Vegetation Management and Maintenance Plan

Purpose of this document

This document describes the operational procedures for the City of Coburg parks and open spaces that public works staff will use to practice vegetation management and maintenance.

What is a noxious weed

A noxious, harmful, or injurious weed is a plant designated by agricultural or governing authorities as harmful to agricultural or horticultural crops, natural habitats or ecosystems, and even humans or livestock. Most noxious weeds have been introduced into ecosystems due to ignorance, mismanagement, or accidental means. While some noxious weeds can be native species, many localities classify them as non-native. Generally, these plants grow aggressively, multiply rapidly without natural controls (such as native herbivores or specific soil conditions), and can have adverse effects through contact or ingestion.

They can cause significant damage to the environment and the economy, taking over ecosystems, destroying habitats, and causing losses worth millions of dollars. In some environments, a species can be a pest; in others, it may be beneficial or domesticated.

Awareness of the damage that non-native, invasive plants can cause is crucial. However, it's also important to understand that while most invasive plants are not native to the United States, not all non-native plants are invasive or harmful. Of the thousands of plants intentionally introduced to North America, less than 10% have become problematic invaders. Despite numerous “awful stories” about introduced plants, many non-native, domesticated plants have benefited society. For example, crops like corn and wheat and landscaping plants play significant roles in our economy and environment. Moreover, some *native* plants and animals, such as feral animals, mesquite, and juniper, can also become invasive in certain situations.

Three main methods for controlling weeds are manual, chemical, and biological.

1. Manual Control: This involves physically removing the weed from the ground, including its roots, either by hand or using machinery.

2. Chemical Control: This method includes spraying or injecting the weed with chemicals designed to kill or manage its growth.

3. Biological Control: This approach utilizes insects or diseases that target the weed or involves planting other plants that can outcompete the weeds for resources. Creating shade can also help, especially if the weed thrives in sunlight.

Prevention and early eradication are the best ways to deal with problem plants. Non-specialists often hesitate to take action, but delaying a control program can lead to increased costs and more significant damage caused by the weed.

Many plants can irritate the skin, leading to rashes. These include poison ivy, oak, poison sumac, stinging nettles, ragweed, leadwort, baby's breath, and giant hogweed.

This document outlines procedures for managing various pests, including weeds, animals, viruses, and fungi.

Guide on the use of the document

This document is primarily for staff responsible for Park land, open space, stormwater/bioswale and unimproved right of way maintenance.

What is a Maintenance Mode?

In this context, a “mode” refers to the standard by which a park natural area is maintained in the City of Coburg. Natural regions are classified alphabetically (Mode A – Mode C). The mode scale goes from most intensive management (Mode A) to least intensive management (Mode C). The maintenance modes assigned to each parkland area dictate pest species' threshold (tolerance) levels on these sites.

Maintenance Modes in Natural Areas

The purpose of the maintenance mode system for Natural Areas is to preserve the high quality of these environments. We have a reduced tolerance for invasive weed species in natural areas that host relatively intact and diverse native plant communities. Under this maintenance mode system, three maintenance levels are designated for natural areas.

Mode A areas are active or established wetland mitigation bank sites. Due to state and federal laws regulating wetlands, these sites are held to very high standards for the percentage cover of native and weed species.

Mode B and C

Maintenance Service Levels in Developed Parks

Park Operations has established a set of maintenance standards for developed parks. These standards outline the expected maintenance service levels for park assets and specify the degree of care they should receive. The service level for each asset depends on various factors, including the intended use or aesthetic qualities of a specific park or area within a park.

Policy

Ordinance No 207 regulates the planting and maintenance, protection, control, and removal of trees in public areas within the city limits of Coburg. The city has the right to plant, prune, maintain, and remove trees located within public righty-of-way as necessary to preserve and enhance the symmetry and beauty of such areas. Another support comes from The Coburg Parks and Open Space Master Plan, adopted by the Coburg City Council on January 4, 2005, under ordinance A-194. It is now a functional component of the City's Comprehensive Plan. Adopting the Plan will allow the city to develop and adopt a methodology for collecting System Development Charges (SDCs) for parks and open space acquisition and development under the City's existing SDC ordinance (2003). The Coburg City Council adopted the Plan on January 4, 2004, under ordinance A-194.

As part of the Coburg Parks and Open Spaces Master Plan with 2019 amendments, a survey on parks and open spaces shows that the community enjoys the parks for their accessibility within a reasonable walkable distance and space. However, the community also wants more maintenance, such as mowing, edging, and weeding.

Operation Guide for Types of Sites

Prairies

Description

Prairies are habitats primarily characterized by herbaceous plants, with their distinction based mainly on the presence and number of trees in a grassland environment. They can be found in wetland and upland areas and typically have few or no trees. Prairies often include minor features with diverse hydrology, such as vernal pools and emergent ponds. Ecologists generally agree that natural prairies evolved alongside fire and typically had no more than two trees and a few shrubs per acre.

Once dominated by prairies, the Willamette Valley floor was frequently burned by indigenous people to enhance hunting and maintain essential plant species used for food and ceremonial purposes. Without regular periodic burning, prairie habitats have been overtaken by woody species, and now, less than 5% of the historically occurring prairies remain in the Willamette Valley. These prairie habitats may host remnant populations of rare plants, making the conservation and expansion of these species a high management priority.

If left unmanaged, prairies may gradually succeed in forested ecosystems over time. Effective managing these habitats may involve mowing, prescribed burns, and other actions to preserve prairie structure and control weeds and woody vegetation to create or expand suitable habitats for diverse herbaceous plant communities.

Wetland prairies may be found in areas such as Trails End Park, Booth Kelly Millpond Trail, Jacob Spores Park, the City's Wastewater Treatment Plant property and regional parks such as Armitage Park and Green Island.

Action Thresholds

Due to their undeveloped or natural features, prairies are classified as Mode A areas in our parks maintenance classification system. The designation of a natural area indicates the habitat's resource quality.

Some areas under City management fall under state and federal regulations for wetland protections and monitoring. This restoration and enhancement help mitigate the impacts of on wetlands allowing for their natural ecosystem to flourish. Adequate site preparation, which includes removing competing vegetation, is crucial for successfully establishing native plant communities. Restoration, enhancement, or research project sites typically undergo intense monitoring and weed control lasting at least five years. This helps to minimize competition from weeds and supports the establishment of native

prairie plant communities. Regarding native plant abundance or diversity, Mode A prairies are often among the highest-quality sites managed by the city.

Mode B prairies and savannas are medium-quality habitats and have often undergone significant natural resource alterations or enhancements.

Mode C prairies are generally lower-quality or fragmented habitats that non-native species may dominate, either purposefully (irrigated grass and ornamental plantings) or by being left unattended.

If poison oak or other poisonous plants are found in areas where the public might contact them, control measures may be implemented at any time for public safety.

The current mode classifications are listed in the table below.

Mode A Prairies

In Mode A Prairies, weeds are classified into three categories: Class 1, Class 2, and Class 3. Each class includes exotic or invasive species that must be managed to ensure that the overall weed cover does not exceed 10-15%.

Control measures should be implemented when any potentially invasive weed has less than 2% cover. This proactive response aims to quickly address new invasions of exotic species and promote the growth of native prairie plant communities.

Best professional judgment will guide the effective use of control methods for site preparation and ongoing management. For instance, if hand weeding crews are tasked with removing a Class 2 weed that has reached 10% cover, they may also be instructed to remove Class 3 weeds at 3% cover from the same area.

Here's an example of a Vegetation Management and Maintenance Plan based on the City of Eugene's Integrated Pest Management (IPM) Policy and Operations Manual:

Site Assessment

Site Type: Prairie (Mode B - high-quality natural resource area)

Management Objectives:

- Maintain and enhance native plant diversity
- Control invasive species
- Preserve habitat for rare/uncommon native plants
- Maintain open grassland structure

VMMP Strategies

Prevention

- Minimize soil disturbance to prevent weed establishment
- Use weed-free materials (e.g., seed, mulch) for restoration activities
- Clean equipment before entering the site to prevent the spread of invasive species
- Educate staff and visitors about identifying and reporting invasive species

Monitoring

- Conduct regular surveys to detect new invasive species early
- Map and track populations of target weeds
- Monitor the effectiveness of control methods

Cultural Controls

- Promote healthy native plant communities through prescribed burning (where appropriate)

- Use native plant seeding/planting to increase competition with weeds
- Manage visitor access to minimize trampling and soil disturbance

Mechanical Controls

- Hand-pulling of small weed populations
- Mowing or cutting larger infestations before seed set
- Brush-cutting to maintain open structure and control woody encroachment

Biological Controls

- Utilize approved biological control agents for specific invasive species (e.g., Klamath weed beetles for St. John's wort)

Chemical Controls (as a last resort)

- Spot-treat persistent invasive species with approved herbicides
- Use selective herbicides to minimize impact on non-target species
- Follow all pesticide application guidelines and notification procedures

Implementation Schedule

Spring:

- Conduct site assessment and update weed maps
- Begin manual removal of early-season weeds
- Implement prescribed burns (if conditions allow)

Summer:

- Continue manual and mechanical weed control
- Monitor and treat any new weed populations
- Collect native seeds for future restoration work

Fall:

- Conduct follow-up herbicide treatments as needed
- Plant native species in treated areas
- Evaluate the effectiveness of the season's management activities

Winter:

- Plan next year's management activities
- Maintain equipment
- Provide staff training on IPM techniques

Adaptive Management

- Review monitoring data annually to assess the effectiveness of control methods
- Adjust management strategies based on results and new research
- Update plan as needed to address changing site conditions or management priorities1

This example vegetation management plan incorporates key elements from the City of Eugene's IPM manual, including site-specific management objectives, a range of IPM strategies, and an adaptive approach to pest management in natural areas.

Coburg Public Works Parks Dept. Mowing & Maintenance list

1. Pavilion Park

Site Type: Recreation: Picnic area, pavilion, paths, benches

Management Objectives: 1

Prevention :1

Maintenance Plan

	Time allocated for each task			
	Daily	**Weekly**	**Monthly**	**Annually**
Mowing	3			
Mowed at the level of 4"				
Mulched in Spring/Summer				
Bagged two times in the Summer	1			
Weed eating				
Weeding planting beds	1	4		
Manual controls: Spring/summer/fall				
Chemical Control as needed				
Cleaning restrooms	0.5	1		
Trash removal	0.25	0.5		

Natural Areas:

Grass, planting beds, sensory area, fountain area, benches, paths.

Event Prep outside normal operations:

Events that commonly occur at Pavilion Park, Christmas in Coburg, Weddings, Birthdays, and Concerts in the Park

Accessibility: Two ADA Parking Stalls, ADA Restrooms, ADA Soft Paths, and One ADA Picnic Table

2. Norma Pfeiffer

Site Type: Recreation: Basketball/Pickleball Court, Picnic area: 4 tables, playground, paths, benches: 5

Management Objectives: 1

Prevention :1

Maintenance Plan

	Time allocated for each task			
	Daily	**Weekly**	**Monthly**	**Annually**
Mowing		4		
Mowed at the level of 4"				
Mulched in Spring/Summer				
Bagged two times in the Summer				
Weed eating		1.25		
Weeding planting beds		0.5	2	
Manual controls: Spring/summer/fall				
Chemical Control as needed				
Cleaning restrooms	0.5	1		

Trash removal	0.25	0.5

Natural Areas:

Grass, one planting bed, Rose Garden, Sensory area, Memorial Flagpole, benches, and paths.

Event Prep outside normal operations:

Events that commonly occur at Norma Pfeffer include Birthdays, Car shows, and Antique fairs

Accessibility: Two ADA Parking Stalls, ADA Restrooms, ADA Soft Paths, and One ADA Picnic Table

3. Johnny Diamond

Site Type: One Picnic area: playground, paths, benches: 4

Management Objectives: 2

Prevention :1

Maintenance Plan

	Time allocated for each task			
	Daily	**Weekly**	**Monthly**	**Annually**
Mowing		1		
Mowed at the level of 4"				
Mulched in Spring/Summer				
Bagged two times in the Summer				
Weed eating		0.5		

Weeding planting beds		1	4
Manual controls: Spring/summer/fall			
Chemical Control as needed			
Cleaning restrooms			
Trash removal	0.25	0.25	

Natural Areas:

Grass, many planting beds, a Sensory area, benches, and paths.

Event Prep outside normal operations:

Events that commonly occur at Johnny Diamond include Birthdays

Accessibility: ADA Concrete path, One ADA Picnic table

4. Jacob Spores

Site Type: One Picnic area, BBQ

Management Objectives: 3

Prevention :1

Maintenance Plan

	Time allocated for each task			
	Daily	**Weekly**	**Monthly**	**Annually**
Mowing		1		

Mowed at the level of 4"				
Mulched in Spring/Summer				
Bagged two times in the Summer				
Weed eating		0.5		
Weeding planting beds			1	4
Manual controls: Spring/summer/fall				
Chemical Control as needed				
Cleaning restrooms				
Trash removal	0.25	0.25		

Natural Areas:

Grass, many planting beds, a Sensory area

Event Prep outside normal operations:

Events that commonly occur at Jacob Spores include Birthdays

Accessibility:

5. Trails End

Site Type: One Picnic area, Asphalt Path, Soft Path, two benches

Management Objectives: 3

Prevention :1

Maintenance Plan

	Time allocated for each task			
	Daily	**Weekly**	**Monthly**	**Annually**
Mowing				
Mowed at the level of 3"				
Mulched in Spring/Summer				
Bagged two times in the Summer				
Weed eating		0.5		
Weeding planting beds				
Manual controls: Spring/summer/fall				
Chemical Control as needed				
Cleaning restrooms				
Trash removal	0.25	0.25		
Adding Play Chips				6

Natural Areas:

Grass and a Sensory area

Event Prep outside normal operations:

Events that commonly occur at Jacob Spores include Birthdays

Accessibility: ADA Concrete Path

6. Booth Kelly

Management Objectives: 4

Prevention: 5

Maintenance Plan

	Time allocated for each task			
	Daily	**Weekly**	**Monthly**	**Annually**
Mowing				
Weed eating			1.5	
Weeding planting beds				
Manual controls: Spring/summer/fall				
Chemical Control as needed				
Cleaning restrooms				
Trash removal	0.25	0.5		
Natural Areas:				
Sensory area				
Event Prep outside normal operations:				
Accessibility:				

Right of Way Areas

1. Van Duyn St
   Date range = April-July
   Time per task = 2 hrs.
   Frequency = Weekly
   - WEED EATER AND PUSH MOWER
   - North and South Side from N Willamette St to Bottom Loop. Also, Bruce St to Hatfield West side of Rd.

2. S Willamette St.
   Date range = April-July
   Time per task = 2 hrs.
   Frequency = Weekly
   - WEED EATER AND PUSH MOWER
   - East and West sides of the road from Pearl to Vintage (unless someone maintains it)

3. Pearl St
   Date range = April-July
   Time per task = 3 hrs.
   Frequency = Every two weeks
   - WEED EATER, PUSH MOWER, AND RIDER
   - Including the swale area on the North side, East and West of Finley St

4. Industrial Way
   Date range = April-July
   Time per task = 3 hrs.
   Frequency = Monthly

- WEED EATER, PUSH MOWER, RIDER, AND BRUSH HOG MOWER
- This includes the East and West sides of North and South Industrial Way
- including the area West of the Road from Pearl to Serenity Lane Entrance to the creek edge

5. Roberts Rd
   Date range = April-July
   Time per task = 3 hrs.
   Frequency = Monthly
   - WEED EATER AND BRUSHHOG MOWER
   - Area West of Street 5ft backside of curb from S Industrial to Roberts Ct
   - Also, the area North of S Industrial on the West side of the street to McDonalds' Entrance

6. Area East of the end Roberts Rd in Cul da sac
   Date range = April-July
   Time per task = 1 hrs.
   Frequency = Monthly
   - WEED EATER AND BRUSH HOG
   - Area East and South of Cul da sac and sidewalk on Pearl St to GCR Sign

7. Bottom Loop
   Date range = April-July
   Time per task = 1 hrs.
   Frequency = Weekly
   - WEED EATER AND RIDER
   - Area East of the road on both sides of Loop Path to Property line

8. Sarah Lane

Date range = April-July
Time per task = 1 hrs.
Frequency = Weekly

- WEED EATER AND RIDER
- Area South of Sarah from Miller to end of street

Stormwater Swales

1. Vintage St
   Date range = April-July
   Time per task = 4 hrs.
   Frequency = Twice (spring/summer)
   - WEED EATER, RIDER, BRUSHHOG, AND BILLY GOAT MOWER
   - Area West of the end of the road (see No Dumping City of Coburg Sign)

2. Austin & Abby
   Date range = April-July
   Time per task = 4 hrs.
   Frequency = Twice (spring/summer)
   - WEED EATER, RIDER, AND BILLY GOAT MOWER
   - Area from the street on both sides of Loop Path to Property Line
   - All the way to Bottom Loop Rd

3. S Industrial Way
   Date range = April-July
   Time per task = 3 hrs.
   Frequency = Twice (spring/summer)
   - WEED EATER, BRUSHHOG, AND BILLY GOAT MOWER
   - Area behind sidewalk on Northwest Corner of S. Industrial and Roberts Rd

4. Pearl St
   Date range = April-July
   Time per task = 1.5 hrs.
   Frequency = Monthly
   - WEED EATER, BRUSHHOG, AND BILLY GOAT MOWER
   - Area behind the sidewalk in the corner Northeast of N Industrial and Pearl St

5. Coburg Creek
   Date range = April-July
   Time per task = N/A
   Frequency = N/A

Parks

1. Norma Pfeiffer Park
   Date range = April-Oct
   Time per task = 4 hrs.
   Frequency = Weekly
   - WEED EATER, WALKER MOWER, & EDGE

2. Johnny Diamond Park
   Date range = April-Oct
   Time per task = 2 hrs.

Frequency = Weekly

- WEED EATER, WALKER MOWER, & EDGE

3. Jacob Spores Park
   Date range = April-Oct
   Time per task = 2 hrs.
   Frequency = Weekly
   - WEED EATER AND WALKER MOWER
4. Pavilion Park
   Date range = April-Oct
   Time per task = 3 hrs.
   Frequency = Weekly
   - WEED EATER, WALKER MOWER, & EDGE

5. Trails End Park
   Date range = April-Oct
   Time per task = 3 hrs.
   Frequency = Weekly

6. Coburg Creek Subdivision
   Date range = N/A
   Time per task = N/A
   Frequency = N/A
   - Rough cut mow

Maintenance areas **(weed, spray, & pre-emergent)**

1. Diamond St Island

Date range = April-July
Time per task = 1 hr.
Frequency = Monthly

2. City Hall flower beds
   Date range = April-July
   Time per task = 1 hr.
   Frequency = Monthly

3. Mini Park at McKenzie and Willamette Northwest corner
   Date range = April-July
   Time per task = 1 hr.
   Frequency = Monthly

4. Mini Park on S Willamette St in front of Willamette Forks Restaurant
   Date range = April-July
   Time per task = .5 hr.
   Frequency = Monthly

5. Tree Wells on Willamette St
   Date range = April-July
   Time per task = .5 hr.
   Frequency = Monthly

6. Mill St bubbles
   Date range = April-July
   Time per task = 1 hr.
   Frequency = Monthly

7. Johnny Diamond planting areas
   Date range = Year long
   Time per task = 3 hrs.
   Frequency = Monthly

8. Veterans Memorial Area
   Date range = Year long
   Time per task = 2 hrs.
   Frequency = Monthly

9. Pavilion Park planting areas
   Date range = Year long
   Time per task = 3 hrs.
   Frequency = Monthly

10. Playground at Norma
    Date range = Year long
    Time per task = 2 hrs.
    Frequency = Monthly

Trails and Paths

1. Booth Kelly Trail
   Date range = Year long
   Time per task = 2 hrs.
   Frequency = Monthly

2. Coburg loop path
   Date range = Year long

Time per task = 2 hrs.
Frequency = Monthly

Guide of Parks

Norma Pfeiffer

Size: 1.73 acres

Classification: Neighborhood Park

Ownership: City of Coburg

Context: Pfeiffer Park is located in Coburg's downtown, one block east of Willamette Street, on a portion of an abandoned rail line.

Level of Usage: High (based on questionnaire results)

Facilities: Restrooms, Basketball court (two hoops), Park signage, Veteran's memorial and flagpole, Picnic Shelter, Picnic tables (4), Barbeque, Benches (2), Drinking fountain, Equipped play area (climbing structure, slide, climbing bars, swings), Lighting (streetlights), Open field, Trash receptacles (3), Significant shade trees, and Parking.

Pavilion Park

Size: 0.48 acres

Classification: Mini Park

Ownership: City of Coburg

Context: Pavilion Park is in Downtown Coburg on Willamette Street, immediately adjacent to Pfeiffer Park.

Level of Usage: High (based on questionnaire results)

Facilities: Pavilion, Ornamental Lighting (5 lights), Concrete walkways, Benches (2), Trash receptacle (1)

Mode:

Trails End Park

Size: 21.01 acres

Classification: Natural Area Park

Ownership: City of Coburg

Context: This wetland area lies adjacent to Interstate 5 on the north end of Industrial Way and is within the City's urban growth boundary.

Level of Usage: Minimal (no public access is currently available)

Facilities: None

Prairie Type:

Mode:

Booth Kelly Millpond Trail

Size: 2.31 acres

Classification: Linear Park

Ownership: City of Coburg

Context: This linear park is located along the western edge of the Coburg Estates Subdivision.

Level of Usage: Moderate - many repeat users (based on questionnaire results)

Facilities: Soft surface trail, Benches (4), Trash receptacles (2)

Prairie Type:

Mode:

Jacob Spores Park

Size: 0.30 acres

Classification: Mini Park

Ownership: City of Coburg

Context: Integrated within the Moody Subdivision

Level of Usage: Low (based on questionnaire results)

Facilities: Shelter, Table, and Barbeque

Mode:

Johnny Diamond Park

Size:

Classification: Park

Ownership: City of Coburg

Context:

Level of Usage: Low (based on questionnaire results)

Facilities: Benches, two swings, one swing bench.

Mode: