support damaged areas with bamboo stakes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selectively cut back areas that are partially damaged or in some situations, mow or damaged areas</td>
</tr>
<tr>
<td><strong>Weeds</strong></td>
<td>Monitor weekly during the summer months</td>
<td>Manage weeds by pulling so as to minimize disturbance (triggers weed response)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pull perennial weeds such as Canada thistle (Cirsium arvense) and yellow sweet clover (Meliotis officinalis) before they go to seed to reduce spread</td>
</tr>
</tbody>
</table>
Low annual weeds will be outcompeted by installation

Fireweed Seed Dispersal
Monitor plant development on a weekly basis until flowers open, then shift to daily tracking.

Fireweed is an opportunistic plant that produces a large volume of seed. Plants will be cut down prior to seed production, harvested by Artist, picked up by waste management services

Legibility of intention
During fallow periods of winter and early spring ensure there are enough cues on site to make visible the artist’s intention

Ensure boardwalk design is unique in relation to the context as well as functional

On the Belkin’s outdoor electronic screen, Include video documentation of the Fireweed Field’s evolution through phases of growth and development

Regular artist interventions throughout all seasons and phases of growth provide a presence of site

Didactic panels and accessible information for a variety of publics

### 8.6 Equipment
Equipment required for on-going maintenance will come from the HTP and UBC Tool Crib, therefore on-site storage is not required.
- 1 x Soil Probe
- 6 x 50’ 5/8” hoses (min.)
- 3 x Y splitter valves
- 4 x Impact sprinklers
- 1 x Water key: Zurn
- 2 x mower rented from UBC Tool Crib

### 8.7 Review
The Curator of Outdoor Art will schedule a meeting with the artist, HTP Instructor, both Landscape Architects (Campus & Community Planning & Municipal) and Soft Landscape representatives, to review the first year of meadow maintenance based on the criteria included in this application. At this time, plans for future years will be adjusted based on new learning. At the end of three years (April 1, 2024), the Belkin Gallery will undergo an assessment of the landscape and its succession from lawn to meadow. The benefits of the meadow in relation to the project’s stated measures of success will be discussed and decisions made about its future. If at any point the gallery chooses to revert back to lawns, we will reinstate the site to the same or better condition before turning back over its’ ongoing maintenance to the UBC soft landscape team.
9. **SCHEDULE OF ACTIVITIES**  
(Construction and Maintenance highlighted)

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb - March 2021</td>
<td><strong>Preparation</strong></td>
</tr>
<tr>
<td></td>
<td>- Consult with Musqueam Nation Protocol Office</td>
</tr>
<tr>
<td></td>
<td>- <strong>Finalize design, construction, and maintenance plan for meadow &amp; boardwalk</strong></td>
</tr>
<tr>
<td></td>
<td>- Acquire development permit</td>
</tr>
<tr>
<td></td>
<td>- Hire contractor to build boardwalk</td>
</tr>
<tr>
<td></td>
<td>- Purchase seed, soil &amp; compost</td>
</tr>
<tr>
<td></td>
<td>- Coordination of research, programming &amp; communication plans</td>
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<tr>
<td></td>
<td>- Biodiversity research on BBM collections for both sites begins</td>
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<td></td>
<td>- Curriculum planning &amp; development for ENVR 200 &amp; Horticulture Program</td>
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<tr>
<td></td>
<td>- Hiring and onboarding for Belkin internship to support project</td>
</tr>
<tr>
<td>April - May 2021</td>
<td><strong>Germination &amp; Growth</strong></td>
</tr>
<tr>
<td></td>
<td>- Musqueam Nation ceremony prior to breaking ground</td>
</tr>
<tr>
<td></td>
<td>- HTP prepares, plants and irrigates the site</td>
</tr>
<tr>
<td></td>
<td>- <strong>Meadow monitored on a daily basis to ensure moisture levels for germination</strong></td>
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<tr>
<td></td>
<td>- Average precipitation is 2.5 cm a week, irrigate if required</td>
</tr>
<tr>
<td></td>
<td>- Plant development monitoring begins with vegetative growth</td>
</tr>
<tr>
<td></td>
<td>- Photo &amp; video documentation of grass removal &amp; planting for outdoor screen</td>
</tr>
<tr>
<td></td>
<td>- Research projects for Sustainability Scholars identified &amp; awarded</td>
</tr>
<tr>
<td>June - August 2021</td>
<td><strong>Flowering</strong></td>
</tr>
<tr>
<td></td>
<td>- <strong>Meadow grows and begins blooming late summer</strong></td>
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<td>- Soil moisture &amp; plant health monitored on a daily basis, irrigate in drought situation</td>
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<td>- <strong>Weeds identified &amp; removal assessed weekly</strong></td>
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<td>- <strong>Fireweed Flowers are monitored and tracked daily upon opening</strong></td>
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<td></td>
<td>- Biodiversity research collecting at three intervals through summer</td>
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<tr>
<td></td>
<td>- Artist-led Intensive with art &amp; science participants</td>
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<td></td>
<td>- Sustainability Scholar research projects undertaken</td>
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<td>- Included in Outdoor Art Tours offered by the Belkin until 2023</td>
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<td></td>
<td>- Curated program of video &amp; animation on outdoor screen</td>
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<td>- Fall programming cross-institutional coordination and promotion</td>
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</table>
| Sept - Dec 2021 | - Meadow finishes blooming and is sheared to prevent seed dispersal  
| Flowering & Seed Production | - Cut plant material is gathered by HTP and removed by Waste Management Services  
| | - Seed pods are collected in collaboration with Musqueam Garden  
| | - Seed pod gifts distributes to Musqueam  
| | - Installation of *Forecast* in Belkin & CIRS windows  
| | - Curated program of video & animation on outdoor screen  
| | - Biodiversity research collecting at two intervals through fall  
| | - Events with community contributors: SCBC, UBC Climate Hub, UBC Botanical Garden, Beaty Biodiversity Museum, USI & Belkin  
| | - ENVR 200 course activities  
| 2022 – 2023 | - Artist interventions in the meadow  
| Dormant | - *Fireweed Fields* will continue to transform from year to year as plants become established  
| | - Biodiversity collecting will continue with three intervals  
| | - Roy’s application for a related SSHRC research grant  
| | - Public Humanities Hub funding sought to continue research and development of this pilot |
Holly Schmidt, *Forecast*, 2019, Audain Art Centre window, temporary installation, mirrored vinyl. New seasonal *Forecast* texts will be created for the windows of the Belkin Art Gallery and CIRS building.
10. APPENDIX

- Plans
  - Site Plan
  - Utility Plan
  - Irrigation Plan
- Boardwalk
  - Boardwalk Schematic Plan
- Demonstration of Support, Letters
PLANS

- Site Plan
- Utility Plan
- Irrigation Plan
NOTE:
MECHANICAL TRENCHING WILL NOT BE PERMITTED IN ROOT PROTECTION ZONES IDENTIFIED IN THE FOLLOWING DOCUMENTS PREPARED BY DYNAMO & ASSOCIATES:
CONSTRUCTION MANAGEMENT PLAN FOR WORK ADJACENT TO TREES FOR NORTH MAIN MALL - PHASE 2 NORTH OF MEMORIAL ROAD DATED FEB. 3RD, 2012 AND CONSTRUCTION MANAGEMENT PLAN FOR WORK ADJACENT TO TREES FOR MEMORIAL BOULEVARD - PHASE 2 DATED FEB. 3RD, 2012.

SEE IRR.3 FOR EAST MEMORIAL ROAD IRRIGATION & NOTES.
SEE IRR.2 FOR WEST MEMORIAL ROAD IRRIGATION.
BOARDWALK

Designed in collaboration with Charlotte Falk, the boardwalk configuration references the rhizomatic root structure of fireweed. Its organic shape is intended to create unexpected opportunities to be immersed in the meadow, while also offering places for small gatherings and engagement with the outdoor screen.

Made of cedar, the boardwalk provides a different look and feel to the concrete and paving stones of Main Mall, while leading people into the field. The visibility of the boardwalk varies from different vantage points and with the changing of the seasons.

The boardwalk is a subtle, slightly above-ground intervention into the landscape that follows the existing topography of the site. It was designed to last up to 6 to 8 years and is in accordance with UBC Accessibility Guidelines.

See attached Boardwalk Schematic Plan
BOARDWALK DESIGN NOTES:

TIMBER PLANK BOARDWALK CONSTRUCTION, SIMILAR TO THOSE BUILT ALONG PUBLIC TRAILS

ALL FORMS AND DIMENSIONS SHOWN ARE SCHEMATIC

APPROXIMATE TOTAL AREA: 1550 sq. ft.

BOARDWALK FORM AND LOCATIONS DESIGNED FOR “PATH OF LEAST RESISTANCE” WITH REGARDS TO INTEGRATION ON SITE, ENSURING NO OR MINIMAL SLOPES, AND AVOIDANCE OF EXISTING INFRASTRUCTURE

CONSTRUCTED AS CLOSE TO GRADE AS POSSIBLE, TO REMOVE NEED FOR GUARDS OR RAILS (PER UBC BUILDING CODE)

SUPPORT METHOD TBC. PRIORITY FOR A DESIGN THAT REQUIRES MINIMAL IMPACT ON SITE, MINIMAL MATERIAL USE, WHILE PROVIDING SUFFICIENT SAFETY AND UTILITY

CONCRETE FOOTINGS (IF NEEDED) PRE-CAST STANDARD FORMS, ON GRAVEL, TO SUPPORT TIMBER SLEEPERS. ALTERNATIVE TO TRENCH IN 4” X 4” BOARDS TO SUPPORT DECKING

PLANK MATERIAL: CEDAR 5/4”x 4” OR 5/4”x 6” (BUDGET PENDING)

PLANK SURFACES TO BE MEDIATED, AND/OR MAINTENANCE ALLOCATED TO PREVENT SLIPPAGE DURING WET SEASONS