

**Dickinson Park Conservation Area
Lynden Parks Department**

Stewardship Plan

September 2021



1. Introduction

The Conservation Area Stewardship Plan begins to establish management, maintenance, and monitoring guidelines for the Conservation Area, the northern portion (5.66 acres) of the City's recently acquired Dickinson Park, which is being protected through a conservation easement.

This Stewardship Plan has been prepared to fulfil the requirements of the State Department of Ecology for the use of their grant funding to acquire the property. While this Stewardship Plan is specific to the Conservation Area, its context within the larger park property is important. Use guidelines and land management of the entire park property will impact the Conservation Area. The easement for the Conservation Area primarily sets it aside - as is - for the protection of the forest and the dynamic stream system that runs through it.

a. Background

Purchased in 2019 using State Department of Ecology Revolving Fund Loan monies, Dickinson Park is a recent and remarkable acquisition to the City's Park System. It is an extraordinary 9-acre wooded parcel in the middle of the city. Currently, the property has a single-family house on it with paved access from the north off Double Ditch Road and gravel access from the east off Fishtrap Way. The parcel is heavily forested with 2nd growth conifer trees. The property also boasts access to two creeks, Fishtrap Creek which forms the southern border of the park property, and Pepin Creek which flows through the Conservation Area. The confluence to these two streams is at the southwestern edge of the property – also within the Conservation Area.

Conservation Area

The northern 5.66 acres of the property, the "Forest Conservation Area" delineated on Figure 2 below, is being encumbered by a Deed of Right for Conservation Purposes. The conservation easement will protect the 2nd growth forest in this section of the park and allow Pepin Creek to maintain its natural hydrogeomorphic processes as it makes its way to the confluence with Fishtrap Creek. Future channel processes may necessitate stabilization of slopes and shoreline for safety.

While the 2nd growth forest within the Conservation Area is generally in remarkable condition, careful management is still needed. As a forested "island" within a developed urban landscape, pressures on the landscape remain, despite the "conserved" status. These pressures include: the spread of invasive species, potential overuse by visitors, and lack of forest regeneration due to herbivory.

b. Land Use History

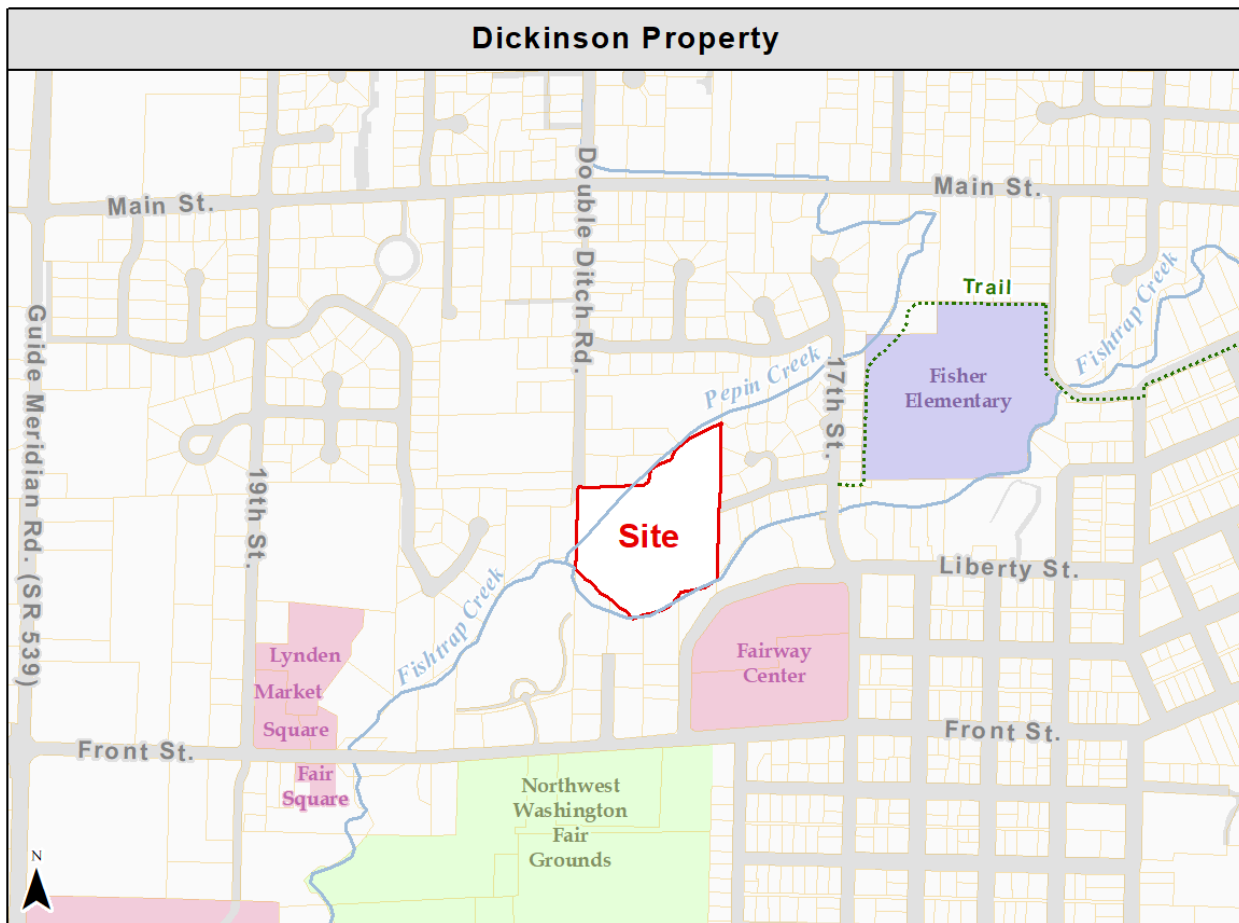
Fishtrap Creek forms the southern boundary of the overall park property as the creek bisects the City of Lynden on its path to the Nooksack River. Additionally, Pepin Creek, which flows south from British Columbia, joins Fishtrap Creek at the southwest corner of this property. As such, this was likely an important cultural site for the Nooksack Indian Tribe who have resided in this area for thousands of years. The entire area was cleared by Lynden's early European settlers for timber and agriculture in the late 1800s. Except

for clearing for access and a home site in the late 1960s, the Dickinson Park property grew back to the extraordinary 2nd growth conifer forest that it is today.

The City of Lynden developed around the Dickinson property throughout the second half of the 20th century. Residential developments were built to the west, north and east and commercial activity and multifamily residential apartments and condominiums were developed across Fishtrap Creek to the south. Due to its limited access from the dead-end Double Ditch Road and the steep ravine of Fishtrap Creek on the south, most Lynden residents did not even know the property existed when it was acquired by the City.

The Dickinson family developed the property in the late 1960s, clearing for the driveways and home site, and maintaining 2 lawn areas on the property. In the late 1990s, the property owner worked with the Nooksack Salmon Enhancement Association to stabilize the eroding streambank below the home location. This project included the installation of large woody debris and planting native trees and shrubs in a thin strip directly along the creek. The Conservation Area within the Park has largely been left alone and is characterized by large conifers and dense undergrowth.

Figure 1. Vicinity Map – Dickinson Park Property, Lynden WA



2. Purpose – Landowner’s Goals

The City of Lynden acquired the Dickinson property as a park property with three goals. The Conservation Area of the Park directly helps the City meet these goals.

- 1) *To preserve unique and beneficial natural fish and wildlife habitat in the core of the City.*

The 5.66-acre Conservation Area protects the forested northern portion of the property from additional residential development. This will be done by protecting and managing natural ecological processes in the forested area.

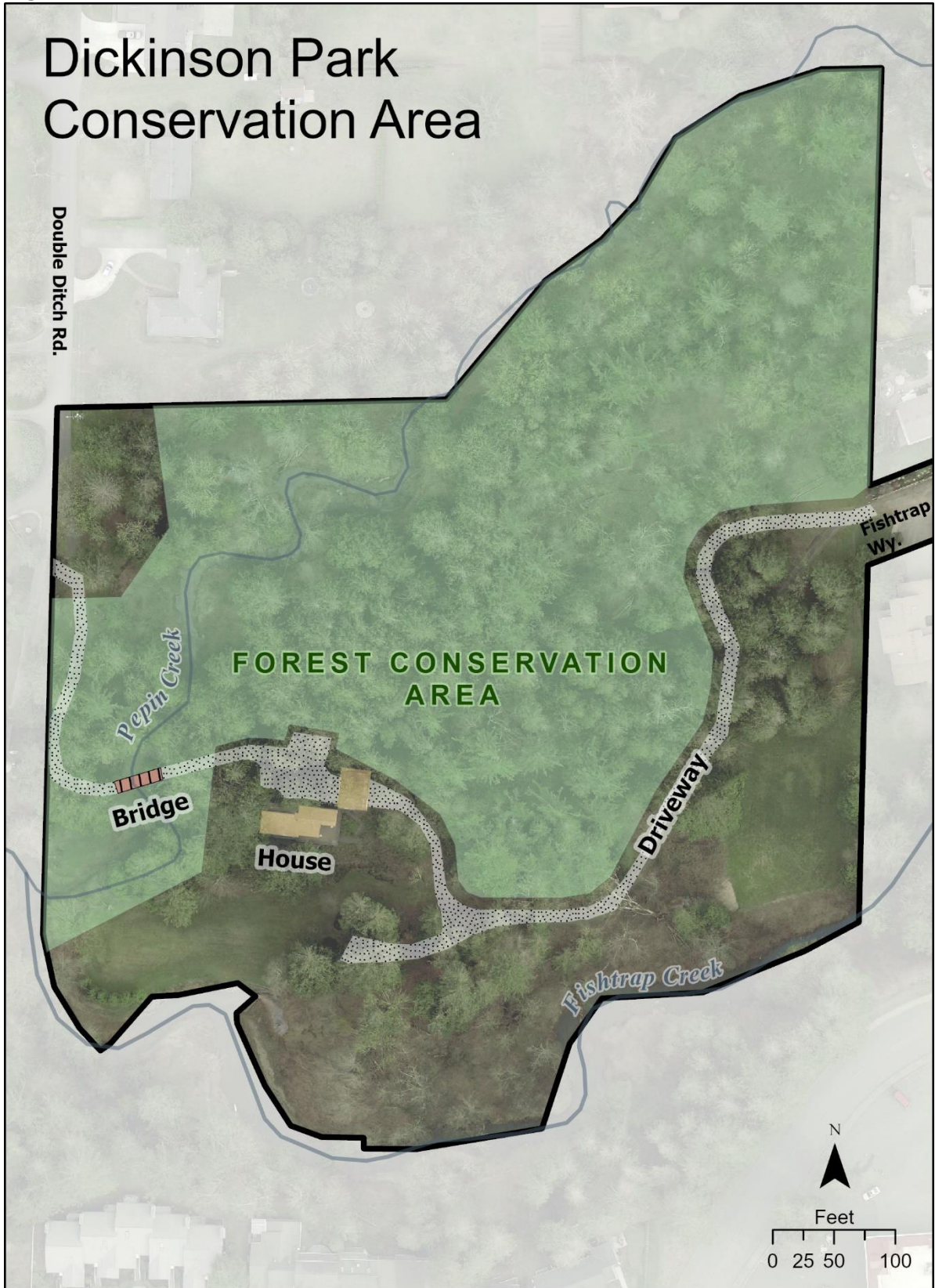
- 2) *To deliver low impact public access for residents to enjoy.*

This will be done by connecting the property to the City’s existing public trail system and by developing low impact visitation areas, interpretive hiking trails, and environmental education opportunities within the park, including in the Conservation Area.

- 3) *To help buffer the impacts of the City’s residential growth on Fishtrap and Pepin Creeks.*

As a park property, this 9-acre parcel no longer faces residential development pressure. Being located at the confluence of Fishtrap and Pepin Creeks, this property is uniquely suited to deal with high water events and to allow the stream to maintain its normal ecological processes.

Figure 2. Dickinson Park Conservation Area



3. Relationship to other actions and plans

The City of Lynden Park Master Plan (2020) identifies Dickinson Park as a key to providing park access to Lynden residents that live in the City's western residential neighborhoods. It is also an important link in the development of the City's most established public trail, the Jim Kaemingk Sr. Trail.

The City's Shoreline Management Program (2019) identifies this property as important to protect and that it provides opportunity on which to improve habitat.

4. Current and Desired Conditions – Conservation Area

a. Fish use and habitat

The Conservation Area includes approximately 1,200 feet of the lower reach of Pepin Creek and its confluence with Fishtrap Creek. Both these streams provide freshwater habitat for Washington State Department of Fish and Wildlife priority fish species and habitat. Chum (*Oncorhynchus keta*), fall Chinook (*Oncorhynchus tshawytscha*), bull trout (*Salvelinus malma*), winter steelhead (*Oncorhynchus mykiss*), cutthroat (*Oncorhynchus clarki*), and coho (*Oncorhynchus kisutch*) are documented to use these streams.

Pepin Creek is actively downcutting as it flows from the northeast to the southwest in a deep ravine. The stream through this lower stretch from Main Street downstream to the confluence on this property is dynamic with naturally erosive streambanks. The ravine through the Conservation Area is well vegetated. Potential spawning areas through this property are present but minimal. Fish likely move through here on the way to other spawning grounds throughout the system.

Directly downstream of the existing driveway bridge over Pepin Creek, approximately 40 feet of the left bank has been hardened with a low concrete wall and old concrete pieces. This was built to prevent the stream from pushing into the ridge on which the house is located. There are no plans to remove that wall.

Desired Conditions

Maintain the ability of the stream to maintain its natural hydrogeomorphic course. Projects that would allow the channel to naturally migrate are limited due to this being a constrained urban stream, but the channel migration zone that does exist should be restored to native forest wherever possible. There are no plans to remove the hardened streambank downstream of the bridge.



Box culvert bridge on the existing driveway over Pepin

b. Riparian

The existing Pepin Creek riparian area is in relatively good shape. As stated above, it flows in a deep ravine on the property and both banks are well vegetated with large trees. Portions of the streambank have been hardened with concrete and there are pockets of invasive plants throughout.

Desired Conditions

Maintain the status of the well-vegetated Pepin Creek riparian zone. Aggressive control of invasive plant species, including clearing, hand pulling, and targeted herbicide treatments should occur as they are located.



Well-vegetated riparian slope above Pepin Creek

c. Hydrologic

The upland ridge above Pepin Creek is well drained and contains no wetland areas. Pepin Creek is fed by groundwater and surface water runoff throughout the watershed.

Desired Conditions

Protect the streambanks from erosion and restore natural hydrogeomorphic processes where feasible.

d. Soils and Soil Stability

The soils on the property are classified as Laxton loam (generally along the upland areas of the property) which are moderately well drained stable soils and the Lynden urban complex (generally in the Fishtrap Creek riparian area) which are generally well drained deep sandy loam soils. Pepin Creek is in a deep ravine on this property and is actively downcutting. This can result in erosive forces on the steep slopes of this ravine.

Desired Conditions

Direct public use and pathways away from steep slopes. Possible methods would include the establishment of an appropriately located trail and split rail fencing and educational signage.

e. Upland

The upland slopes and ridgetop highlight the 2nd growth conifer forest that overlooks this property. The forest is dominated by varying aged Western red cedar with Oregon grape, Indian plum and sword fern in the understory and ground cover. A few large Douglas fir trees are scattered across the property. The eastern slope of the property contains several large deciduous trees (Big leaf maple, paper birch, and cottonwood). Typical to an urban forest, there is also a heavy presence of invasive plant species – English ivy, blackberry, and herb-Robert are abundant throughout the upland portions of the property.

At the time of acquisition, there are neighboring lawn encroachments on the NE property line. Three properties along this line have extended their lawn and/or landscaped area into the park property. The north property encroaches up to 32 ft, the middle one encroaches 12 ft, and the south property encroaches 8 ft. These include unmaintained and unmaintained lawn areas. Now that the survey has clearly delineated the property boundary, the Parks Department will work closely with the property owner to create a clear demarcation between the two properties (possibly a split rail fence).

The small area just to the northwest of the Conservation Area, but within the creek buffer has been reserved as a possible trailhead location for parking. Future development of the parking area would be subject shoreline permitting. The remainder of the Park property outside of the conservation area to the south are anticipated for other as yet undetermined public recreational purposes.

Of note, both the riparian and upland areas of this property are heavily impacted by deer. There are “game” trails crisscrossing the upland areas and obvious sign of browsing across the property. Anything that can be eaten by deer has been. The browsing activity is abundant enough to inhibit forest regeneration.

Desired Conditions

Protect the existing forest, control invasive plant species, and manage the forest for active regeneration. The invasive plants need aggressive management to be fully controlled. In particular, English Ivy is currently covering significant areas of the forest floor and migrating up tree trunks in many locations. Other ground cover invasive plants should be pulled annually. Where appropriate, herbicide treatments may be necessary. Other control methods for ground cover invasive plants, such as low-intensity controlled fire, might be explored over time.

The neighboring property encroachments (NE property line) will be addressed by notifying the neighbors of the property line location and not allowing further private use of the public property.

Finally, the impact to the forest by deer herbivory will need to be addressed if long-term regeneration is to continue.



Game trail crossing the upland area

f. Public Use

At this time, the park property is not developed for significant public use. There is no developed public parking area and access points to the property are not designed to accommodate traffic. Furthermore, there are not designated use areas or an established trail system on the property. The small property retained to the northwest of the conservation area is anticipated as a area for trailhead parking for those wishing to enter the Park from the north over the existing bridge.



Residents walking through the cedar grove just to the south of the Conservation Area

Desired Conditions

Develop a park wide trail plan that will establish proper walking locations within the park and specifically within the Conservation Area. The Conservation Area will be protected but will be connected to the broader park property through a passive “hiking” trail. The development of an established walking path will help to protect the forest by directing users to the appropriate locations in that area.

A developed sitting area (bench) will be placed on the ridge along this trail to allow users to enjoy the forested landscape.

g. Cultural and Historic Resources

A Cultural Resources Assessment of the larger Pepin Creek Relocation Project was conducted by Garth Baldwin in 2013. While this property is considered to have a moderate to high risk of containing cultural resources, no documented sites are located here. The Conservation Area will be protected as is with minimal development over time. Any future ground disturbing activity (trail establishment) may require a more intensive survey and Inadvertent Discovery Protocol will be established for that activity.

Desired Conditions

Conduct the appropriate cultural resources and historic structure intensive surveys when required to further identify any culturally important sites on the property.

5. Maintenance and Monitoring Schedule

Activity	Timing	Effectiveness Review
Develop Park Use Plan <ul style="list-style-type: none"> • Determine Park purpose • Confirm City Trail location(s) • Collect public input • Establish access points • Finalize use areas 	2021-2023	Review and revise as needed
Develop Forest Management Plan <ul style="list-style-type: none"> • Invasive species management • Forest regeneration 	2022-2023	Review and revise as needed
Invasive Species Control	Ongoing	Intensive for 5 years. Spot control thereafter in perpetuity.
Forest Inventory <ul style="list-style-type: none"> • Flora, fauna and tree inventory 	Establish by 2025	10-year monitoring cycle

6. Adaptive Management Plan

The Park Use Plan and Forest Management Plan will identify the appropriate objectives for the management of this property. These plans will be developed using the best available science, public feedback, and the desires of policy makers. As activity occurs, those plans will be consulted and reviewed for necessary changes over time.

7. Roles, Responsibilities, and Funding

The Lynden Parks Department is responsible for the protection and stewardship of this park property. The City Council through the Parks Committee, with advice from the Parks and Trails Advisory Board, works with the Lynden Parks Department to establish the use and management directives for this park property.

Parks funding comes from a variety of sources – City General Fund, a current Parks and Trails Bond, and Park Impact Fees. Specific development, restoration and management activities for this park will require funding from targeted grant resources. The Lynden Regional Parks and Recreation District has historically provided funding for park improvements and has already obtained funding for future trail improvements within Dickinson Park, south of the Conservation Area.

8. Constraints and Uncertainties

The long-term care and management of this property will require balancing public use and desires with careful ecological management.

Securing funding and allocating the appropriate resources for this work will be substantial.

9. Attachments

a. **Vicinity Map:** Incorporated above

b. **Site Plan:** Incorporated above

c. **Photos:** Incorporated above

d. **Permit requirements:**

No identified permits are needed at this time. Future trail construction and infrastructure development may need permits that will be identified at that time.

e. **Monitoring Protocols:**

Monitoring of the property will be designed to observe an appropriate balance between providing public access for viewing/recreation and conservation of the property's unique natural resources. The specifics of this oversight will entail:

- Designation of suitable trail locations and monitoring the impacts of that use on the forest and riparian environment.
- The identification and control of invasive plant species across the property.
- Forest inventory surveys to assess the viability of natural forest regeneration and determining the appropriate forest management techniques to increase the viability of the native flora.
- Inventory and document the use of the property by local native fauna.