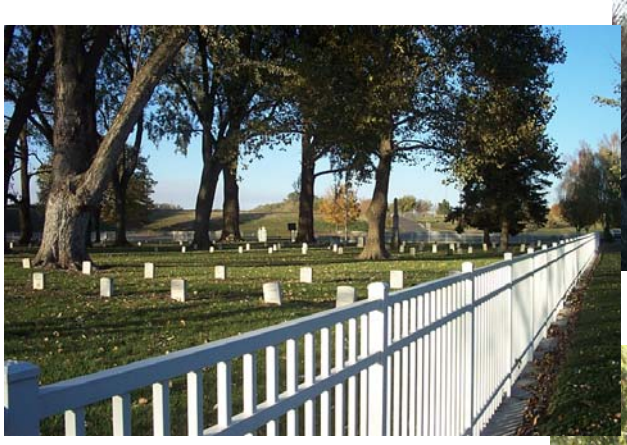

Fort Walla Walla Master Plan

July 2004

FORT WALLA WALLA MASTER PLAN
MAIN REPORT

Acknowledgements

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FORT WALLA WALLA MASTER PLAN
MAIN REPORT

SECTION 1 – INTRODUCTION

1.1 FORT WALLA WALLA PARK

Fort Walla Walla Park is the largest park within the City of Walla Walla's Parks and Recreation system. The park is located approximately 2 miles from downtown Walla Walla, at the western boundary of the city. It's size, location, and variety of recreational opportunities makes it an important regional resource. The park is used by citizens across the Walla Walla Valley, who engage in both active and passive recreational activities on park lands.

Photo 1: The main entrance to Fort Walla Walla Park from Myra Road

1.2 PURPOSE

The Fort Walla Walla Park Master Plan will serve as a guiding document for future management of the park.

1.3 GOALS OF THE MASTER PLAN

The goals of the Fort Walla Walla Master Plan, as defined by the City and the US Army Corps of Engineers (Corps), are to:

- Protect and enhance riparian habitat on that portion of Garrison Creek located on Fort Walla Walla Park property
- Identify and protect cultural and historical resources at Fort Walla Walla Park
- Establish recreational use zones that concentrate active recreational use within the 69-acre parcel currently used for active recreation
- Preserve additional lands at Fort Walla Walla Park as passive open space
- Maintain the Fort Walla Walla Natural Area at Fort Walla Walla Park

In addition, the Corps will cooperate with City of Walla Walla Department of Parks and Recreation (DPR) to protect Fort Walla Walla Park as a public resource, within the guidelines established by the National Register of Historic Places and the charter of the City; utilize Fort Walla Walla as a recreational and educational setting; minimize conflicting recreational uses at Fort Walla Walla Park; and protect and enhance the habitat of the Fort Walla Walla Natural Area.

1.4 SCOPE

The agreement between the City of Walla Walla and the Corps stated that the Corps work with the City to develop the Master Plan and an ArcView Geographic Information System (GIS) database. The geographic scope of the study area included only those park lands owned by the City of Walla Walla, with a view to properties bordering the park, and the effect management of those lands might have on Fort Walla Walla Park.

1.5 COORDINATION

The scope of the Fort Walla Walla Park Master Plan was agreed upon in February 2003, and the official signing of the agreement took place in March 2003. The City and the Corps have worked together to develop both volumes of this Master Plan. Both City and Corps representatives met with park user groups and lessees as part of the Master Planning process.

1.6 PLANNING PROCESS

The City of Walla Walla and the Corps engaged in an approximately 1-year interdisciplinary, environmental planning process to formulate a Master Plan that would guide the management and enhancement of resources at Fort Walla Walla Park.

1.6.1 Inventory and Analysis

The first step in the creation of the Master Plan was the inventory of existing conditions and resources at Fort Walla Walla Park. The inventory gave planners a snapshot of the site as it existed at the beginning of the project. The inventory was conducted using existing information gathered from various agencies and other resources, such as the Washington Department of Fish and Wildlife and the National Resource Conservation Service (NRCS). A landscape architect, wildlife biologist, and archeologist from the Corps conducted several site visits during the development of this report in order to check data and visually inventory the site.

Data collected by the Corps was entered into an Environmental Systems Research Institute (ESRI) ArcView© GIS to assist in the analysis of the data. The GIS base data and analysis will be housed with the City of Walla Walla, at the City Service Center, for utilization in future management decisions.

1.6.2 Resource Objectives

Resource Objectives were developed in a working session that included the Corps planning team and City of Walla Walla Parks and Recreation staff. The Resource Objectives are based on the original goals for Fort Walla Walla Park, which were developed at the start of the planning process.

1.6.3 Land Use Classifications

Land Use Classifications are meant to communicate, in the simplest terms, the character of each parcel. This characterization will help guide future management emphasis of parcels within Fort Walla Walla Park.

1.6.4 Management Units

A Management Unit is the designation of a geographic area that will be managed consistently toward the same goal or goals. These goals were determined by the resource objective, land use classification, and the present condition of the area.

An interdisciplinary planning team, through analysis of the present conditions, determined the management units in a work session that took place in February, following the public scoping meeting.

1.6.5 Recommendations

Management recommendations have been developed for each management unit, and for the Park as a whole. Recommendations were made based on the goals set out by the City of Walla Walla, the current condition of the resource, and the capacity of each parcel to meet the goals set out by the City of Walla Walla.

SECTION 2 – INFLUENCING AND CONSTRAINING FACTORS

2.1 GENERAL

This section is a summary of the important environmental, cultural, and aesthetic factors taken into consideration to determine the best management practices for Fort Walla Walla Park (see Plate 1—Base Map).

2.2 SUMMARY OF PROJECT FACTORS AND ANALYSIS

2.2.1 Ecological Factors

2.2.1.1 Hydrology

Photo 2: Fort Walla Walla Park features many springs and creeks.

Garrison Creek runs through Fort Walla Walla Park, essentially dividing the park into two sections. Garrison Creek is a distributary, (a natural subdivision, or braid, of the Mill Creek channel as it descends from the mountains into the valley.) The park is also dotted with small springs, which feed small ponds and channels in the Natural Area. Bryant Creek ran through the eastern portion of the park, near the VA hospital, but was diverted into Garrison Creek at Jefferson Park in the 1980s to avoid flooding the pond in Jefferson Park. Remnants of the riparian zone along the Bryant creek bed remain. A small creek, Thompson Creek, runs through the Natural Area and into a culvert under Myra Road. The presence and abundance of clean water is a factor that initially made the site attractive as a frontier military outpost. It is a goal of this Master Plan to protect and enhance aquatic resources within Fort Walla Walla Park, and maintain the inherent unaffected character of the Natural Area. The water table is high in most areas of the park.

Project Boundary

Hydrology

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 250 500 750 1000 Feet

Base Map

Fort Walla Walla Master Plan

Plate 1

2004

2.2.1.2 Climate

The Walla Walla Valley enjoys generally mild weather, with four distinct seasons, and a growing season that is one of the longest in the state. Some of the outdoor facilities, such as the Fort Walla Walla Amphitheater, are not used during the colder months. However, many hearty souls continue to recreate outdoors at Fort Walla Walla Park during the winter months.

2.2.1.3 Air Quality

Air quality in the Walla Walla Valley is generally considered good. However, urban development in the vicinity of Fort Walla Walla Park may negatively impact air quality in the Park. Careful consideration must be given to the size and types of development near the park perimeter in order to maintain the high recreational quality park users currently enjoy.

2.2.1.4 Land Cover and Vegetation

Fort Walla Walla Park contains varied vegetative communities, which include irrigated lawn areas, high-quality riparian vegetation, and pockets of intact shrub-steppe vegetation. A number of small wetlands dot the park. Development on lands surrounding the park has diminished the amount of seemingly "natural" land in the area, making the open space and native vegetation at Fort Walla Walla Park a valuable asset to the region. Some areas of the park contain noxious weeds, which may be controlled with management practices. Appendix D contains a technique for restoring dryland areas to shrub-steppe, which will improve the natural quality of the park as well as help with the control of noxious weeds.

Photo 3: Fort Walla Walla Park features wetlands, grasslands, and riparian areas.

2.2.1.5 Wildlife

The Blue Mountain Audubon Society has documented over 100 species of birds and 30 species of mammals in the Park's Natural Area. The park is an important seasonal stop for migratory birds, and is home to a resident herd of white-tail deer. Coyotes may be heard howling at night, and large cats (*i.e.*, bobcat and cougar) have been sighted there. The wild nature of the riparian corridors and Natural Area provide excellent cover, as well as a source of food for wildlife. Streams offer a natural travel route to wildlife, and fresh water from streams and springs is readily available. No endangered species have been documented in the park.

2.2.1.6 Fish

Garrison Creek, a tributary of the Walla Walla River, is the only perennial stream that flows through Fort Walla Walla Park. The creek has the potential to support anadromous fish (steelhead trout), but downstream structures currently block fish passage into this reach of the stream. Current watershed management recommendations for anadromous fish focus on Yellowhawk Creek, with little emphasis on Garrison Creek. Garrison Creek does, however, support some resident species of fish (squawfish, sculpin, sucker, and dace). The ponds in the natural area were stocked at one time with gambusia, an exotic fish species used for mosquito control.

2.2.1.7 Endangered Species Act Listings

No federally-listed endangered or threatened species have been documented in Fort Walla Walla Park.

2.2.2 Cultural Factors

2.2.2.1 Archaeological and Historical

Fort Walla Walla Park lies on the site of Fort Walla Walla, a military outpost critical to the settlement of the Columbia Basin. Fort Walla Walla was founded at the current site in 1858, and operated until 1910. In 1974, the Jonathon Wainwright Veteran's Administration Hospital and Fort Walla Walla Park were listed as the Fort Walla Walla Historic District, and were placed on the National Register of Historic Places. The designation of the Historic District requires that any major development be coordinated with the Washington State Historic Preservation Office (SHPO). See Appendix B for an in-depth discussion of the management of cultural and historical resources within Fort Walla Walla Park.

2.2.2.2 History of Fort Walla Walla Park Lands

Fort Walla Walla Park was acquired from the Federal Government in several phases. The first land acquisition took place in 1958, when the General Services Administration transferred 6.35 acres of land to the City of Walla Walla for use as a park. Land was transferred from the Federal Government in 1961 and again in 1976, with several conditions:

- The land must be used for public purposes
- To protect historic and cultural properties from being inadvertently compromised, lost, or destroyed, SHPO consultation must be initiated prior to proposed uses and developments (including ground-disturbing activities).
- A sign must be erected and maintained near the main entrance to the property indicating that it is a park or recreation area, and that it was acquired from the Federal Government for general use by the public.
- The property cannot be sold, leased, assigned, or otherwise disposed of except to another eligible government agency. The Secretary of the Interior must agree, in writing, that this agency would continue to use and maintain the property for a public park or for other recreational purposes, with the same property conditions attached.
- The Federal government can take over the property for purposes of national defense.
- The Federal government reserves its rights for mining and gas.

A 15-acre parcel was established as the Fort Walla Walla Museum in 1974. The last land acquisition occurred in 1982, when Virgil and Lucretia Davin donated a small strip of land at the corner of Dalles Military Road and Myra Road (Plate 2).

2.2.2.3 Land Status

The lands at Fort Walla Walla Park are owned entirely by the City of Walla Walla, and are managed by DPR.

2.2.2.4 Transportation

Three main roads provide circulation through Fort Walla Walla Park, with small spurs providing access to parking and picnic areas. None of the existing roads have curbs that limit vehicle access in the park. Park users have expressed dissatisfaction with circulation routes within the park, and the lack of directional

Project Boundary

Hydrology

V-WASH-474 V.A. Hospital
January 15, 1958
6.35 Acres

V-WASH-474B V.A. Hospital
April 28, 1961
46.76 Acres

A-WASH-474D U.S.F.S. Pastureland
November 16, 1961
41.7 Acres

A-WASH-474B U.S.F.S. Horse Pasture
June 14, 1976
51.50 Acres

V-WASH-474I V.A. Hospital
June 15, 1976
52.26 Acres

Virgil & Lucyreta Davin
December 13, 1982
3.77 Acres

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 300 600 900 1200 Fe

Land Acquisition

Fort Walla Walla Master Plan

Plate 2

2004

signage. In spite of speed limit signage, drivers on the southern spur, off of Dalles Military Road, often travel at excessive speeds, creating a dangerous situation for pedestrians.

2.2.2.5 Building Facilities

- **Public Restrooms**

  Currently, restrooms are located in the picnic area close to the cemetery, and adjacent to the BMX track. The DPR restroom replacement plan anticipates that the restroom adjacent to the BMX track will be replaced in 2005 and the restroom close to the cemetery will be replaced in 2006. Participants in the public meeting expressed a desire for additional public restroom facilities in the park, and asked that they be kept open all year, rather than seasonally.

- **Storage Buildings for User Groups**

  Under current operations, each user group requiring a storage facility maintains a small shed adjacent to their facility. Consolidation of storage facilities is desirable, in order to efficiently combine infrastructure needs and reduce the number of structures within the park.

2.2.2.6 Fencing

Photo 4: Chain link fencing delineates the boundary between the Park and the Veteran's Administration Medical Center.

Several types of fencing are in use on the Fort Walla Walla Park grounds. Chain-link fencing provides security around the perimeter of the Fort Walla Walla Museum, the Fort Walla Walla Amphitheater, and the CARS track. A short chain-link fence separates spectators from pilots at the Proptwisters facility. A split-rail fence at the south boundary delineates the Natural Area, and a high chain-link fence on the west, north, and east delineates park boundaries and separates the Natural Area from heavy traffic on Myra Road and Poplar Street.

2.2.2.7 Wildlife Habitat Improvements

- **Backyard Stream Team – Garrison Creek**

  The Walla Walla Backyard Stream Team (WWBST) is a grassroots group of community volunteers who work to make the community aware of watershed issues, and stress the small things that individuals can do to promote watershed health. The WWBST received grants from the Washington State Department of Ecology and Pacific Power to rehabilitate 1852 feet of riparian corridor along Garrison Creek in Fort Walla Walla Park. The first grant money was used to remove blackberries and other noxious weeds, and plant native riparian vegetation plant protectors and native grasses along 1000 feet of the creek, from Myra Road east. The work took place over a 6-month period (winter 2003 to spring 2004), with most of the labor performed by volunteers from the community and local schools and colleges. The second grant will continue with the same project by extending the work an additional 852 feet upstream.

- **Volunteer Planting within the Fort Walla Walla Natural Area**

  Under an agreement with the City of Walla Walla, the Blue Mountain Audubon Society manages the Fort Walla Walla Natural Area**.** The Audubon Society hosts at least one work day each year, and volunteers regularly clear trails and plant shrubs and trees in the Fort Walla Walla Natural Area.

2.2.2.8 Recreation Facilities

- **Existing conflicts**

  Most conflicts within the park occur over noise generated by various activities. Museum presentations and BMX track competitions involve the use of amplified sound systems, which

may project beyond the bounds of their accepted activity areas. The hum from the engines of model airplanes used at the Proptwisters airport has also caused complaints by other users and neighbors close to the park. The DPR and the Proptwisters have worked with various users to coordinate scheduled activities to reduce the number of noise and activity conflicts within the park. They have met with some success, although there are instances where it appears best to either move the current activity or change uses. The DPR staff is concerned that the noise conflicts will continue and reach a level of regulation that the Proptwisters will find unacceptable as they experience more and more limits on the days and times they are able to fly in the current location.

- **Coordinated siting of facilities**

  The DPR, through this plan, is attempting to consolidate like activities to reduce noise and use conflicts. For many years, activities and facilities were located within the park without thought to long-term consequences or future needs of park users. Consolidation, or activity "zoning," will help to reduce use and noise conflicts for those within the park and those who live and work in the vicinity of the park.

2.2.2.9 Aesthetic Factors

Fort Walla Walla Park has been praised by park users as a relaxing green space—a nice, quiet place to spend time, whether recreating actively or passively. Recent development near the park has affected, and will continue to affect, the user experience by generating more traffic noise, dust, and hardscape. Efforts to work with city and county planners to mitigate negative impacts to the park will be critical in preserving the quality of user experience and enjoyment.

2.3 PUBLIC INVOLVEMENT

The DPR hosted a public meeting at Walla Walla Regional Airport on February 27, 2004. Approximately 60 community members attended the meeting, which consisted of a brief presentation by DPR and Corps personnel, and a brainstorming break-out session. Participants of various backgrounds and interests worked together to develop and map a plan for the park. At the end of the night, the planning team had twelve maps of the park with various ideas for use zones drawn on the maps. The planning team then met to evaluate and document the outcome of this session.

On April 21, 2004, DPR hosted a drop-in Open House at Green Park Elementary School. Three conceptual recreational zoning plans and a conceptual circulation plan were presented, and those attending were asked to give feedback and rank their preferences for what they believed to be the best use of the entire park. The results compiled from the comment sheets are contained in Appendix A. Preferences for various plans tended to be expressed by the user group with which the commenter was affiliated. Almost all attendees were affiliated with one of the organized users group.

In addition to the public meetings, staff from DPR and the Corps met individually with user groups who have use agreements or leases with DPR. These meetings began in April 2003 and continued through March 2004. Each user group was given the same set of questions to answer, so that planners could get a feel for their concerns and issues. The meetings also involved free-form discussion of each group's ideas and thoughts about the overall feeling of the Park as it currently exists.

SECTION 3 – PROJECT RESOURCE OBJECTIVES

3.1 GENERAL

Resource objectives are goals specific to the management of an area. They specify the selected option(s) for resource use, management, and design. Resource objectives for Fort Walla Walla Park are presented in this section, and are referenced again in the discussion of management units. The Resource Objectives for Fort Walla Walla Park were developed by the Corps/City Master Planning Team, and were based on the goals set out by the City of Walla Walla at the onset of the planning process. The Master Planning Team developed three primary objectives, with subheadings describing specific objectives. The primary resource objectives are:

- Aquatic ecosystem health
- Recreational zoning
- Historic preservation and protection

3.2 PROJECT RESOURCE OBJECTIVES

3.2.1 Resource Objective Number 1 – Aquatic Ecosystem Health

3.2.1.1 Rationale

Several streams and springs are located within Fort Walla Walla Park. These aquatic resources provide habitat to fish and other wildlife, and contribute to the overall health of the watershed.

3.2.1.2 Implementation

Limit hardened development adjacent to water by maintaining a 25-foot buffer of native riparian vegetation along streams. Control invasive weeds that may choke out beneficial riparian vegetation. Protect wetlands with similar measures, applying a buffer and restoring native vegetation. Avoid runoff into waterways that may contain pesticides, fertilizers, or other pollutants. Evaluate streams for channel health and complexity, and partner with other agencies and organizations (*i.e.,* US Fish and Wildlife, Walla Walla County Conservation District, Tri-State Steelheaders) to enhance stream health.

3.2.2 Resource Objective Number 2 – Recreational Zoning

3.2.2.1 Rationale

Fort Walla Walla Park has become a “catch all” for activity in the City of Walla Walla. The result is a park with various activities scattered throughout, with little planning or forethought given to the impacts of one activity upon another. This has often created conflicts between different user groups over facilities, timing, and noise.

3.2.2.2 Implementation

Consolidate similar recreational uses into specific geographical areas within the park. Take into consideration issues such as facilities required for activity, level of activity, timing of activities, history of use, and cooperation with other user groups.

3.2.3 Resource Objective Number 3 – Historic Preservation and Protection

3.2.3.1 Rationale

Fort Walla Walla Park is sited on a former military preserve, and has a long history of use and service to the region and community. The City of Walla Walla was founded primarily because of the presence of this Fort. The property is listed on the National Register of Historic Places, and has been important throughout the history of the Walla Walla Valley.

3.2.3.2 Implementation

Establish protocol for the protection of historical and cultural resources within the Park. Protect known cultural and historical resources from activities or elements that might degrade their quality or longevity. Provide an interpretation of historical and cultural resources.

SECTION 4 – LAND USE CLASSIFICATIONS

4.1 GENERAL

This section presents land use classifications for Fort Walla Walla Park. These classifications can be considered zones in the sense that they allow for different types of management and development within each land classification category. The land classifications, as well as the resource objectives, provide a conceptual guide for the future management of lands at Fort Walla Walla Park. Land use classifications are assigned to parcels of land within Fort Walla Walla Park, called management units.

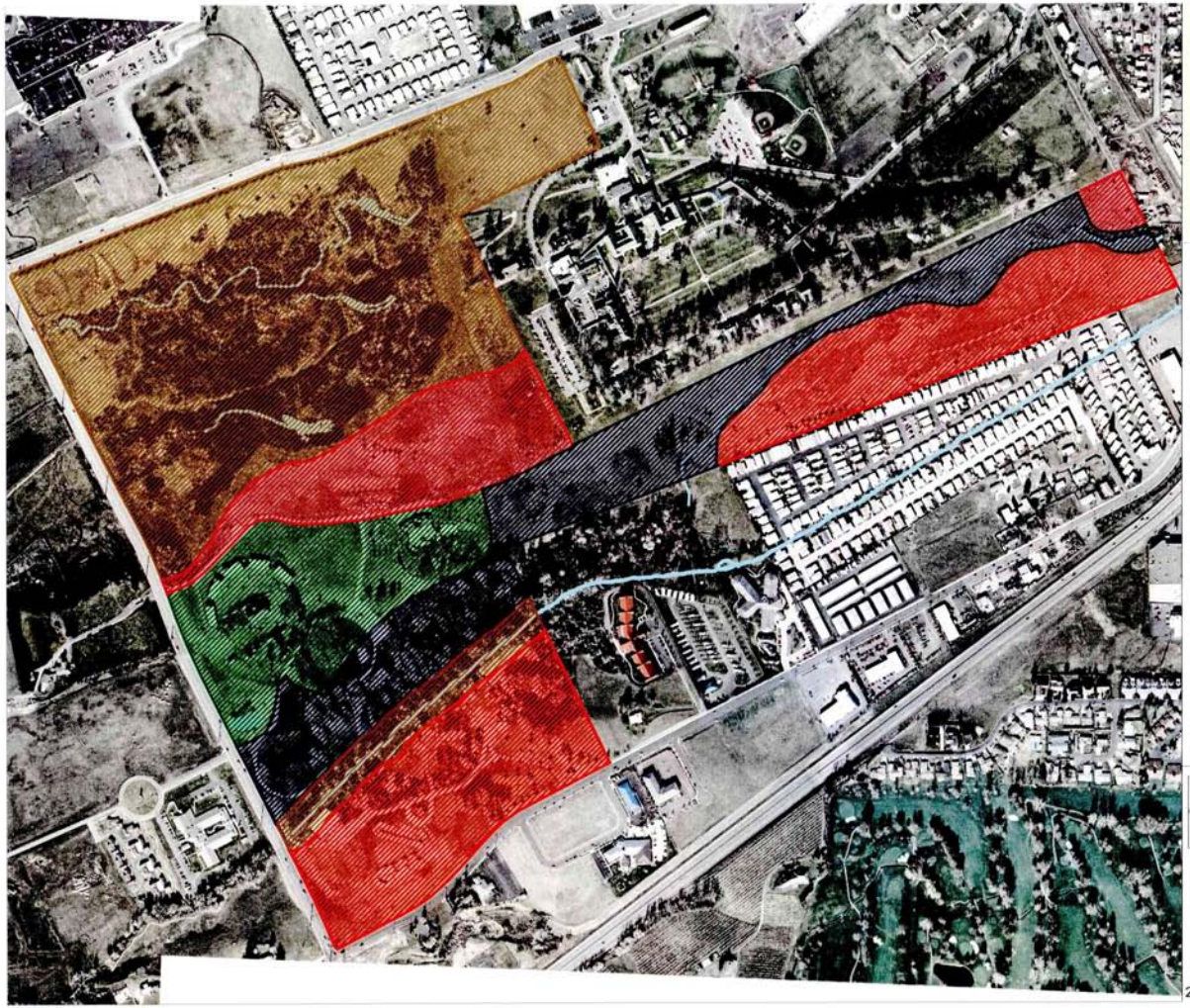
The land use classification map, Plate 3, was generated by grouping together features from the aerial photo provided by the City of Walla Walla. Analysis of vegetation types, habitat types, aquatic features, existing recreational uses, potential future uses, existing land form, and historic and cultural resources helped guide the Master Planning Team in the development of land classifications.

4.2 LAND USE CLASSIFICATIONS

4.2.1 Active Recreation

Photo 5: Disc golf is one of many active recreational activities enjoyed by Fort Walla Walla Park visitors.

The Active Recreation classification refers to areas deemed suitable for approved active recreational activities, such as organized sports with specific and regulated facility needs.



Project Boundary

Hydrology

Active Recreation
Historical/Cultural
Natural Area
Passive Recreation
Transitional

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 250 500 750 1000 Feet

Land Use Classifications

Fort Walla Walla Master Plan

2004

Plate 3

4.2.2 Passive Recreation

The Passive Recreation classification relates to open areas that may be utilized for multiple passive activities that do not require specific facilities (*i.e.*, picnicking or walking).

Photo 6: Picnicking is a popular passive recreation activity.

4.2.3 Historic/Culturally Significant

The Historic/Culturally Significant classification refers to lands that are protected due to their historical or cultural significance. These lands may include developed and undeveloped facilities, and can include interpretive activities or facilities.

4.2.4 Natural

The Natural land use classification applies to lands within the park that are protected because of their wildlife habitat value. They may include aquatic resources or upland habitat types (*e.g.*, shrub-steppe) that have been determined worthy of protection.

4.2.5 Transitional

The Transitional land use classification has been applied to those lands which may be utilized for varied uses, depending on demand. These lands have the potential to be categorized into one of the other land use classifications in the future, depending upon need and future development within the park.

4.3 LAND CLASSIFICATION ACREAGE

Within Fort Walla Walla Park, the Natural land use classification covers the highest amount of acreage. Active recreation follows with the second most acreage. The Transitional classification covers the least amount of acreage. A synopsis of land classification acreages appears in table 4-1, below.

Table 4-1
Land Classifications

Classification	Acreage	Percentage of Overall Acreage
Active Recreation	43.5	21.2
Passive Recreation	33.3	16.2
Historical/Cultural	23.3	11.4
Natural	86.2	41.9
Transitional	19.2	9.3
Total	**205.5**	**100.0**

SECTION 5 – MANAGEMENT UNITS DESCRIPTION AND OBJECTIVES

5.1 GENERAL

5.1.1 Description of Management Units

Fort Walla Walla Park has been divided into eight individual management units (MUs), as shown on plate 4. Each MU is a tract of land designated to achieve, or contribute toward the achievement of, management objectives. An important part of each MU is the resource objective. Each MU resource objective communicates a site-specific application of the landscape-wide management objectives previously identified by the Master Planning Team.

5.1.2 Composition of MUs

The MUs, as described in this section, contain the following components: a) land classification; b) acreage; c) unit description; d) influencing and constraining factors; e) resource objectives; and f) development and management concepts. The following paragraphs contain a detailed outline and explanation of the components listed under the management unit, each of which has a specific name assigned for ease of identification.

a) Land Classification

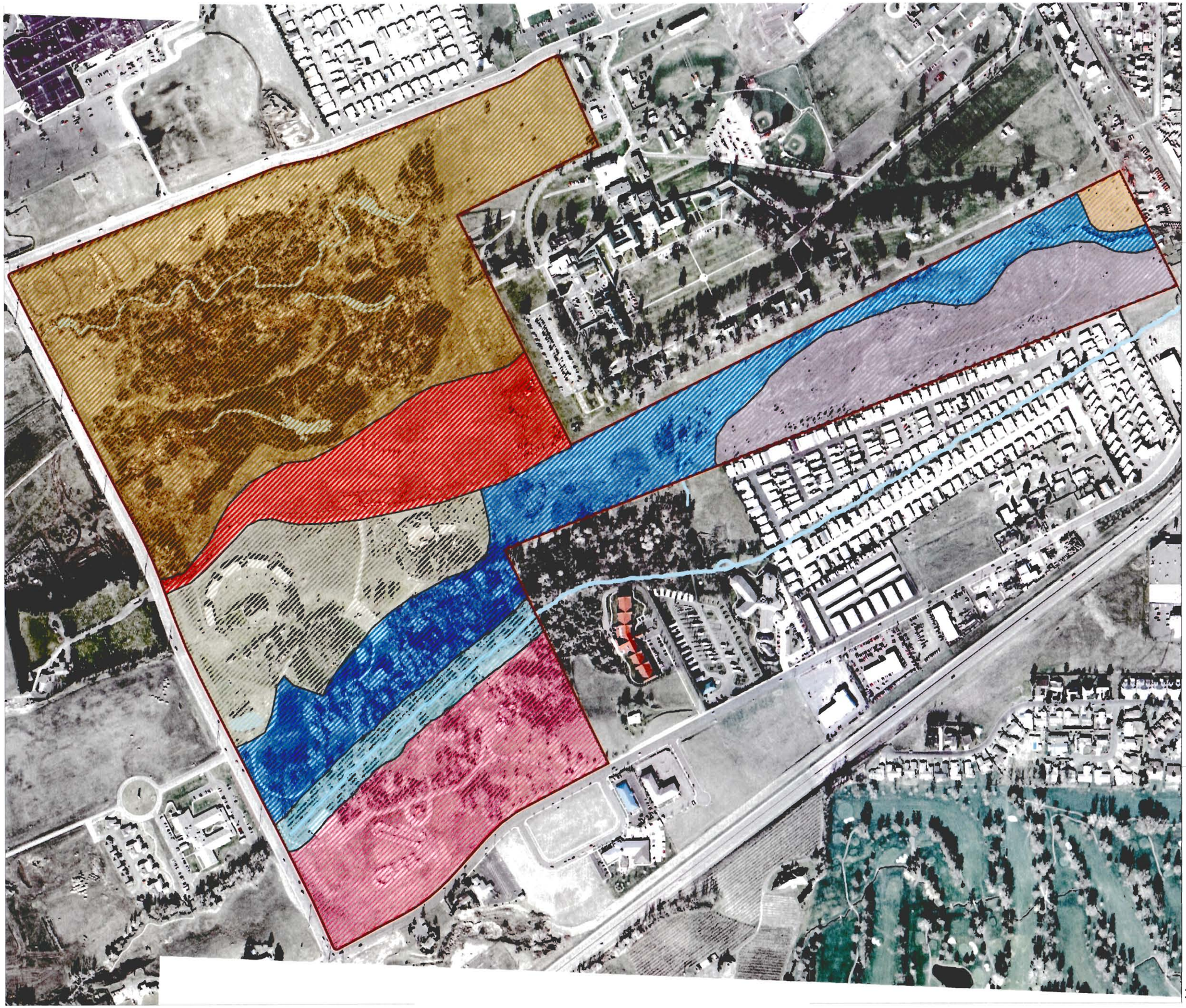
The five land classifications (Active Recreation; Passive Recreation; Historical/Cultural; Natural; and Transitional) are defined in Section 4. These designations identify the primary management functions of each MU at Fort Walla Walla Park.

b) Acres

This section indicates the total number of acres contained in the MU.

c) Unit Description

The unit description contains details of all ecological, cultural, and aesthetic features found within the MU.



Project Boundary

Hydrology

- Dalles Corner MU
- Garrison Creek Corridor MU
- Interpretive MU
- Natural Area MU
- Mullan's Trail MU
- Rancho Active MU
- East Gate MU
- North Buffer MU

Source: 3DI, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 250 500 750 1000 Feet

Management Units

Fort Walla Walla Master Plan

2004

Plate 4

1) Ecological Factors

This section will contain a discussion of each of the factors listed below:

- Landform
- Elevation
- Percent of slope
- Aspect
- Soils
- Land cover/Vegetation
- Water Resources

2) Cultural Factors

This section will contain a discussion of each human-related factor listed below:

- Access
- Current management
- Adjacent management units
- Adjacent ownership/management outside of Fort Walla Walla Park
- Existing development

3) Aesthetic Factors

This section contains a list of visual, auditory, and olfactory factors within, or perceived from, the MU.

d) Influencing and Constraining Factors

This section is a summary of conditions that may limit or promote the implementation of proposed objectives. It also includes a discussion of potential environmental, social, and administrative tradeoffs that may occur in the future.

e) Resource Objectives

- Objective
- Rationale

f) Development of Management Concepts

The development of management concepts section contains a detailed description of the uses, developments, and management techniques that should be undertaken to implement resource objectives. The concepts discussed in this section are not all-inclusive, but are intended to convey an understanding of the type of management strategies and techniques envisioned for implementing resource objectives. The ultimate decisions regarding the methods of implementation rest with the City of Walla Walla, the landowners, and DPR, the land managers.

5.2 The Management Units (MU)

5.2.1 Dalles Corner MU (see Plate 5)

Photo 7: The Dalles Corner MU

a) Land Classification: Active Recreation

b) Acres: 25.6

c) Unit Description

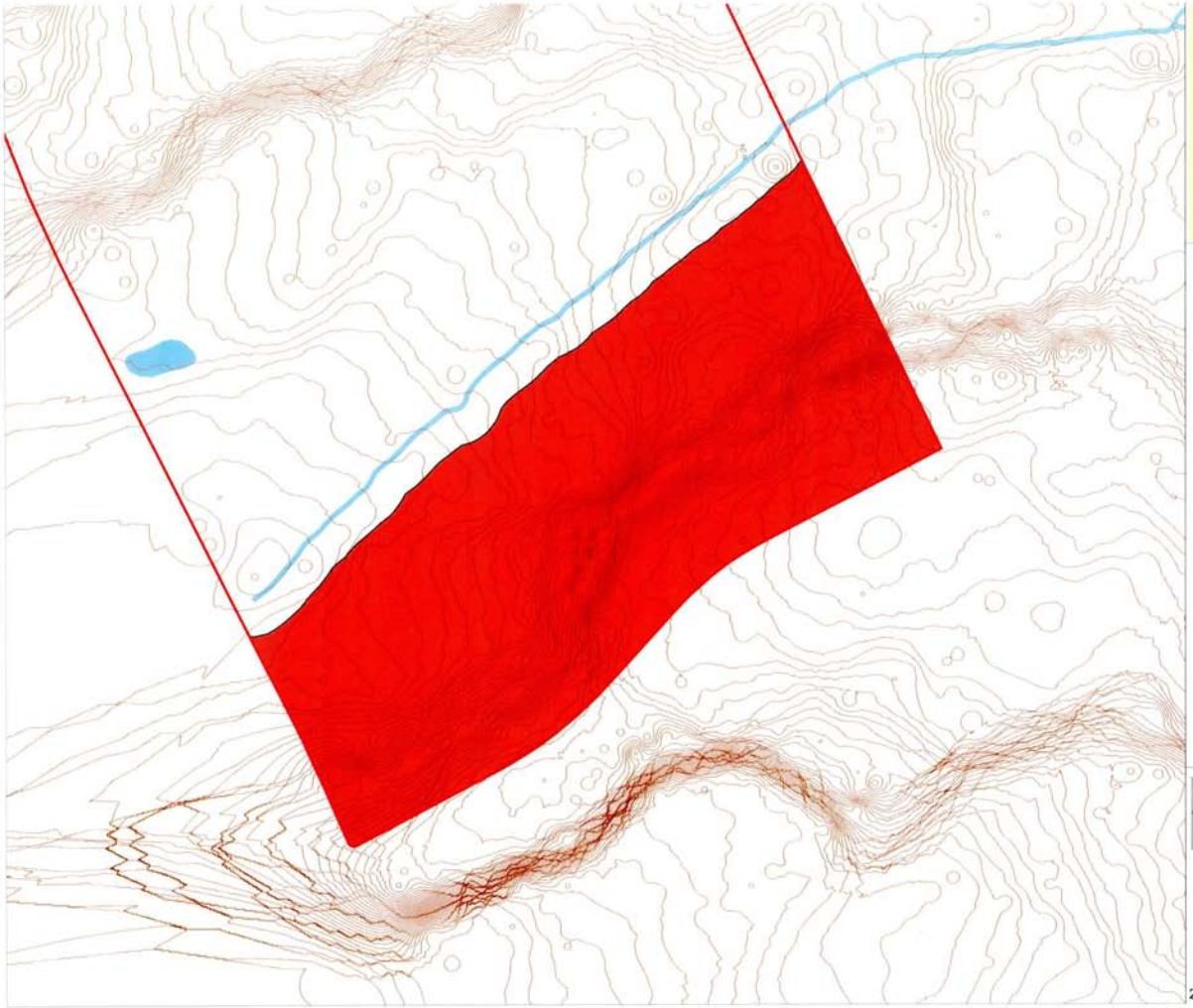
1) Ecological Factors:

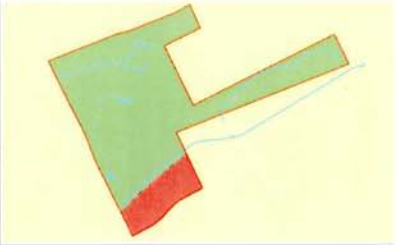
- Landform

  The topography of this MU ranges from steeply sloping around the park perimeter, to gently sloping and flat lands in the interior of the MU.

- Elevation

  The elevation of this MU ranges from a low point of 848.91 feet above sea level to a high point of 892.78 feet above sea level.





Project Boundary

Hydrology

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 250 500 Feet

Dalles Corner M.U.

Fort Walla Walla Master Plan

2004

Plate 5

- Percent of Slope

0-5%	(8.58 acres – 35% of the unit)
6-10%	(4.72 acres – 19% of the unit)
11-15%	(3.33 acres – 14% of the unit)
over 15%	(7.75 acres – 32% of the unit)

- Aspect

Flat	(0%)
North	(1.16 acres – 4.75% of the unit)
Northeast	(2.13 acres – 8.74% of the unit)
East	(1.15 acres – 4.72% of the unit)
Southeast	(0.17 acres – 0.69% of the unit)
South	(0.92 acres – 3.78% of the unit)
Southwest	(2.83 acres –11.59% of the unit)
West	(5.79 acres –23.76% of the unit)
Northwest	(10.24 acres – 41.98%of the unit)

- Soils

Ahtanum Silt Loam, 0-3% slopes (4.58 acres – 19% of unit
Catherine Silt Loam, 0-3% slopes (7.93 acres – 32% of unit)
Terrace Escarpments (1.49 acres – 6% of unit)
Walla Walla Silt Loam, Lacustrine substratum, 0-8% slopes (5.81 acres – 24% of unit)
Walla Walla Silt Loam, Lacustrine Substratum, 8-30% slopes (4.57 acres – 19% of unit)

- Land Cover/Vegetation

Bare Ground	0.28 acres	1.16% of unit
Bare/Sparse Grass	0.40 acres	1.64% of unit
Buildings	0.08 acres	0.34% of unit
Dense Dry Grass	0.28 acres	1.15% of unit
Dry Grass	2.89 acres	11.84% of un
Dry Irrigated Grass	6.02 acres	24.67% of un
Forbland	0.20 acres	0.82% of unit
Irrigated Grass	8.01 acres	32.85% of un

Mesic shrub	0.26 acres	1.07% of unit
Palustrine Forest	2.21 acres	9.06% of unit
Shadow	2.14 acres	8.77% of unit
Trees	1.62 acres	6.62% of unit

- Water Resources:

  The Dalles Corner MU borders the Garrison Creek Corridor MU and its associated riparian zone. A small wetland exists near the disc golf course.

2) Cultural Factors

- Access

  This MU is accessible via the Dalles Military Road entrance. Those on foot or riding bicycles may enter from a footpath at the west end of the park, or via a footbridge that crosses Garrison Creek and connects this MU with the Passive MU.

- Utilities

  Six fire hydrants ring the southern perimeter of this MU. The MU also contains sewer lines and manholes, potable water lines, and eight system valves.

- Adjacent MUs

  The Garrison Creek Corridor MU abuts this MU to the north.

- Adjacent Ownership

  Two separate parcels of privately-owned lands lie to the east of the Dalles Corner MU. One parcel contains a home and manicured lawn, while the second is riparian vegetation surrounding a section of Garrison Creek.

- Existing Developments

  Several active recreational developments currently exist within this MU. The largest is a BMX bicycle racetrack. A skateboard park, consisting of concrete surface, ramps, and halfpipes is located at the northwest corner of the MU. The disc golf club maintains a 10-hole course (20-hole course possible with use of alternate tee boxes) with goal baskets and small concrete tee pads. A house is located to the east of the main entrance sign, as are the remnants of a campground, with hardened camp spurs.

3) Aesthetic Factors

- Large stand of trees around the south perimeter of the park
- Irrigated lawn gives lush, cooling feel to contrasting open, dry landscape
- Birds and other wildlife may be spotted within the boundaries of this MU
- Steep topography around the outer perimeter of the park (and, thus, the MU) gives feeling of enclosure, and helps provide visual and physical separation from outside development for those within the park
- Small wetland provides a piece of wildlife habitat within a manicured setting

d) Influencing and Constraining Factors

The proximity of this MU to the Garrison Creek corridor should affect management issues and development, taking into consideration the goals of aquatic protection and riparian restoration. Care should be taken to avoid development that will send runoff into the creek. Future development should also be sensitive to the riparian corridor and the wildlife that may possibly utilize it.

Due to surrounding residential and commercial development, activities should be sited and timed to be sensitive to their impact and use on the surrounding community (*i.e.*, no late night

BMX races utilizing sound system, lighting should be of an appropriate scale and be positioned so as not to disturb residents of surrounding community, *etc.*).

e) Resource Objectives

(1) Objectives

- Recreational Zoning

(2) Rationale

- Fort Walla Walla Park has become an area of mixed activity. The result is a park with various activities scattered throughout, with little planning or forethought given to the impacts of one activity upon another. This has created conflicts between different user groups over facilities, timing, and noise.

  Various user groups pursue active recreation activities in locations across the park. Consolidating active recreational activity into one large location will assist the management of grounds (irrigated lawn and trees), noise associated with some active recreational activities, and timing conflict. The visibility offered by consolidating location may actually help to recruit participants from one activity to another, thereby enhancing user numbers.

f) Management Concepts

- Relocate the Adventure Challenge Course, operated by Walla Walla County Department of Court Services, to the meadow adjacent to residence.
- Remove residence from park (long-term) and convert the space to parking and/or a manicured recreational area.
- Establish parking off main driveway to accommodate disc golf course and Adventure Challenge Course users.
- Abandon part of camp loop pavement (as shown in circulation plan, plate 13) and restore to manicured lawn.
- Relocate the CARS track to active recreation area.
- Eliminate the “O” road loop adjacent to BMX track.
- Construct playground near BMX track
- Enlarge parking area adjacent to skateboard park.

- To reduce impacts to aesthetics of park and surroundings, limit height of structures so they do not exceed sightlines at street level (meaning that no structure built within this MU should be seen above eye level by a person sitting in a car on Dalles Military Road). Any audio development should be focused toward the interior of the park, and must comply with existing City ordinances.
- Plant more trees and shrubs around south and west perimeter of Dalles Corner MU to buffer noise from street and BMX sound system.
- Relocate bathroom building to area close to expanded parking lot, in order to better serve both the BMX track and the skateboard park.
- Add curbs along all vehicular roadways, and add speed bumps to main road into south side of park
- Relocate maintenance shop to far southeast corner, allowing access from Dalles Military Road.
- Continue to allow dry camping under current guidelines: under special use permit during approved events only, with proof of adequate insurance.
- Maintain small wetland, and protect from pollution from fertilizer, pesticide, and run-off from roadways.

5.2.2 Garrison Creek Corridor MU (Plate 6)

Photo 8: The Garrison Creek Corridor MU

a) Land Classification: Natural

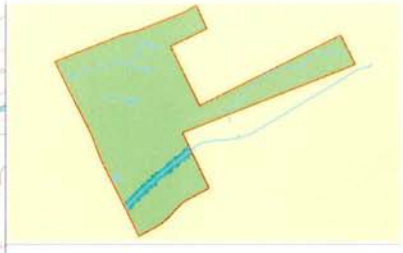
b) Acres: 3.5

c) Unit Description

1) Ecological Factors

- Landform

  This management unit includes Garrison Creek itself, and a 25-foot buffer on either side of the creek. The banks of the creek have been steeply cut in some area while, in others, it is readily accessible from level ground. Generally, the banks slope gently to the water surface.



Project Boundary

Hydrology

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 100 200 300 Feet

Garrison Creek Corridor M.U.

Fort Walla Walla Master Plan

2004

Plate 6

- Elevation

  The elevation of this management unit ranges from a low point of 844.91 feet above sea level to a high point of 865.70 feet above sea level.

- Percent of Slope

0-5%	(3.77 acres – 55.91% of the unit)
6-10%	(1.40 acres – 20.79% of the unit)
11-15%	(1.34 acres – 19.87% of the unit)
over 15%	(0.23 acres – 3.43% of the unit)

- Aspect

Flat	(0%)
North	(0%)
Northeast	(0.32 acres – 4.76% of the unit)
East	(0%)
Southeast	(0.29 acres – 4.30% of the unit)
South	(0.73 acres – 10.78% of the unit)
Southwest	(1.67 acres –24.73% of the unit)
West	(2.72 acres –40.30% of the unit)
Northwest	(1.02 acres – 15.13%of the unit)

- Soils

  Ahtanum Silt Loam, 0-3% slope (<1 acre – 7% of unit)
  Catherine Silt Loam, 0-3% slope (6.27 acres – 93% of unit)
  Yakima Silt Loam, 0-3% (<1 acre – 0.22% of unit)

- Land Cover/Vegetation

Bare Ground	0.04 acres	0.65% of unit
Bare/Sparse Grass	0.05 acres	0.76% of unit
Dense Dry Grass	0.25 acres	3.71% of unit
Dry Grass	0.52 acres	7.68% of unit
Dry Irrigated Grass	0.37 acres	5.46% of unit
Irrigated Grass	1.29 acres	19.07% of unit

Palustrine Forest	3.16 acres	46.78% of unit
Pavement	0.30 acres	4.39% of unit
Trees	0.78 acres	11.52% of nit

- Water Resources

  Garrison Creek flows through the center of this management unit. An associated riparian (palustrine) vegetative zone grows along either side of the creek.

2) Cultural Factors

- Access

  The Garrison Creek Corridor MU runs east to west through the central portion of the park. Visitors may access the park by vehicle or on foot from either of the park's main entrances, various footpaths, or the proposed bicycle/pedestrian trail through the passive management unit. One footbridge crosses the creek, and connects the disc golf course with the picnic area.

- Utilities

  A potable water line and a sewer line are present within this MU.

- Adjacent MUs

  The Dalles Corner and Mullan's Trail MUs border the Garrison Creek Corridor MU to the south and north.

- Adjacent Ownership

  A parcel of privately-owned land directly east of the park boundary continues a prime bit of riparian habitat as it follows Garrison Creek until it enters the Rancho Villa Mobile Home Park.

- Existing Developments

  The WWBST, in partnership with the City of Walla Walla, planted 1000 feet of the stream in riparian vegetation in spring 2004. Phase two of the project will plant an additional 852 feet. The only manmade development in the area is a footbridge.

3) Aesthetic Factors

- Water adds high aesthetic value (sight, sound)
- Water adds cooling effect to air, riparian vegetation provides shade
- Potential for wildlife viewing within riparian corridor
- Riparian vegetation provides visual buffer between active Dalles Corner MU and passive Mullan's trail and Interpretive MUs, giving the viewer choice in visual experience

d) Influencing and Constraining Factors

- Protection of riparian zone
- Water quality – tributary of Mill Creek, irrigation and water rights downstream
- Watershed planning emphasis on Yellowhawk Creek for high quality anadromous fish habitat and passage

e) Resource Objectives

- **Aquatic Ecosystem Health**

  - **Rationale**

    Several streams and springs are located within Fort Walla Walla Park. These aquatic resources provide habitat to fish and other wildlife, and contribute to the overall health of the watershed.

  - **Implementation**

    Limit hardened development adjacent to water by maintaining a 25-foot buffer of native riparian vegetation along streams. Control invasive weeds that may choke out beneficial riparian vegetation.

Protect wetlands with similar measures, applying a buffer, and restoring native vegetation. Avoid runoff into waterways that may contain pesticides, fertilizers, or other pollutants. Evaluate streams for channel health and complexity, and partner with other agencies and organizations (*i.e.,* US Fish and Wildlife, Walla Walla County Conservation District, Tri-State Steelheaders) to enhance stream health.

f) Management Concepts

- Maintain a 25-foot buffer on either side of the creek.
- Remove aggressive invaders (*i.e.*, blackberry and poison hemlock) and replace invasive plant species with native riparian vegetation.
- Work to restore the riparian corridor along Bryant Creek to make a connection with Garrison Creek from the east end of the park.
- Consider altering creek banks in areas where banks are steeply cut down. Laying the banks back may assist in the establishment of desirable riparian vegetation. There is potential to cost-share a project of this sort with the Corps and, possibly, other agencies in the region.
- Develop interpretive signage and a trail through the riparian area, perhaps in cooperation with community groups such as WWBST, or local service clubs and organizations.
- Work with willing landowners to acquire additional property along the creek.
- Develop a long-term tree maintenance plan to replace the ornamentals in the riparian zone with native species.
- Allow some standing snags for use by cavity-nesting birds such as woodpecker and owls.
- Consider constructing 1 or 2 more footbridges across the creek to connect the active recreation areas with the passive, and allow park users views of the interior of the riparian vegetation corridor for educational purposes.

5.2.3 Mullan's Trail MU (Plate 7)

Photo 9: The Mullan's Trail MU

a) Land Classification: Passive Recreation

b) Acres: 35.3

c) Unit Description

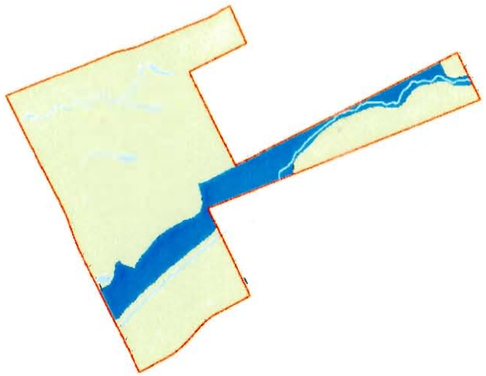
1) Ecological Factors

- Landform

  The topography of this MU varies from steep slopes along the perimeter to gently rolling terrain. Most of the land is flat to gently sloping, making it ideally suited to activities such as picnicking and leisurely walks.

- Elevation:

  The elevation of this MU ranges from a low point of 846.25 feet above sea level to a high point of 909.39 feet above sea level.



Project Boundary

Hydrology

Source. 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 250 500 750 1000 Feet

Mullan's Trail M.U.

Fort Walla Walla Master Plan

2004

Plate 7

- Percent of Slope

0-5%	(24.25 acres – 73% of the unit)
6-10%	(4.36 acres – 13% of the unit)
11-15%	(1.86 acres – 6% of the unit)
over 15%	(2.81 acres – 8% of the unit)

- Aspect

Flat	(0%)
North	(0.09 acres – 0.27% of the unit)
Northeast	(0.31 acres – 0.94% of the unit)
East	(0.16 acres – 0.48% of the unit)
Southeast	(0.32 acres – 0.97% of the unit)
South	(4.34 acres – 13.06% of the unit)
Southwest	(11.20 acres –33.67% of the unit)
West	(3.62 acres –10.89% of the unit)
Northwest	(13.22 acres – 39.74%of the unit)

- Soils

Catherine Silt Loam, 0-3% slopes (8.93 acres – 27% of unit
Touchet Silt Loam, 0-3% slopes (8.75 acres – 26% of unit)
Walla Walla Silt Loam, Lacustrine substratum, 0-8 slopes (<1 acre – 3% of unit)
Walla Walla Silt Loam, Lacustrine substratum, 8-30% slopes, eroded (3.96 acres – 12% of unit)
Yakima Gravelly Silt Loam, 0-3% slopes (5.75 acres – 17% of unit)
Yakima Silt Loam, 0-3% slopes (4.99 acres – 15% of unit)

- Land Cover/Vegetation

Bare Ground	0.17 acres	0.51% of unit
Bare/Sparse Grass	0.46 acres	1.37% of unit
Buildings	1.03 acres	3.10% of unit
Dense Dry Grass	8.39 acres	25.20% of unit

Dry Grass	6.93 acres	20.81% of unit
Dry Irrigated Grass	0.24 acres	0.73% of unit
Forbland	0.10 acres	0.30% of unit
Irrigated Grass	acres	of unit
Palustrine Forest	11.11 acres	33.38% of nit
Pavement	1.55 acres	4.66% of unit
Shadow	0.03 acres	0.10% of unit
Shrub/Dense grass	2.09 acres	3.55% of unit
Trees	1.62 acres	6.29% of unit

- Water Resources

  A portion of the boundary of this MU follows the Bryant Creek alignment. Bryant Creek lies within this MU.

2) Cultural Factors

- Access

  Vehicles may access this MU from the Myra Street entrance. Bicyclists and pedestrians may access this MU from the bike path that enters at Chestnut Street

- Utilities

  Sewer lines and manholes, and three potable water lines run through this MU

- Adjacent MUs

  The Garrison Creek Corridor MU is located just south of portions of this MU. The Interpretive, Northern Buffer, Dalles Corner, and East Gate Management Units abut the Mullan's Trail MU

- Adjacent Ownership

  The grounds of the Jonathan Wainright Veteran's Administration Hospital lie to the north of a portion of this MU. The hospital is separated from the park by a fence and a steep change in slope.

- Existing Developments

  Currently, this MU contains the Rotary picnic shelter, the public restroom, and a footpath.

3) Aesthetic Factors

- Varied landscape types provide a visually interesting experience for users.
- Tall trees offer cooler, shaded experience
- Open grassland offers long, open vistas
- Varied topography offers viewer interesting views and variable feelings of enclosure
- Increasing traffic on Myra Road due to development will contribute noise, detracting from user experiences
- Changing traffic patterns within the park will give this MU a slower, more pedestrian feel than it currently has

d) Influencing and Constraining Factors

- Development on Myra Road will affect circulation within the park (still to be determined) and have aesthetic impacts in the form of noise and dust
- Use may shift away from Myra Road edge into interior of park due to development along Myra Road
- Adjacency to Garrison Creek Corridor MU will affect the type of development along the southern edge of this MU. Care should be taken to avoid development that will compromise the riparian buffer or cause runoff into the creek.
- Parts of the riparian zone upstream of the Rotary picnic shelter are used as campsites by transients. Clearing the riparian zone of blackberries, and replanting the area with lower growing natives will help to discourage this activity, thus lowering the security and fire threat within the park

e) Resource Objectives

(1) Recreational Zoning

- Rationale

  Fort Walla Walla Park has become an area of mixed activity. The result is a park with various activities scattered throughout, with little planning or forethought given to the impacts of one activity upon another. This has often created conflicts between different user groups over facilities, timing, and noise.

- Implementation

  Consolidate similar recreational uses into specific geographical areas within the park. Take into consideration issues such as facilities required for activity, level of activity, timing of activities, history of use, and cooperation with other user groups.

(2) Resource Objective Number 1 – Aquatic Ecosystem Health

- **Rationale**

  Several streams and springs are located within Fort Walla Walla Park. These aquatic resources provide habitat to fish and other wildlife, and contribute to the overall health of the watershed.

- **Implementation**

  Limit hardened development adjacent to water by maintaining a 25-foot buffer of native riparian vegetation along streams. Control invasive weeds that may choke out beneficial riparian vegetation. Protect wetlands with similar measures, applying a buffer, and restoring native vegetation. Avoid runoff into waterways that may contain pesticides, fertilizers, or other pollutants. Evaluate streams for channel health and complexity, and partner with other agencies and organizations (*e.g.*, US

Fish and Wildlife, Walla Walla County Conservation District, Tri-State Steelheaders) to enhance stream health.

f) Management Concepts

- Re-route the bike trail at the east end of the park so that it follows the alignment of Bryant Creek, maintaining enough of a buffer that riparian vegetation has room to revegetate, given the opportunity.
- Explore the possibility of reversing the diversion of Bryant Creek into Garrison Creek, so that Bryant Creek once again flows perennially. Likewise, consider the idea of diverting a small amount of water from Garrison Creek to Bryant Creek to encourage riparian vegetation, and augment the high quality riparian forest in the lower park area, possibly encouraging a wildlife corridor. There is a potential to cost-share a project of this sort with the Corps and, possibly, other agencies in the region.
- Work to restore small areas in the shrub-steppe zones along the bike path to remove brome grass, and plant native shrub-steppe vegetation. Currently, some remnants of native shrubs, grasses, and forbs exist in this area. These remnant areas should be protected, since they will provide seed stock for other areas.
- Team with the Walla Walla sub-group of the Washington Native Plant Society to rejuvenate native vegetative communities on the site.
- Expand picnic facilities into current wood yard, giving users the option of a groomed lawn picnic experience or a more secluded, wooded picnic spot.
- Relocate the existing playground to an area closer to the existing parking lot and Rotary Shelter.
- Locate restroom facilities close to the existing parking lot and Rotary Shelter.
- If available from willing seller, acquire riparian area behind the RV park and nursing home on Dalles Military Road to connect the riparian corridor and bike path.
- Continue eradication of blackberries around riparian areas within the park to eliminate noxious weeds and make the area less attractive to transients

5.2.4 Interpretive MU (Plate 8)

Photo 10: The Interpretive MU

a) Land Classification: Historical/Cultural

b) Acres: 23.3

c) Unit Description:

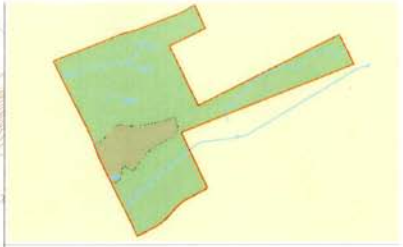
1) Ecological Factors

- Landform

  The terrain in this MU varies drastically, supporting a natural amphitheater, and resulting in two levels at the Fort Walla Walla Museum.

- Elevation

  The elevation of this MU ranges from a low point of 849.62 above sea level to a high point of 884.67 above sea level.



Project Boundary

Hydrology

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 100 200 300 400 Feet

Interpretive M.U.

Fort Walla Walla Master Plan

2004

Plate 8

- Percent of Slope

0-5%	(12.02 acres – 51% of the unit)
6-10%	(2.54 acres – 11% of the unit)
11-15%	(2.06 acres – 9% of the unit)
over 15%	(6.72 acres – 29% of the unit)

- Aspect

Flat	(0%)
North	(0.04 acres - .15% of the unit)
Northeast	(0.68 acres – 2.9% of the unit)
East	(0.09 acres – 0.38% of the unit)
Southeast	(0.54 acres – 2.32% of the unit)
South	(3.95 acres – 16.91% of the unit)
Southwest	(7.21 acres – 30.87% of the unit)
West	(3.59 acres – 15.37% of the unit)
Northwest	(7.25 acres – 31.09%of the unit)

- Soils

Catherine Silt Loam, 0-3% slope (1.26 acres – 5% of unit)
Touchet Silt Loam, 0-3% slopes (5.6 acres – 24% of unit)
Walla Walla Silt Loam, Lacustrine substratum, 0-8% slopes (10.84 acres - 46% of unit)
Walla Walla Silt Loam, Lacustrine Substratum, 8-30% slopes, eroded (3.85 acres – 17% of unit)
Yakima Silt Loam, 0-3% slopes (1.78 acres – 8% of unit)

- Land Cover/Vegetation

Bare Ground	0.41 acres	1.74% of unit
Bare/Sparse Grass	0.46 acres	1.96% of unit
Buildings	1.36 acres	5.84% of unit
Dense Dry Grass	6.08 acres	26.04% f unit
Dry Grass	3.18 acres	13.61% of un
Dry Irrigated Grass	1.21 acres	5.18% of unit
Forbland	0.12 acres	0.50% of unit
Mesic shrub	0.28 acres	1.22% of unit

Palustrine Forest	5.69 acres	24.38% of unit
Pavement	1.46 acres	6.26% of unit
Shadow	0.75 acres	3.22% of unit
Shrub/Dense Grass	0.53 acres	2.26% of unit
Trees	1.82 acres	7.79% of unit

- Water Resources

  A small wetland in the southwest corner of this MU is maintained intact within the bounds of the Fort Walla Walla Museum.

2) Cultural Factors

- Access

  The Interpretive MU is accessed by vehicle via two entrances from Myra Road. One roadway runs below the Fort Walla Walla Museum, between the museum and the cemetery. The road loops up the hill and runs between the North Buffer MU and the back side of the museum, then dead ends in front of the amphitheater. The Interpretive MU may be accessed by foot or bicycle from the bike/foot path that runs from the eastern park boundary to the amphitheater, through the Mullan's Trail MU.

- Utilities

  The Interpretive MU contains sewer lines and manholes, potable water, a fire hydrant, and electricity.

- Adjacent Management Units

  The Mullan's Trail and Northern Buffer MUs border the Interpretive MU.

- Adjacent Ownership

  The Interpretive MU is surrounded by lands owned by the City of Walla Walla and managed by the DPR.

- Existing Developments

  The Interpretive MU is home to the Fort Walla Walla Museum and the Fort Walla Walla Amphitheater. Both facilities provide cultural opportunities to citizens of the City of Walla Walla, as well as visitors from surrounding communities.

3) Aesthetic Factors

- Fort Walla Walla Museum sits on a hill and is highly visible within the park
- Buildings within the museum have varied architectural treatments (*e.g.*, historic, log, cinder block) creating visual dichotomy. Unification of architectural style of official museum buildings (not historical display buildings) will help visitors to interpret the museum and the functions of its buildings
- Storage on the back side of cinderblock museum buildings is visible to those using the north Myra entrance and the Fort Walla Walla Natural Area
- Amphitheater makes natural use of topography to blend into the hillside
- The log theme used on amphitheater front and museum administration building presents a unified theme that is easily interpreted by park users

d) Influencing and Constraining Factors

- The lease agreement with Walla Walla Community College (WWCC) for the Fort Walla Walla Amphitheater gives WWCC exclusive use of the facility if they choose to manage it that way
- Amphitheater is only used in the summer months
- Radio-controlled car track is incompatible use with museum and amphitheater
- This MU contains two of the three vehicular access points to the park

e) Resource Objectives

- Historic Preservation
    - Rationale

      Fort Walla Walla Park is sited on a former military preserve, and has a long history of use and service to the region and community. The City of Walla Walla was founded primarily because of the presence of the Fort. The property is listed on the National Register of Historic Places, and has been important throughout the history of the Walla Walla Valley.

    - Implementation

      Establish protocol for protection of historical and cultural resources within the Park. Protect known cultural and historical resources from activities or elements that might degrade their quality or longevity. Provide an interpretation of historical and cultural resources.

f) Management Concepts

- Allow no other purpose or function for the cemetery other than remembrance and the honoring of military service.
- Allow no new burials, headstones, or monuments in the cemetery; and maintain current vegetation.
- Clean cemetery headstones and monuments every 5 years, utilizing a mild acid commonly used to remove organic materials. Resurface those headstones with scars and chips.
- Continue the practice of maintaining soil around headstones to avoid damage from string trimmers and mowers.
- Refurbish headstones within 2 years, starting at the west end of the cemetery to ensure that all headstones are cleaned and repaired.
- Add handicapped parking at current site of the CARS track to accommodate guests to the amphitheater.

- Work with the museum to consider moving the museum entrance to the flat area at the top of the rise, between the museum buildings and the amphitheater, adjacent to the proposed parking area.
- Continue to protect the small wetland on museum grounds.
- Landscape the upper perimeter of the museum to muffle traffic noise and soften the visual impact of concrete buildings.
- Request that the museum soften (with architectural treatment) the current back side of the concrete block buildings to better reflect desired design character of the park.
- Identify the large flat area between the museum and the amphitheater as the primary parking lot for museum development.

5.2.5 North Buffer MU (Plate 9)

Photo 11: The North Buffer MU

a) Land Classification: Transitional

b) Acres: 17.7

c) Unit Description

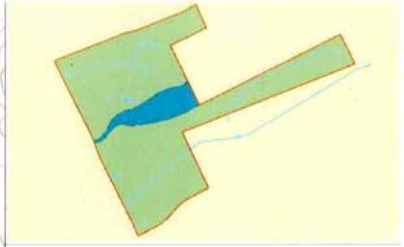
1) Ecological Factors

- Landform

  Most of this MU is flat or gently rolling.

- Elevation

  The elevation of this MU ranges from a low point of 862.24 feet above sea level to a high point of 894.46 feet above sea level.



Project Boundary

Hydrology

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 100 200 300 400 Feet

North Buffer M.U.

Fort Walla Walla Master Plan

2004

Plate 9

- Percent of Slope

0-5%	(9.11 acres – 52% of the unit)
6-10%	(7.63 acres – 43% of the unit)
11-15%	(.51 acres – 3% of the unit)
over 15%	(.44 acres – 2% of the unit)

- Aspect

Flat	(0%)
North	(0.05 acres – 0.29% of the unit)
Northeast	(0.55 acres – 3.11% of the unit)
East	(0.31 acres – 1.75% of the unit)
Southeast	(0.01 acres – 0.07% of the unit)
South	(0.68 acres – 3.82% of the unit)
Southwest	(5.79 acres –32.72% of the unit)
West	(4.17 acres – 23.59% of the unit)
Northwest	(6.13 acres – 34.65%of the unit)

- Soils

Terrace Escarpments (<1 acres - < 1% of unit)
Walla Walla Silt Loam, Lacustrine substratum, 0-8% slopes (17.55 acres – 99% of unit)
Walla Walla Silt Loam, Lacustrine Substratum, 8-30% slopes (<1 acre - <1% of unit)

- Land Cover/Vegetation

Bare/Sparse Grass	0.05 acres	0.27% of unit
Buildings	0.03 acres	0.14% of unit
Dense Dry Grass	10.26 acres	57.98% of nit
Dry Grass	3.02 acres	17.07% of unit
Dry Irrigated Grass	0 acres	0.01% of unit
Irrigated Grass	2.71 acres	15.29% of unit
Pavement	1.03 acres	5.84% of unit
Shadow	0.01 acres	0.03% of unit
Shrub/Dense Grass	0.47 acres	2.64% of unit
Trees	0.13 acres	0.72% of unit

- Water Resources

  There are no water resources in this MU.

2) Cultural Factors

- Access

  The North Buffer MU is accessed from the northern entrance off of Myra Road, or from the bike/foot path that runs between the park's eastern boundary and the amphitheater.

- Utilities

  Three sewer lines and two sewer manholes are present within the Northern Buffer MU.

- Land Ownership/Management

  This land is owned by the City of Walla Walla and managed by the DPR. Management includes mowing grass and weed control.

- Adjacent MUs

  The Interpretive MU and the Fort Walla Walla Natural Area MU border this MU.

- Adjacent Ownership/Management

  The Veteran's Administration owns and operates the Jonathon Wainwright Veteran's Administration Hospital, to the east of this MU. Surrounding land to the north, south, and west is owned by the City of Walla Walla and managed by the DPR. Sub-agreements exist for management of the Fort Walla Walla Natural Area (Audubon), the Fort Walla Walla Amphitheater (Walla Walla Community College Foundation), and the Fort Walla Walla Museum (Fort Walla Walla Museum).

- Existing Developments

    - The Walla Walla Proptwisters operate a model airplane airport within this MU.
    - The Fort Walla Walla Challenge course is currently located within this MU.
    - Recommendations in this plan propose that both facilities be relocated to sites where the activity will be more compatible with surroundings.

3) Aesthetic Factors

- Open vistas across gentle landscape
- Views into Fort Walla Walla Natural Area offer sense of mystery
- Fort Walla Walla Natural Area buffers this MU from impacts of traffic on Myra Road and Poplar Street

d) Influencing and Constraining Factors

- Conflicts between Proptwisters and other park users over noise and intrusion of airplanes into restricted space at Fort Walla Walla Natural Area and Veteran's Administration medical center
- Currently serves as overflow parking for events within the park
- Challenge course operators desire a quieter, shadier site for their activity
- This MU contains known cultural resources, which should be managed in accordance with recommendations in Appendix B.

e) Resource Objectives

- Recreational Zoning

    - Rationale

      Fort Walla Walla Park has become an area of mixed uses. The result is a park with various activities scattered throughout, with little planning or forethought given to the impacts of one activity

upon another. This has often created conflicts between different user groups over facilities, timing, and noise.

- Implementation

  Consolidate similar recreational uses into specific geographical areas within the park. Take into consideration issues such as facilities required for activity, level of activity, timing of activities, history of use, and cooperation with other groups.

f) Management Concepts

- Develop an agreement to share the proposed museum parking lot for evening performances at the amphitheater.
- Delineate an acceptable overflow parking area for the amphitheater
- Relocate the current airfield, as now used; when a new permanent field site is located that meets safety standards and requirements. The City shall assist the Proptwisters in the cost of relocation through either/or funding, labor, and materials.
- Remove parking lot at trailhead of Arthur G. Rempel Nature Trail (after establishment of a new Natural Area entrance on the north side of the park).
- Relocate Adventure Challenge Course to Dalles Corner MU.
- Team with the local Walla Walla sub-group of the Washington Native Plant Society to establish native shrub-steppe vegetation where appropriate
- Take appropriate measures to control noxious weeds

5.2.6 Fort Walla Walla Natural Area MU (Plate 10)

Photo 12: The Fort Walla Walla Natural Area MU

a) Land Classification: Natural

b) Acres: 79.4

c) Unit Description

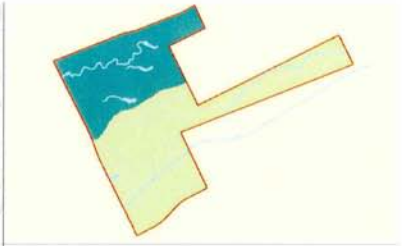
1) Ecological Factors

- Landform

  The topography of this MU varies greatly, with slopes over 15% around the edges. It is characterized by river bottom with streams, ponds, and dense riparian vegetation, and open shrub-steppe at the flat lands on the shelf around the perimeter.

- Elevation

  The elevation of this MU ranges from a low point of 844.61 feet above sea level to a high point of 893.95 feet above sea level.



Project Boundary

Hydrology

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 250 500 750 Feet

Natural Area M.U.

Fort Walla Walla Master Plan

2004

Plate 10

- Percent of Slope

0-5%	(49.27 acres – 62% of the unit)
6-10%	(15.44 acres – 20% of the unit)
11-15%	(6.44 acres – 8% of the unit)
over 15%	(8.25 acres – 10% of the unit)

- Aspect

Flat	(0%)
North	(1.88 acres – 2.37% of unit)
Northeast	(1.88 acres – 2.37% of unit)
East	(1.31 acres – 1.65% of unit)
Southeast	(2.69 acres – 3.39% of unit)
South	(2.65 acres – 3.34% of unit)
Southwest	(16.0 acres –20.15% of unit)
West	(25.59 acres – 32.23% of unit)
Northwest	(27.40 acres – 34.50%of unit)

- Soils

  Ahtanum Silt Loam, 0-3% slopes (9.90 acres – 12% of unit)
  Catherine Silt Loam, 0-3% slopes (42.57 acres – 54% of unit)
  Hermiston Silt Loam, 0-3% slopes (0.99 acres – 1% of unit)
  Terrace Escarpments (3.95 acres – 5% of unit)
  Touchet Gravelly Silt Loam, 0-3% slopes (1.42 acres – 2% of unit)
  Touchet Silt Loam, 0-3% slopes (14.71 acres – 19% of unit)
  Walla Walla Silt Loam, Lacustrine Substratum, 0-8% slopes (3.27 acres – 4% of unit)
  Walla Walla Silt Loam, Lacustrine substratum, 8-30% slopes, eroded (2.6 acres – 3% of unit)

- Land Cover/Vegetation

Bare Ground	0.18 acres	0.23% of unit
Bare/Sparse Grass	0.90 acres	1.13% of unit
Buildings	0.26 acres	0.33% of unit

Dense Dry Grass	20.95 acres	26.38% of unit
Dry Grass	17.56 acres	22.11% of un
Forbland	0.88 acres	1.10% of unit
Irrigated Grass	2.43 acres	3.06% of unit
Mesic shrub	9.11 acres	11.47% of unit
Palustrine Forest	21.47 acres	27.04% of unit
Pavement	0.21 acres	0.26% of unit
Pond	0.44 acres	0.55% of unit
Shadow	0.07 acres	0.09% of unit
Shrub/Dense Grass	2.56 acres	3.22% of unit
Trees	2.38 acres	3.03% of unit

- Water Resources

  Thompson Creek flows through the Fort Walla Walla Natural Area, and several springs feed ponds within the MU.

2) Cultural Factors

- Access

  This MU is currently accessed from the northernmost entrance off Myra Road. A small parking lot and trailhead is located just off of the road.

- Utilities

  Sewer lines and manholes, potable water lines, and a fire hydrant are located within the Fort Walla Walla Natural Area MU. Most utilities are located at the east end, adjacent to the Wainwright Veteran's Administration Hospital.

- Land Ownership/Management

  This land is owned by the City of Walla Walla and managed by DPR. The City maintains a sub-agreement with Blue Mountain Audubon for management and trail maintenance of the Fort Walla Walla Natural Area.

- Adjacent MUs

  The Northern Buffer MU is adjacent to the Fort Walla Walla Natural Area MU.

- Adjacent Ownership/Management

  The lands to the east of this MU are owned by the Federal government, and operated as the Jonathan Wainwright Veteran's Administration Hospital.

- Existing Developments

  Very little development has taken place within this MU since it was acquired. A large horse barn and small outbuilding remain from its days as a government facility. The Arthur G. Rempel Nature trail, an interpretive trail, has been developed by the Blue Mountain Audubon Society.

3) Aesthetic Factors

- Varied topography creates visual interest
- Presence of water provides high aesthetic quality
- Quality riparian vegetation
- Varied plant communities provide color and texture
- Presence of wildlife provides viewing and listening opportunities
- Quiet interior gives feeling of being someplace wild, not in a busy municipal park
- Traffic on Myra Road and Poplar Street produce noise and dust, which may increase with increased development along perimeter of park

d) Influencing and Constraining Factors

- Deed requires that SHPO be consulted on activities requiring ground disturbance
- Historic buildings within the MU contribute to the designation of the National Historic District, and must be managed in accordance with National Historic Preservation guidelines in consultation with the SHPO
- This is the only urban public wildlife area in the City Parks system
- Area sometimes used by transients, which poses a fire risk

e) Resource Objectives

- **Aquatic Ecosystem Health**

  - Rationale

    Several streams and springs are located within Fort Walla Walla Park. These aquatic resources provide habitat to fish and other wildlife, and contribute to the health of the watershed overall.

  - Implementation

    Limit hardened development adjacent to water by maintaining a 25-foot buffer of native riparian vegetation along streams. Control invasive weeds that may choke out beneficial riparian vegetation. Protect wetlands with similar measures, applying a buffer, and restoring native vegetation. Avoid runoff into waterways that may contain pesticides, fertilizers, or other pollutants. Evaluate streams for channel health and complexity, and partner with other agencies and organizations (*e.g.,* US Fish and Wildlife, Walla Walla County Conservation District, Tri-State Steelheaders) to enhance stream health.

f) Management Concepts

- Employ a professional archaeologist to determine boundaries of archaeological site 45 WW 36 (the Fort dumpsite) that was excavated in the 1970s and 1980s, in order to evaluate its archaeological significance.
- Convert Forest Service barn to an interpretive nature center, eventually staffing it with a part- or full-time naturalist. Work with interested community groups to obtain funding. (Historic preservation, environmental education, and green building grants may be available.) Where possible, use environmentally-friendly building materials and processes to rejuvenate the barn.
- Establish native shrub-steppe vegetation in dry upland areas at higher elevation areas at south end of natural area, on flatland at west end of natural area, and grassland near east end of natural area. One possible technique for accomplishing this is included in Appendix D.
- Plant only native species within the natural area. Work to replace ornamentals with natives as they become decadent and decline. Select vegetative species from the Native Plant List (Appendix C) for plantings within the Natural Area.
- Encourage the growth of native poplars and willows in wet areas of the Natural Area
- Establish native grasses such as streambank wheatgrass (*Agropyron riparium*) and Great Basin Wild Rye (*Elymus cinereus*).
- Work to aggressively control noxious weeds within the natural area by chemical means (where appropriate), as well as with biological and mechanical means. Continue the use of Poison Hemlock Moth (*Agonopterix alstroemeriana*)
- Densely plant the west and north perimeters of the natural area, adjacent to Myra Road and Poplar Street.
- Establish an entrance to the natural area off Avery Street to service the Nature Center. The east entrance to the natural area should have a parking lot large enough to accommodate two school buses, a restroom, water fountain, and picnic facilities for visiting groups
- Where possible, reduce the slope of berms on the Poplar Street perimeter to more effectively facilitate growth of vegetation.

- Do not plant trees directly on top of berm. As replacement of trees becomes necessary, plant them on the inside slope of the berm, rather than on top.
- Team with the Walla Walla sub-group of the Washington Native Plant Society to attain vegetative goals for the Natural Area.
- Consider placing the Natural Area in a conservation easement to maintain it as a community natural area in perpetuity

5.2.7 Rancho Active MU (Plate 11)

Photo 13: The Rancho Active MU

a) Land Classification: Active Recreation

b) Acres: 19.1

c) Unit Description

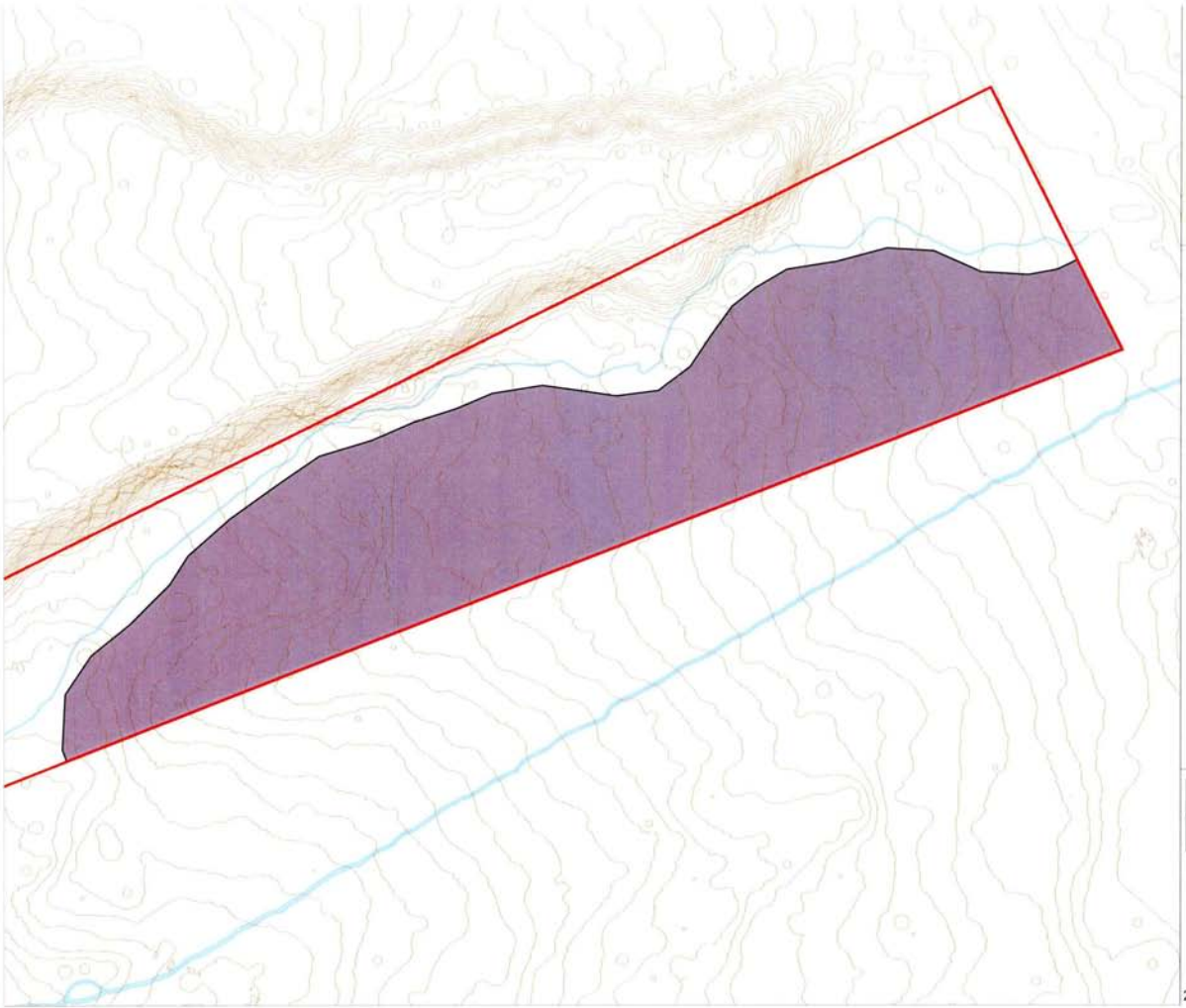
1) Ecological Factors:

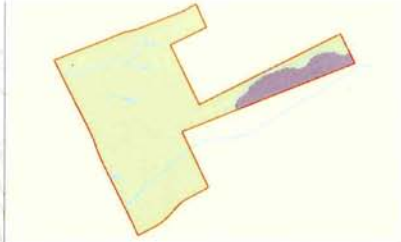
- Landform
- Elevation

  The elevation of this MU ranges from a low point of 878.87 feet above sea level to a high point of 904.24 feet above sea level.

- Percent of Slope

0-5%	(15.46 acres – 81% of the unit)
6-10%	(3.06 acres – 16% of the unit)
11-15%	(0.50 acres – 2% of the unit)
over 15%	(0.13 acres – 1% of the unit)





Project Boundary

Hydrology

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 250 500 Feet

Rancho Active M.U.

Fort Walla Walla Master Plan

2004

Plate 11

- Aspect

Flat	(0%)
North	(0.37 acres – 1.94% of unit)
Northeast	(1.28 acres – 6.68% of the unit)
East	(0.15 acres – 0.79% of the unit)
Southeast	(0.12 acres – 0.63% of the unit)
South	(0.90 acres – 4.68% of the unit)
Southwest	(2.53 acres –13.19% of the unit)
West	(8.27 acres –43.17% of the unit)
Northwest	(5.54 acres – 28.92%of the unit)

- Soils

Touchet Silt Loam, 0-3% slopes (3.92 acres – 20% of unit)
Yakima Gravelly Silt Loam, 0-3% slopes (15.23 acres – 80% of unit)

- Land Cover/Vegetation

Bare Ground	0.11 acres	0.55% of unit
Bare/Sparse Grass	0.16 acres	0.86% of unit
Dense Dry Grass	11.17 acres	58.33% of unit
Dry Grass	5.74 acres	29.96% of unit
Dry Irrigated Grass	0.01 acres	0.04% of unit
Irrigated Grass	0.71 acres	3.69% of unit
Pavement	0.78 acres	4.06% of unit
Shadow	0.04 acres	0.18% of unit
Shrub/Dense Grass	0.26 acres	1.34% of unit
Trees	0.19 acres	0.99% of unit

- Water Resources

No water resources are located within this MU

2) Cultural Factors

- Access

  The Rancho Active MU is accessed only by the Fort Walla Walla bike/foot path.

- Utilities

  A potable water line runs through the Rancho Active MU.

- Land Ownership/Management

  The land is owned by the City of Walla Walla and managed by DPR.

- Adjacent MUs

  The Mullan's Trail MU is adjacent to this MU.

- Adjacent Ownership/Management

  This MU is bounded on the east and south by private property. The Rancho Villa Mobile Home Park lies immediately south of this MU, on the other side of the park boundary; and a car dealership lies immediately east.

- Existing Developments

  The Fort Walla Walla bike/foot path lies within this MU.

3) Aesthetic Factors

- The boundary of this MU runs along the backside of the Rancho Vista trailer park, which is inconsistent with the rest of the park setting, and presents a mixed visual experience ranging from well-kept gardens to sheds, tools, debris, and garbage cans. Screening along this perimeter with vegetation will improve views from inside the park and create a more consistent park feeling.

d) Influencing and Constraining Factors

- Park users often overlook this part of the park due to its physical layout. Some community members expressed surprise that it was park property at the February meetings. In order to bring this section into the rest of the park, an entrance should be established at the east end, off of Chestnut Street. An entrance here will help to orient the park to the Walla Walla population, highlight access to the park from the City of Walla Walla, and raise awareness of the bike/walking path.
- In order to accomplish this, the City will need to acquire land on the southeast portion of Chestnut Street, as it enters the Veteran's Administration Hospital grounds.
- Active recreational development in this MU will need to be planned and sited so it does not adversely impact residential development (the Rancho Villa Mobile Home Park) adjacent to this MU.

e) Resource Objectives

- **Recreational Zoning**

  - Rationale

    Fort Walla Walla Park has become an area of mixed activity. The result is a park with various activities scattered throughout, with little planning or forethought given to the impacts of one activity upon another. This has often created conflicts between different user groups over facilities, timing, and noise.

  - Implementation

    Consolidate similar recreational uses into specific geographical areas within the park. Take into consideration issues such as facilities required for activity, level of activity, timing of activities, history of use, and cooperation with other user groups.

f) Management Concepts

- Acquire land from General Services Administration (Veteran's Administration Hospital) to create eastern entrance to Fort Walla Walla Park from Chestnut Street
- Re-route bike path to follow alignment of Bryant Creek
- Reserve space for indoor active recreation facilities on the east end of this MU
- Plant vegetation to screen southern and eastern perimeter of this MU
- Preserve intact shrub-steppe vegetation, where possible
- If development encroaches into shrub-steppe areas, work with the local Walla Walla sub-group of the Washington Native Plant Society to salvage and relocate native plant species within the park.

5.2.8 East Gate MU (Plate 12)

Photo 14: The East Gate MU

a) Land Classification: Transitional

b) Acres: 1.5

c) Unit Description

1) Ecological Factors:

- Landform

  This MU is mostly flat to gently sloping.

- Elevation

  The elevation of this MU ranges from a low of 900.61 feet above sea level to a high point at 904.51 feet above sea level.

Project Boundary

Hydrology

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 25 50 75 100 Feet

East Gate M.U.

Fort Walla Walla Master Plan

2004

Plate 12

- Percent of Slope

0-5%	(1.16 acres – 79% of the unit)
6-10%	(0.29 acres – 20% of the unit)
11-15%	(0.02 acres – 1% of the unit)
over 15%	(0 acres – 0% of the unit)

- Aspect

Flat	(0%)
North	(0%)
Northeast	(0%)
East	(0.03 acres – 2.15% of the unit)
Southeast	(0 acres – 0.30% of the unit)
South	(0.03 acres – 1.91% of the unit)
Southwest	(0.31 acres –21.15% of the unit)
West	(0.91 acres - 61.51% of the unit)
Northwest	(0.19 acres – 12.98%of the unit)

- Soils

  Yakima Gravelly Silt loam, 0-3% slopes
  (1.48 acres – 100% of unit)

- Land Cover/Vegetation

Bare Ground	0 acres	0.27% of unit
Bare/Sparse Grass	0.04 acres	2.57% of unit
Buildings	0 acres	0.07% of unit
Dense Dry Grass	0.99 acres	67.16% of unit
Dry Grass	0.33 acres	22.57% of unit
Pavement	0.10 acres	6.75% of unit
Trees	0.01 acres	0.61% of unit

- Water Resources

  There are no water resources in this MU

2) Cultural Factors

- Access

  This MU may be accessed on foot from West Chestnut Street. There is no vehicular access to this MU currently. The Fort Walla Walla bike/foot path enters the park at the southeast boundary of this MU.

- Utilities

  A potable water line and a storm drain lie within this MU.

- Land Ownership/Management

  This land is owned by the City of Walla Walla and managed by DPR.

- Adjacent MUs

  The Mullan's Trail MU is adjacent to this MU.

- Adjacent Ownership/Management

  Land to the north of this MU is owned by the Veteran's Administration, and operated as the Jonathan Wainwright Veteran's Administration Hospital. Land to the east is privately owned, and includes several private residences and commercial development.

- Existing Developments

  The Fort Walla Walla bike/foot path, a paved trail, is located within this MU.

3) Aesthetic Factors

- Adjacent to the irrigated grounds of the Veteran's Administration Medical Center, which provides contrast of texture and views
- Northeastern boundary, along bike path, looks into a truck storage yard, which diminishes visual character. Vegetative screening is desirable here.
- Good examples of native shrub-steppe vegetation

d) Influencing and Constraining Factors

- This MU is adjacent to the VA Medical Center, which may impact the type of development possible here.
- It is adjacent to Bryant Creek corridor. Care should be taken to avoid development that will degrade the creek bed or existing native riparian vegetation.
- This is the first part of Fort Walla Walla Park a visitor experiences when they enter from the bicycle/foot path

e) Resource Objectives

- Recreational Zoning
  - Rationale

    Fort Walla Walla Park has become an area of mixed activity. The result is a park with various activities scattered throughout, with little planning or forethought given to the impacts of one activity upon another. This has often created conflicts between different user groups over facilities, timing, and noise.

  - Implementation

    Consolidate similar recreational uses into specific geographical areas within the park. Take into consideration issues such as facilities required for activity, level of activity, timing of activities, history of use, and cooperation with other user groups.

f) Management Concepts

- Develop a sense of entrance to Fort Walla Walla Park at this site using signage, and planting. Planting need not be irrigated and formal, but a designation that this area is actively managed is desirable. Shrub-steppe species are appropriate.
- Protect native shrub-steppe vegetation where it occurs. If planned development must impact vegetation, work with the local Walla Walla sub-group of the Washington Native Plant Society to salvage and relocate native shrub-steppe vegetation to an appropriate site within the park.
- Protect adjacent Bryant Creek from development that may impact water quality or native riparian vegetation.

SECTION 6 – DESIGN CRITERIA

6.1 GENERAL

Design principles and criteria particularly appropriate to Fort Walla Walla Park are discussed throughout this section. In considering design issues within the park, attention was paid to human values, aesthetic values, and ecological issues that were mentioned by park users as values that make the park an enjoyable place for them to visit.

6.2 DESIGN APPROACH

6.2.1 Interdisciplinary Team Approach

To encourage a balanced approach in selecting practical goals, an interdisciplinary team of resource professionals participated in developing conceptual and specific design recommendations for Fort Walla Walla Park. Primary team members included recreation professionals, a landscape architect, wildlife biologist, archaeologist, and a GIS analyst. Other experts were consulted as needed.

6.2.2 Design for Efficient Operation

Areas should be laid out and developed to facilitate clear standards of use, ease of maintenance, and ease of circulation. Where modification or renovation of existing facilities occurs, special design consideration should be given to:

- Improving the visitor experience, with consideration to health, safety and security of visitors
- Maintaining environmental quality
- Reducing operation and maintenance costs

New development and renovation of existing amenities should adhere to Americans with Disabilities (ADA) design standards for facilities such as restrooms, picnic facilities, and non-primitive pathways.

6.2.3 Standardization

A standard architectural design theme and color scheme for restrooms, shelters, and storage facilities should be used for the future development and renovation of existing structures.

6.2.4 Access and Circulation

Roads into recreation areas play a strong role in influencing the recreation experience. The design and location of roads, parking areas, walks, and trails must be in accordance with the philosophy and intent of the way in which the public will use and participate in recreation activities. In theory, activities and roadways should be consolidated so that vehicular circulation routes take up the least amount of space possible, leaving more open space available for recreational uses. Roads and access points should provide clear direction to activities, and keep park users safe and separate from vehicular traffic. Bicycle and foot trails should provide users with a safe route of travel and provide aesthetic interest along the route. Parking should be adequate to accommodate users without consuming valuable open space or contributing sediment or runoff to streams and wetlands.

Photo 15: Tour buses on narrow park roads present challenges to vehicular and pedestrian traffic.

6.3 SAFETY AND SECURITY

6.3.1 Fencing

Fencing within Fort Walla Walla Park serves two purposes: security and delineation. Fencing is an appropriate way to delineate park boundaries in areas where venturing beyond them may be dangerous to the park user, or where conflicting land use may occur on adjacent property. Chain link fencing is currently used within the park for security and delineation purposes. This is an

acceptable material where it is necessary. Fencing materials for delineation purposes may be constructed of less industrial, friendlier materials (*i.e.*, wood or vinyl) where practical. Fencing should follow the established park color scheme of browns, greens, and golds so they blend into the landscape. Iron and white picket are acceptable fence materials in the Interpretive MU, as they reflect historic fence materials.

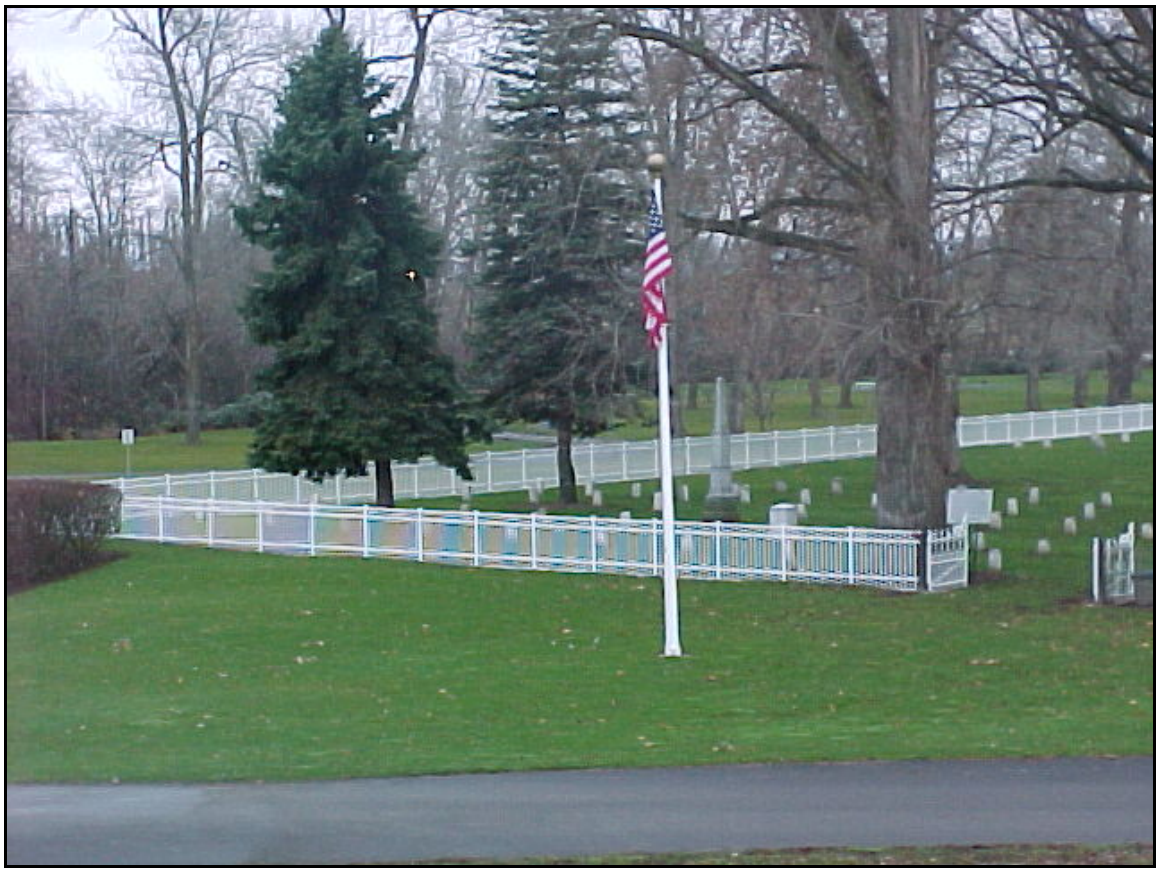


Photo 16: A white fence is appropriate for the historic cemetery

6.3.2 Signs

Signage within the park should be kept to a minimum, as too much signage can be confusing and visually intrusive, particularly if there is no common design theme. Signage within Fort Walla Walla Park shall follow accepted City of Walla Walla DPR signage standards. No permanent or semi-permanent (sunken into the ground) signs should be posted without prior approval by the Director of Parks and Recreation and the Parks and Recreation Advisory Board.

Photo 17: An example of a City park sign.
Signs of this style are appropriate for main entrances.

Major entry signs should follow the theme currently used in City parks. They should be constructed of sandblasted wood, display the name of the park, and indicate that it is a city park. Secondary facility and activity signs should be designed to follow a common theme, use a font that is easy to read (such as Helvetica or Sans Serif), and use text that is easily visible from a minimum distance of 8 feet.

Overall, care should be taken to ensure that the park does not become visually cluttered with unnecessary signage. Information kiosks should be placed strategically within the park to accommodate user groups that feel they need to communicate with the public regarding their activity. This will help to keep signage to a minimum, while providing information in an organized manner.

6.3.3 Vehicular Circulation

A hierarchy of roads and circulation routes will be established to accommodate both vehicular and pedestrian/bicycle traffic, as well as to more efficiently move traffic through the park. It may be expected that non-motorized routes will be shared by bicyclists and pedestrians, and should be designed as described in section 6.3.3.2. The established routes should be able to handle the challenge of accommodating Park traffic as diverse as tour buses and dog-walkers.

Photo 18: An example of some of the circulation challenges within the Park.
Roads do not have curbs to prevent parking on the lawn.
Some parking areas are not large enough to accommodate need.

6.3.3.1 Roads

The roads within Fort Walla Walla Park are currently designed as narrow, paved roads that were built when the park received less use, and different types of use. This analysis has identified several problems with the current roads that should be corrected to accommodate higher visitor use and traffic volumes. The suggested changes will contribute to visitor safety by helping to separate traffic uses, and enhance efficiency of traffic flow within the park.

- Issues:

  - Roads too narrow to accommodate tour buses
  - Users do not obey posted speed limits on Dalles Military Road entrance
  - Lack of separation between roadway and park users creates hazards
  - Lack of control of vehicular traffic – driving on grass, breaking irrigation heads, *etc.*

The following are suggestions for road types and specifications to enhance circulation within Fort Walla Walla Park. For locations of these road types, see Plate 13.

- Main Entrance Roads, shown in yellow on Plate 13

  Two 12-foot lanes
  - 20 mph
  - Curbs

- Secondary Roads, shown in pink on Plate 13, access the campground, maintenance yard, and backstage area of the amphitheater only. They are not intended to be used by the general public.
  - One lane with shoulder
  - 10-15 mph
  - No curbs

Project Boundary

Hydrology

- Abandoned
- Bike/Pedestrian
- Future Parking Lot
- Primary Vehicle Road
- Secondary Vehicle Road
- Proposed Parking Entrance

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 250 500 750 1000 Feet

Circulation Plan and Parking

Fort Walla Walla Master Plan

2004

Plate 13

6.3.3.2 Bike and Pedestrian Paths

Photo 19: The Fort Walla Walla bicycle path is used as an east-west circulation route.

These pathways should be designed to a minimum width of 12 feet to accommodate two-way bicycle traffic or combined bicycle and pedestrian traffic comfortably. Bike paths should be paved throughout the park, utilizing old road-beds where designated or an asphalted surface, pitched 2% away from creeks and waterways. Bike paths are shown in blue on Plate 13.

6.3.3.3 Pedestrian-Only Pathways

Photo 20: Pedestrian paths may be paved or graveled.

Pedestrian-only pathways may be either paved or gravel, as determined by the Director of Parks and Recreation. It is suggested that established pathways be designed to connect various areas of the park so that park users do not forge their own travel routes in undesirable places. Foot paths should be paved or graveled with pea gravel that will pack down so they are accessible to all users, and meet the standards required by the ADA.

6.3.3.4 Parking Lots

The Master Plan recommends the expansion of current parking facilities, and the addition of several other small parking facilities, in order to meet current and future use. Parking facilities are shown in yellow on plate 13.

The following parking facilities are recommended:

Lot A	Dalles Military Road Entrance
Lot B	Skatepark/BMX
Lot C	Picnic West
Lot D	Cemetery
Lot E	Fort Walla Walla Museum
Lot F	Amphitheater
Lot G	Nature Center

It is recognized that the construction and expansion of parking facilities will occur over a period of 5 to 15 years, on an as-needed basis, based upon facility development.

6.3.3.5 Amphitheater Parking

A need exists for overflow parking for the Fort Walla Walla Amphitheater. Currently, very limited parking capacity exists, which is inadequate when the amphitheater is hosting performances. The grassy area north of the road has traditionally been used for overflow parking during events. A more controlled parking situation is desirable, including handicap parking spaces adjacent to the theater. A developed parking lot between the museum and the amphitheater would serve both facilities. Because events at each facility usually take place at opposite times, conflict will be minimal. An overflow parking area should be delineated and adhered to in order to protect shrub-steppe vegetation north of both facilities in the North Buffer MU.

6.4 STRUCTURES

6.4.1 General

Structures, by their placement, can enhance or confuse the park user's experience. Too many small structures clutter the park visually, and confuse park users who may search several structures to find the service they desire. In order to enhance the visitor experience, it is recommended that structures be grouped together as much as possible in order to use public open space most efficiently. Hard development such as parking lots, restrooms, and informational structures should be grouped together into service cores. Storage structures, likewise, should be grouped together for multiple activities, thus using open space wisely, and allowing for security of the facility and its contents through the monitoring of several user groups rather than just one.

6.4.2 Sanitary Facilities

Restrooms should be located adjacent to parking lots. They should be designed following accepted architectural and color standards for the park, and should be ADA accessible, with a family assistance or companion care room. Placement of restrooms along other travel routes, such as the bicycle trail, is also acceptable.

6.4.3 Shelters

Photo 21: The Rotary Picnic Shelter utilizes architectural materials appropriate for the Park.

Picnic shelters should be similar in style to the Rotary Picnic shelter located near the cemetery. Wood construction is recommended. Any shelter constructed in the future should follow the accepted architectural theme of the park, and should not vary drastically in terms of roof line, style, or color. This will help to create a unified theme and park identity.

6.4.4 Information Centers

Information kiosks should be placed within the park near parking lots and restroom facilities to provide a place for user groups to communicate with the public without cluttering the park with signs. The kiosks should follow the common park design theme in terms of architectural material and color used in construction.

6.4.5 Fort Walla Walla Museum

The Fort Walla Walla Museum is a prominent facility within Fort Walla Walla Park. The museum consists of five concrete block buildings that house artifacts related to the settlement of the Walla Walla Valley, including many agricultural displays, multiple small historic structures that have been relocated from other places within the valley, a large log-style administration and collections building, and several small buildings that house a gift shop, restroom, etc. With the exception of the concrete block buildings, most structures within the museum are united in their historical/vernacular architectural style.

Photo 22: The Fort Walla Walla Museum Administration Building uses design features appropriate to its setting.

The Museum is currently in the process of creating a master plan for its growth and development. It is hoped that the Museum will coordinate its planning effort with this effort to create a unified theme for Fort Walla Walla Park.

6.5 UTILITIES

6.5.1 General

Some utilities, such as potable water and sewer lines, are critical to public places. Other utilities, such as electricity, enable visitors to participate in activities that require lighting and sound. Fort Walla Walla Park has access to most fundamental utilities (exception: gas line) within Park boundaries.

6.5.2 Power

Electrical power is available in most areas of the park, and is already established within the Dalles Corner, Mullan's Trail, and Interpretive MUs. All electrical lines within the park should be placed underground to reduce the visual impacts to the park setting.

6.5.3 Telephone Service

Public telephones should be located near parking lots and restrooms, or within or adjacent to information kiosks. They become part of the information center at the development core of the activity zone.

6.5.4 Water Supply Systems

Potable water runs through the entire park except within the North Buffer MU. Irrigation water is also available throughout most of the park.

6.5.5 Sewage and Wastewater Systems

Sewer lines are not currently available within the Rancho Active or East Gate MUs, but are available throughout the rest of the park.

6.6 LANDSCAPING

6.6.1 General

Landscaping contributes strongly to a park user's experience. Landscapes can create a feeling of enclosure or open space, and often impart strong memories and connections to place for individuals.

Areas selected for recreational development may possess outstanding natural features of earth, rock, water, topography, or plant materials. The design team should ensure that these attractions are used to their optimum advantage during site development, and design should utilize desirable natural features to the maximum extent.

Plants contribute to the aesthetics of a recreation area, and provide visual relief from manmade structures. Plants provide diversity of form, color, and texture, and further contribute to visual appeal through shadow, reflection, leaf or branching habit.

Trees, shrubs, ground cover, and turf may provide climatological effects (absorbing heat, providing shade, slowing wind), and may also be used to stabilize soils or prevent erosion. Landscaping may also support management goals by separating uses, directing circulation, and providing barriers.

6.6.2 Vegetation Planting

For areas of new construction, existing plant materials on a site should be utilized as much as possible or practical. Where new plantings are to occur, species used and planting density should be matched to the type and level of activity to occur on the site. The specific purpose or function of plants should be the basis for their use in a recreational design. A maximum percentage of 60-percent shade should be used for recreational areas. Where recommended in this plan, use native species to enhance the habitat and facilitate education about the natural history of the Walla Walla Valley. For planting of ornamentals in appropriate areas, consult the City of Walla Walla Urban Street Tree Master Plan for recommended species. Older, more decadent stands of trees should be under-planted with young trees on a staggered schedule to maintain the health and vigor of the Park forest. Water courses or natural springs should be protected from damage or degradation that may result from earthmoving or planting activities.

6.6.3 Vegetation Maintenance

Careful consideration should be given to plant species and location when siting new landscaping, as incorrect plant choices may cause increased maintenance. A tree maintenance plan developed by the City arborist will assist in planning and maintaining an urban forest. Dangerous limbs should be removed, but some standing snags, particularly in natural areas, should be left in the landscape for cavity nesting birds and other wildlife. Existing vegetation that is diseased, damaged, or otherwise undesirable should be selectively removed. Maintenance staff should maintain tree rings around the base of trees to prevent damage to tree trunks from lawn mowers or line trimmers.

6.6.4 Weed Control

Weeds are present in almost all areas within the park that are not mowed and irrigated. Identified noxious weeds should be removed chemically, manually, or through biological means. If using chemical control, the pesticide should be applied by a licensed applicator with strong weed identification skills. Coordinate with the Walla Walla County weed board to develop a plan for Fort Walla Walla Park.

Photo 23: Yellow star thistle and other noxious weeds should be aggressively controlled in the Park.

6.7 SUPPORT ITEMS

6.7.1 General

The quality of camping, picnicking, or other recreational experiences is often contingent upon the quality, type, and design of support facilities. The goal should be to provide functional facilities that are durable, vandal-resistant, aesthetically pleasing, and economical to install and maintain.

6.7.2 Picnic Tables

Picnic tables in Fort Walla Walla Park should be movable so that groups can combine tables into configurations that suit their needs. Portable tables facilitate storage in the winter, and provide flexibility in meeting group size requirements. Ideally, tables should be located on flat ground, away from streams, and in semi-shady areas.

Photo 24: Picnic tables should be movable

Picnic tables should be 6 to 8 feet in length, with rounded or chamfered edges. Any wooden parts should be splinter resistant, and metal parts should be rust-resistant. Tables should not have protruding bolts or other hardware that may create a safety hazard. Barrier-free, wheel-chair accessible tables are most desirable.

6.7.3 Trash Receptacles

Centralized dumpsters should be utilized where heavy use warrants it. Siting should take into consideration the ease of access by service vehicles, convenience to the park user, and aesthetics. Dumpsters should be located on a level concrete or gravel pad that is well drained. The dumpster site should be screened with natural or planted vegetation, wooden fencing, or other aesthetic screen. Prevailing winds should be considered in locating the site if odors are likely to be a problem. The site should have direct access by service vehicles to minimize the time spent and the distance traveled within a recreation area. Ample turning and maneuvering space should be planned for the vehicle servicing the dumpster.

Individual trash receptacles should be placed in convenient locations, adjacent to parking lots and information centers, and in central locations in recreational areas. They should be secured, according to design, bolted to the ground or secured to another permanent element, depending on design. Trash receptacles should follow a color scheme that will fit in with the park: browns, greens, or golds, or reflect a historical character in black iron.

6.7.4 Benches

Benches should be provided at picnic areas, playgrounds, rest stops along trails, vistas, or other appropriate sites. Benches should be comfortable (with a seat and back), durable, and attractive. They should be oriented to maximize views and avoid extremes of exposure. Benches should also reflect the color scheme that will fit in with the park landscape: browns, greens, or golds, or reflect a historical character in black iron.

6.8 SPECIFIC AREAS

6.8.1 General

This section provides information and guidance related to the planning and design of specific areas within recreation areas, sites, or facilities.

6.8.2 Education and Information Areas

Within Fort Walla Walla Park many opportunities exist for interpretation of the natural, military, and cultural history of the Walla Walla Valley. Educational opportunities may range from a simple self-guided interpretive trail, to more elaborate productions and facilities such as the living history performing company, a staffed nature center, or the Fort Walla Walla Museum and collections. Due to the historical significance of the site, and the natural character that has been preserved in much of the park, it is important to maximize opportunities to use the park to educate park users about the history of the valley.

If buildings are to be developed to provide education and information to park users, they should reflect the historical character of the park, using the Rotary Shelter, Fort Walla Walla Museum Administration building, or Fort Walla Walla amphitheater as architectural examples. The color of these buildings should follow the recommended park scheme of brown, green, gold, or natural wood.

6.8.3 Natural Areas

Lands designated “natural” within the park should be protected from hardened development to preserve their natural character. Their purpose is to offer park users the opportunity to view native vegetation and wildlife for relaxation or education. Interpretive trails are an excellent way to utilize these lands. Fort Walla Walla is the only park within the City of Walla Walla Park system that can offer park users the opportunity to experience an urban natural area.

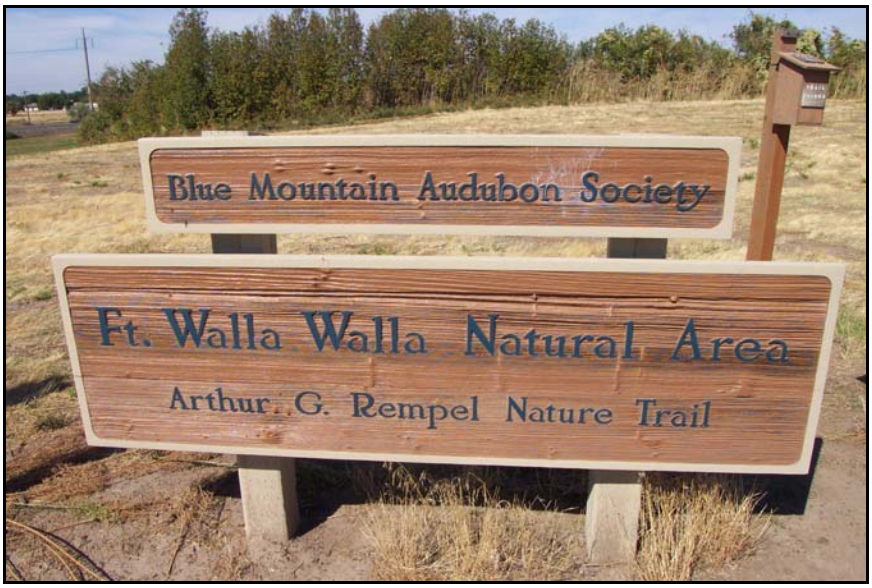


Photo 25: Natural areas within the Park afford visitors wildlife viewing opportunities.

6.8.4 Active Recreation Areas

Photo 26: Recreational zoning keeps similar activities in close proximity.

Active recreation areas should be developed to accommodate use and facilities, with consideration to aesthetics and impacts to other users. Facilities should be sited so that they take advantage of natural features, and minimize impacts to other park users, the environment, and those outside of the park. Active recreation should be concentrated into those areas designated for active recreation, to avoid conflict with other activities within the park.

6.8.5 Passive Recreation Areas

Those areas designated for passive recreation are somewhat unique in that they have different types of landscape treatments, and offer variable experiences for park uses. Essentially, they are what people make of them. The passive recreation area is essentially open land available for park users to enjoy, with some areas designated for

Photo 27: Walking is a popular passive recreation activity.

picnicking, walking, *etc*., but most of it open space for users to create their own experience. These types of areas are important to maintain, as they allow park users the freedom and creativity to generate their own desired park experience.

6.9 WILDLIFE HABITAT DEVELOPMENTS

6.9.1 Tree and Shrub Plantings

Tree and shrub plantings in areas designated with the "Natural" land use classification should follow the recommendations provided in the lists in Appendix C, for riparian and shrub-steppe plantings. Planting these areas with native vegetation will help to increase wildlife use and species diversity within Fort Walla Walla Park. Where possible, partnerships with outside entities and community groups such as the Walla Walla sub-group of the Washington Native Plant Society, Blue Mountain Audubon Society, Walla Walla Conservation District, and WWBST may help the City to plant native species through volunteer labor and/or propagation and acquisition of native plant species.

6.9.2 Nest Boxes

Nest boxes are a way to provide habitat to cavity nesting bird species within Fort Walla Walla Park. Nest boxes may encourage species such as wood duck, screech owl, and woodpeckers to utilize the natural and riparian areas within the park for nesting and rearing of their young. The presence of these bird species through the nesting season will provide visitors with increased wildlife viewing opportunities.

6.9.3 Shrub-Steppe Restoration

Portions of Fort Walla Walla Park contain small parcels of shrub-steppe vegetation. Opportunities exist to re-establish shrub-steppe vegetation within the park to provide habitat and to use as a teaching tool. Prior to European settlement and agriculture, the Walla Walla Valley was covered by vast grasslands and shrub-steppe vegetative communities. Reestablishment of these vegetative communities will assist in interpretation of the natural history of the valley, and provide a unique visitor experience that is unavailable elsewhere locally.

6.9.4 Riparian Restoration

A portion of the Garrison Creek corridor has been restored to native vegetation in order to benefit fish and wildlife. However, the majority of the Garrison Creek corridor remains in mixed native and ornamental vegetation, with a large percentage choked with blackberries and other weeds. The riparian zone around

the creek and park users will benefit from the eradication of blackberries and planting of native riparian vegetation. An opportunity exists to make the creek and riparian zone more accessible to park visitors, and to use the Garrison Creek corridor as an educational setting to teach park visitors of the importance of clean water and the interconnectivity of watersheds.

SECTION 7 – SPECIAL PROBLEMS AND CONSTRAINTS

7.1 GENERAL

This section addresses physical, biological, social, and institutional elements that could impede the accomplishment of goals for Fort Walla Walla Park set out by DPR; and recommends potential solutions to these problems.

7.2 DEVELOPMENT OF NEW RECREATION AREAS

New recreational areas will need to be sited within the appropriate management unit, as designated in this plan. Community groups approach the DPR with ideas for activities or facilities regularly. Some groups exert public pressure in an attempt to get what they desire done to Park lands. For the Master Planning process to be successful, it is critical that the citizen's Parks and Recreation Advisory Board, who reviews these requests, be familiar with the Master Plan and understand the recommendations contained in the plan so that decisions are consistent with recommendations.

7.3 ADJACENT LAND USES

Commercial and residential interests are quickly developing the land around Fort Walla Walla Park, once agricultural and open. Three main arterial roads border the park: Poplar Street, Myra Road, and Dalles Military Road. The development has two effects: it makes Fort Walla Walla Park especially valuable as an open space resource in that area of the city that is so quickly developing. It also somewhat compromises the quality of the park experience for those seeking to view wildlife or enjoy quiet open spaces, as the park becomes a self-contained island for wildlife, with little connection to the lands surrounding it. The development does not diminish the park, but will change the park experience in certain areas, particularly around the perimeter. As a reaction to development around the periphery park, users may move further into the interior of the park to find peace and quiet. Those participating in organized active recreational activities may not notice the impacts to the same degree as those seeking a quiet refuge. Park managers should work with developers and City planners to develop mitigation plans that will minimize or mitigate impacts to the quality of park user experiences. Effort may be put toward changes to landscaping around the perimeter of the park that will minimize the impact of traffic, stop-lights, and commercial signage outside of park boundaries.

7.4 LANDS TO BE ACQUIRED

Some open land around the perimeter of the park still remains, though it is held in private or federal ownership (see Plate 14). Acquisition of these parcels will expand protected open space, enhance connectivity of riparian corridors, and provide more recreational space for residents of the region who enjoy the recreational opportunities available at Fort Walla Walla Park. This is not an imminent goal, but the City should be ready when a willing seller presents an opportunity to acquire lands that will enhance the existing Park.

Photo 28: Land owned by the Veteran's Administration adjacent to the northern Park boundary.

7.4.1 Additional Veteran's Administration Medical Center Grounds

The Veteran's Administration owns large pieces of land, which include many original Fort Walla Walla buildings and the parade grounds. Although the hospital itself is a busy place, little use is made of the grounds surrounding the hospital, with the exception of the baseball and football fields that have been developed there. Acquisition of additional parcels around the perimeter of the Veteran's Administration Medical Center would give the City additional park lands, and ease the maintenance burden on the Veteran's Administration Center. The City should pursue the acquisition of all or part of this site, should it become available, and incorporate the land and facilities into Fort Walla Walla Park.

Project Boundary

Hydrology

1
2
3
4

Source: 3Di, Eugene, OR. Composed of data extracted from the February 10, 2003 aerial flight. Horizontal and vertical control was provided by Rogers Surveying, Inc., Richland, WA.

0 300 600 900 1200 Fe

Lands to be Acquired

Fort Walla Walla Master Plan

2004

Plate 14

7.4.2 Private Land South of Garrison Creek and East of Park Boundary

A parcel of private land sits adjacent to the east end of park. Part of this area has been farmed, part of it contains excellent riparian vegetation along Garrison Creek, and a house sits up on the hill. This parcel is surrounded by the park to the north and west, and a nursing home/assisted living facility to the east. This piece of property would make a very nice addition to the park, should it become available for purchase. The purchase of this piece of property would provide a continuous connection along Garrison Creek, and would include the place where Bryant Creek joins Garrison Creek. The riparian corridor on this property seems to be thriving, and wildlife has been seen there as well.

7.5 WILDLIFE DISTURBANCE

The potential for disturbance of wildlife is greatest near the Fort Walla Walla Natural Area and along the Garrison Creek corridor. The Natural Area has been set aside to preserve wildlife habitat and protect water resources. The Blue Mountain Audubon Society has documented 32 species of mammal and over 200 bird species in the Natural Area. A resident herd of deer and coyotes are known to be year-round inhabitants of the area, and a bobcat has been seen traveling the Garrison Creek corridor. Wildlife will continue to use these areas as long as they are available. However, constant disturbance due to human activity, motorized vehicles, or other loud noise or intrusion will reduce the use by wildlife, and they will seek refuge elsewhere, thus reducing the opportunities for wildlife viewing within the park. Protecting areas that wildlife are known to frequent—the riparian corridors and the Fort Walla Walla Natural Area—will ensure that wildlife viewing opportunities continue in Fort Walla Walla Park.

SECTION 8 – RECOMMENDATIONS, SUMMARY, AND CONCLUSION

8.1 GENERAL

This section summarizes the recommendations made in this Master Plan.

8.2 RECOMMENDATIONS – OVERVIEW

Goals for Fort Walla Walla Park include the protection of aquatic resources, protection of historical and cultural resources, and the establishment of recreational zoning to reduce conflicting uses. The following management recommendations support these goals, and present management concepts to assist the City of Walla Walla DPR in attaining their goals for the Park.

8.3 RECOMMENDATIONS – SPECIFIC

The following recommendations support the goals set out for Fort Walla Walla Park. Many of them may be accomplished through partnerships with other agencies.

The following management concepts support the goal of protecting aquatic resources:

- Work on developing the riparian area along Bryant Creek. Pursue the possibility of reversing the diversion of Bryant Creek into Garrison Creek at Jefferson Park, or diverting some or all of the Garrison Creek flow from the area closest to the northeast end of the bike trail over to the Bryant Creek channel. This would provide a perennial water source for Bryant Creek and aid in the development of a riparian area. This would also move the Garrison Creek flow from the industrial/residential area downstream and put it into a buffered channel. The riparian vegetation that develops would augment the high quality riparian forest in the lower park area. There is potential to cost-share a project of this sort with the Corps and, possibly, other agencies in the region.
- Encourage the growth of native poplars and willows in the Fort Walla Walla Natural Area, along the Garrison Creek Corridor and, as water is available, along Bryant Creek.
- Control poison hemlock, and establish native grasses such as streambank wheatgrass (*Agropyron riparium*) and great basin wildrye (*Elymus cinereus*).
- Try to keep native riparian areas intact. Do not encourage more recreational activities within these areas, where possible. Removal or thinning of native understory shrubs, *etc*., will degrade the habitat and

encourage more human impacts within these areas. Where the developed park abuts native riparian forest, some action is necessary to remove hazards caused by dead trees and limbs. Work to alleviate these problems should focus on removing only those limbs necessary to significantly reduce the hazard. The woody debris should be placed on the ground below the tree in the riparian buffer to maintain a more natural ecosystem. If the downed woody debris becomes excessive, extraneous material should be removed from the area.

- As riparian restoration within the park progresses, develop one or more interpretive trails to invite visitors into riparian zones for exploration and education.
- Develop interpretive signage to educate the public about the importance of riparian zones, the role of small streams in watershed health, and the interconnectivity of streams within a watershed.
- Emphasize the importance of the water onsite in the development of the Fort Walla Walla military complex. Water was one of the important elements in the siting of the Fort. Work with those developing historical interpretation to include this part of the story.

The following recommendations support the goal of protecting historical and cultural resources within Fort Walla Walla Park:

- Enlist a trained archaeologist to test the dump area (site 45-WW-105) to evaluate its archaeological significance.
- Evaluate fort buildings for their contribution to the Fort Walla Walla Historic District (DT 23) nomination status.
- Assess the structural integrity of historic buildings. Acquire funding (grants are available for historic restoration) and rehabilitate buildings as necessary. Consider application to the Heritage Capital Grant Program (Heritage Resource Center of the State Historical Society). The next application period is April/May 2005, and the next grant award will be 1 July 2006. This program funds construction and rehabilitation based on matching funds.
- Do not allow any other purpose or function for the cemetery or its immediate area other than remembrance and the honoring of military service. To preserve the historic nature of the cemetery, do not allow new burials, headstones, or monuments; and maintain the current vegetation.
- Clean each headstone and monument in the cemetery once every 5 years, using a mild acid commonly used to remove organic materials. Resurface gravestones with scars and chips. Continue the current practice of maintaining mineral soils around the base of the headstones to help eliminate damages caused by lawn maintenance.

- Professionally document the entire Fort Walla Walla Historic District using the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) method. Design graphics to display buildings by age and association with significant time periods in the history of the Fort, as well as usage changes. Coordinate this effort with Washington SHPO and the Veteran's Administration Cultural Resources program.
- Develop a management plan to systematically address the maintenance, remodeling, and structural alterations of historic structures.
- Professional ground surface examinations should be supported by systematic archeological testing. Actions may be required to avoid, minimize, or mitigate any adverse affects to significant cultural properties.
- Due to the historical significance of the entire Park site, the use of metal detectors should not be permitted within the Park.
- Partner with the Fort Walla Walla Museum to perform in-depth research on the history of the Fort Walla Walla Historic District. The National Archives has a wealth of military records on Fort Walla Walla, including its history, military cemetery, and building records.
- Partner with the Fort Walla Walla Museum to analyze the cemetery at Fort Walla Walla Park. Examine headstones (material, style, grave placement in cemetery, social groups, *etc.*), causes of death, and association with military engagements.
- Develop a comprehensive bibliography of Fort Walla Walla's role in regional history. Give special attention to written diaries, letters, photographs, and oral histories.
- Solicit oral histories (*e.g*., local historians, descendants of soldiers, tribal members) regarding Fort Walla Walla and the associated property.
- Itemize the military units stationed at Fort Walla Walla until its abandonment as a military fort, describe their functions, and catalog dates when they were present at the Fort.
- Develop interpretive displays for installation in the park outside of the Museum compound. Some themes may be related to maps of military engagements, daily life at Fort Walla Walla, and the role of Fort Walla Walla in the settlement of the Pacific Northwest.
- Promote Fort Walla Walla as a support to settlers traveling West. The Fort was located in close proximity to historically significant trail systems that supported settlement in the region (*e.g.*, the Oregon Trail, Dalles Military Road, Mullan Road, and numerous Indian Trails, including what has become known as the Nez Perce Trail).
- Consolidate cultural resources collections related to Fort Walla Walla. Artifacts are currently stored at Washington State University, University of Idaho, and Building T-8 on the Fort Walla Walla grounds. The Veteran's Administration Cultural Resources program may have more stored in other

locations. Coordinate efforts to create one comprehensive collection standard, reflecting that all artifacts come from the Fort Walla Walla Historic District.
- Create a consulting council of cultural and historical resources professionals, historians, and Fort Walla Walla Museum staff that can serve as a citizen's group to assist in research and documentation of resources at Fort Walla Walla Park.

The following management recommendations support the goal of establishing recreational zoning to reduce conflicting uses:

- Consolidate like uses within designated zones, using the Land Use Classifications developed in this plan. Variations from the recommended Land Use Classifications should be reviewed by the citizen's Parks and Recreation Advisory Board, and justified and documented as an amendment to the Fort Walla Walla Park Master Plan.
- Relocate current uses that do not comply with recommended Land Use Classifications to the appropriate MU. (Specific recommendations are located within MU descriptions). Where an established use is determined inappropriate for the Park, the City may assist in finding a new location for that use or activity.
- Carefully evaluate requests for new activities and facilities within the park. Assess new proposals for impacts to other uses, aesthetic impacts, scope of facilities required, and how that activity fits with the character of the park, the surrounding neighborhood, and the Fort Walla Walla National Historic District.

The following general recommendations result from the analysis conducted for this Master Plan, and relate to various park operations:

- Continue to control exotic plant species, and protect and enhance those areas with native species. Ensure that herbicide applicators understand what plants should and should not be treated.
- Work on small portions in the shrub-steppe areas along the bike path, (within the Mullan's Trail and Rancho Active MUs) to remove brome grass and plant native shrub-steppe vegetation. There are some remnants of native shrubs, grasses, and forbs in this area. These remnant areas should be protected, since they will provide seed stock for other areas.
- Partner with the Walla Walla sub-group of the Washington Native Plant Society to harvest seed and propagate native plants for planting in appropriate areas of Fort Walla Walla Park.
- Convert the brome grass areas on the west side of the Fort Walla Walla Natural Area (along Myra Road) to native shrub-steppe vegetation.

- Natural areas attract a host of visitors who want to escape the urban world for a short time. Some activities involve an auditory experience (*e.g.*, bird watching requires the ability to hear bird songs). Other activities in the park should consider this need, as well. Not all outside sights and sounds can be blocked, but activities in the park should at least restrict visual intrusions into the areas designated as "natural" and significantly reduce audible intrusions, except during infrequent, planned events.
- Consider the issue of wildlife migration corridors in existing and future development plans within the City. The importance of migration corridors to and from natural areas like those found in Fort Walla Walla Park was discussed earlier in this Master Plan. The residential and industrial areas north and east of the park act as a barrier to wildlife movement, and most large mammals probably enter the park from the south and west. Existing streams will provide the best migration path if a natural riparian buffer is maintained along their lengths.
- Support restoration of native shrub-steppe and riparian areas within the Park. The presence of native plant communities will enhance interpretation of the site, support existing Museum facilities, and tie in to adjacent natural areas outside of park boundaries.

8.4 CONCLUSION

Fort Walla Walla Park is a significant piece of the City of Walla Walla Parks System. The park is the largest park in the system, possesses tremendous historic significance, contains an urban wildlife area, and hosts numerous uses and users from across the region. Quality riparian and shrub-steppe vegetative communities are present on the site, as are numerous species of wildlife.

Fort Walla Walla Park faces challenges related to incompatible uses, weed control, and unplanned use. This Master Plan is an attempt to alleviate past issues and chart a course forward for the development and management of Fort Walla Walla Park, as it is anticipated that residential and commercial development in the southern and western end of the City will mean increased visitation and pressures on park facilities.

The unique natural and human history of Fort Walla Walla Park presents multiple opportunities for interpretation of its history and resources. Portions of the park are currently relatively undeveloped, while others already include facilities that support this goal.

This Master Plan has required the interaction and involvement of the general public as well as federal and local offices; the appraisal of natural and cultural resources at the Park; and the examination of various environmental considerations. It will guide the future use, development, and management of Fort Walla Walla Park in a manner that optimizes public benefits within resource potentials.

Appendix A:

Public Outreach

Fort Walla Master Plan
4/21/04 Meeting

	1st preference	2nd preference	3rd preference	Total Point Score*
Conceptual Plans				
Option 1	13	0	10	
Option 2	4	12	0	
Option 3	6	4	5	
Conceptual Plans - votes 4/22- 4/30				
Option 1	16	1	45	
Option 2	1	48	0	
Option 3	55	2	4	
Conceptual Plans Preference Votes				
Option 1	29	0	55	152
Option 2	5	60	0	135
Option 3	61	6	9	204

Notes:

***** 3 points given for 1st, 2 points for 2nd, 1point for 3rd

1st Preference Votes – The majority of the Proptwisters provided no 2nd or 3rd preferences, as the airport is not in the plan.

4/21 Meeting:
Of the 13 votes, 8 were Proptwister/car folks, 3 were BMX, and 2 were unidentified.
Of the 4 votes, 2 were loose cannons and 2 were Proptwister/car folks
Of the 6 votes, 4 were Audubon, 1 was disc golf, and 1 was museum.

Appendix B:

Fort Walla Walla Park Management Plan for Cultural Resources

Introduction

Park cultural properties are non-renewable resources important to both local and regional communities, and they need a good preservation management framework. Fort Walla Park can provide enriching recreational experiences for the public, while still preserving its natural and cultural resources. Achieving both objectives should make it one of the Walla Walla Valley's finer recreational destinations.

The Park acreage formerly known as the Forest Service Pasture must be managed using National Historic Preservation Act section 106 guidelines (*http://www.achp.gov/regs.html*), as per its land sale agreement. Consideration of cultural properties during planning of Park developments and routine maintenance (*e.g.,* planting, irrigation maintenance, manual noxious weed control) is critical, particularly since not all cultural properties have been found.

Activities such as the use of metal detectors, ground-disturbing camping activities, surface artifact collection, and the removal of historic building materials have the potential to damage Park cultural properties. However, the public would benefit by opportunities to learn about archeological research and local research findings. They could walk the old military reserve, camp without impacts to cultural properties, and enjoy a nature center lodged in an historic barn. There could be opportunities to tour rehabilitated military living quarters with educational exhibits.

Background

The remains of many centuries of human activities are located within Fort Walla Walla Park. Known archeological and historical Park resources are being preserved while others may yet be found and require protection. The Walla Walla Valley is within the ceded lands of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), the ancient homeland of the *Weyiiletpuu* (Cayuse) people. Significantly, the Park once formed the southwest quarter of the historic Fort Walla Walla military reserve, and includes a portion of the old fort complex established in 1858 and operated until 1910. The Park also has relocated buildings from the World War II McCaw Hospital, and an historic barn and shed used by the U.S. Forest Service.

Fort Walla Walla was a critical military outpost during the settlement of the Columbia Basin, as well as the Walla Walla Valley. In 1974, lands in the Jonathan Wainwright Veteran's Administration Hospital and Fort Walla Walla Park that embody the fort occupation period were placed on the National Register of Historic Places as the 'Fort Wall Walla Historic District.' The historic district designation recognizes the property's local and regional importance and role in national events, and requires that all development with the potential to affect cultural properties be coordinated with the Washington State Historic Preservation Office (SHPO). Structures in the historic district must be preserved unless determined not to contribute to its designation. Ground-disturbing activities should also be reviewed in the planning stage, and coordinated with the SHPO.

The CTUIR has treaty rights and interests on public lands, as reserved in the 1855 Walla Walla Treaty with the US Government. This fact, along with the presence of burials (two known in the military cemetery), ensure that the Nez Perce Tribe and the CTUIR have special interest in the Park's cultural resources. The Confederated Tribes of the Yakama Indian Nation and Coeur d'Alene Tribe may also have interests. It is recommended that the city consult with tribal cultural resources programs regarding the management of cultural resources within the park.

The term 'cultural properties' refers to historic and culturally-significant resources (*i.e.*, buried archeological deposits, buildings or their remains, cemeteries, human burials, dumps, and artifacts greater than 50 years or more in age). The management of Park cultural properties should be guided by applicable laws, including the National Historic Preservation Act and Washington State laws in the Revised Code of Washington. These laws protect Indian graves, records and archeological resources; and prohibit disturbance, removal, alteration, excavation, or damages to an archeological resource or site without a written permit. Many of the State laws carry legal penalties and threat of civil action by Indian tribe(s). State laws require a professional archeologist to conduct research on public lands. Historic graves/cemeteries are also protected under State laws. The accidental or inadvertent discovery of an historic grave must be properly reported in order for the Washington Office of Archeology and Historic Preservation to provide re-interment costs.

On June 29, 1976, the Interior Department's Bureau of Outdoor Recreation deeded 103.76 acres of the 'Forest Service Pasture' (A-Wash-474B) and the Veteran's Administration hospital property (A-Wash-474I) to the City of Walla Walla. The federal land sale imposed a legal obligation on the City to consult with the Washington SHPO regarding proposed uses and developments to protect historic and cultural properties. The purpose is to prevent historic properties, archeological sites, or other cultural resources from being

inadvertently compromised, lost, or destroyed. The City is directed to comply with the "Procedures for the Protection of Historic and Cultural Properties" (36 CFR Part 800), also known as the Section 106 Process of the National Historic Preservation Act (see the Advisory Council on Historic Preservation's guidelines for "Protection of Historic Properties").

The SHPO helps local governments to actively preserve Washington's irreplaceable historic and cultural resources for the future under the Certified Local Government (CLG) program. The City of Walla Walla has been designated a Certified Local Government (CLG)[1] by the State of Washington, having established an historic preservation program meeting federal and state standards. The program can assist the City of Walla Walla to develop and maintain local preservation efforts in concert with its development plans. This nationwide program provides financial and technical assistance, and is administered by the Office of Archaeology and Historic Preservation (OAHP) in the State of Washington. Together, CLGs and OAHP advocate for the preservation of historically-significant buildings, structures, sites, objects, and districts. The CLGs may apply for special grants from the SHPO; receive recognition for their preservation expertise by local, state, and federal agencies; obtain technical assistance and training from the SHPO; participate in the review of nominations to the National Register of Historic Places; participate in the national historic preservation assistance network; regularly exchange information with the SHPO; and participate in statewide preservation programs and planning (see *www.oahp.wa.gov* for more information).

Historic Preservation Issues

The Park's historic and cultural assets are among the City's most significant and, as such, demand recognition and long-term preservation management. In some cases, however, this amounts to an unfunded mandate. Objectively understanding Park preservation issues is an important first step. The following is a suggested listing:

- Park property should to be systematically inventoried by a qualified professional archeologist(s) and/or architectural historian to document all discoverable cultural properties using pedestrian survey, historic documents (to locate structures, roads, infrastructure pipes), and limited archeological testing (to locate buried cultural deposits and boundaries, if needed for management). Copies of findings would be kept on file at the Fort Walla Walla Museum and the Washington Office of Archeology and Historic Preservation.

[1] Responsibilities of a CLG include maintaining a historic preservation commission, surveying local historic properties, enforcing state or local preservation laws, reviewing National Register Nominations, and providing for public participation.

- Known Fort Walla Walla District properties require updated recording, using Washington State SHPO forms and to Washington State documentation standards (Fort cemetery, two late 19th century fort buildings, two World War II hospital buildings, Fort Dump, historic barn and shed, and concrete foundation associated with the Fort Dump).

- Fort Walla Walla District buildings should be reviewed for their contribution to the district's National Register eligibility standing, and a management plan should be developed that considers treatment needs that provide for the rehabilitation, stabilization, or restoration of historic district buildings.

- Management of the Fort Walla Walla District should be coordinated with the Veteran's Administration (*e.g.*, historic preservation inventories of main fort complex and Park fort buildings and features, and development of management and preservation treatment plans). Inventory methods and preservation treatments should be coordinated with the SHPO.

- The Fort Walla Walla Dump Hussey and Riordan archeological collections [stored at Washington State University (WSU)] require long-term curation in a repository where they would be preserved and available for research and interpretation. The urgent responsibility is the Hussey Collection, which requires immediate relocation to a museum repository.

- Encourage coordination of all Fort Walla Walla archeological collections now housed at the Park, WSU, and University of Idaho's laboratory of Anthropology (1988 excavation of Blue Mountain Mall property).

- The Military Cemetery requires active management of the restoration of its headstones and setting.

- Many planned Park development and routine maintenance activities have the potential to adversely affect cultural properties. The City needs to pragmatically institute a Cultural Review Process (CRP) for all Park ground-disturbing actions to: a) identify cultural properties; b) determine if they are eligible for the National Register; c) protect all cultural properties unless determined to be ineligible for the National Register; d) preserve eligible and listed National Register historic properties; and e) mitigate project activities that could have adverse effects before implementation. The City would coordinate the development plans, CRP, and treatments for cultural properties with the Washington Office of Archaeology and Historic Preservation.

- Incorporate more Fort Walla Walla-era interpretation into the Park and museum interpretive displays. Park interpretation of cultural properties should remain understated in the landscape. Encourage planning for rehabilitation and uses of Fort-era buildings, as they are currently considered contributing elements to the Fort Walla Walla Historic District. Avoid bringing attention to the Fort Dump and its surface artifacts.

- Identify a responsible manager of Park historic preservation issues (*i.e.*, Walla Walla City's CLG staff, Fort Walla Walla Museum Director, qualified historic preservation volunteer(s), Veteran's Administration archaeologist).

- Develop and implement Park cultural properties management plan priorities with a schedule using above listed issues.

Given legal requirements to protectively manage historic properties associated with the Forest Service Pasture parcel and the Fort Walla Walla Historic District, it makes good sense to involve the SHPO early in the planning phases of development for the entire Park property. The intent of the federal process is to allow for consideration of cultural properties during planning of projects or routine activities that have the potential to damage, alter, change, or destroy archeological and historical resources.

Resolving outstanding Park historic preservation management issues will require committed efforts by multiple parties (*i.e.*, the City, community volunteers, the Washington State Archeology and Historic Preservation Office, and Tribal preservation office). Funding mechanisms (State and/or Federal grants and cost-share programs, and gifts from corporate or private sources) need to be established and matched to historic preservation goals and priorities for the Park.

Suggested Historic Preservation Priorities

In order to address the immediate needs of historic property preservation, it is recommended that a list be made of routine and planned maintenance work, along with short- and long-term planned developments at the Park. A Park-wide inventory of cultural properties should be planned and implemented. This should be coordinated with the Washington State Historic Preservation Office and the Veteran's Administration for technical and funding support. In addition, various Federal or State programs may possibly be found to assist the City. These two sources of information would greatly aid the City and allow cultural properties to either be avoided, or the adverse effects of planned developments mitigated prior to project implementation.

Properties in a state of neglect need to be addressed, as neglect itself is an adverse effect, as defined under the National Historic Preservation Act. Of particular concern is the Hussey Collection currently stored in the Park, the two late 19th century Fort buildings (#52 and #53), World War II McCaw Hospital buildings (T-8 and T-9), and the historic barn and shed, in this order. Documentation efforts for these historic properties are important short-term goals. Management obligations for these Historic District buildings and the Fort Dump collection involve both short- and long-term planning and funding. Barracks could be provided to overnight school groups, or used as storage for user groups and park maintenance.

The Hussey Collection

The Hussey Collection is a collection of artifacts, field notes, and publications associated with the amateur excavations of site 45-WW-33 (Fort Walla Walla Dump) from 1976 through the 1990s. The collection is largely located in Park building T-8, which is an unacceptable location for its management, although Washington State University continues to manage the professionally-excavated 1975-76 site collection from 45-WW-33. The amateur archaeology excavations were conducted without a site management plan or professional archeologist oversight, which produced a collection absent a provision for long-term management. The cost for rehabilitation and management of the Hussey Collection in perpetuity underscores why professional archeological data recovery programs should not be undertaken at Fort Walla Walla Park without thoughtful planning, the full support of Washington State's Office of Archeology and Historic Preservation, and leadership by qualified professional archaeologists.

The City of Walla Walla is the property and collection owner of the Hussey Collection. Furthermore, the collection is derived from a site located in the 'Forest Service Pasture' property, which carries with it the property sale stipulation that all historic properties be managed under 36 CFR Part 800 through the "Procedures for the Protection of Historic and Cultural Properties."

Therefore, the City must proactively and responsibly manage the collected cultural and written materials from the Fort Walla Walla Dump (45-WW-33). As a CLG, the City can commit to a long-term agreement with either the Fort Walla Walla Museum or WSU's repository (within its Museum of Anthropology) to house and manage the collection.

The current annual costs for curation at WSU are $5 per cubic foot for cultural materials, and $5 per linear inch for documents. Rehabilitation costs would depend on the size and condition of the collection. Curation costs at the Fort Walla Walla Museum are not known, but are expected to be comparable.

Possibly WSU could offer a partnership with the Fort Walla Walla Museum, using a single computer catalogue system, to address needs for storage space and technical support. Both museum facilities are cost-efficient (operating fees only) and appropriate to house the Hussey Collection on a long-term basis.

The Fort Walla Walla Museum is the preferred repository for the Hussey Collection for several reasons. The collection would remain onsite and in the Walla Walla community, and access would be immediate for researchers and interpreters. Annual curation costs are comparable between the preferred repositories, and the City could support a local non-profit enterprise. The needed rehabilitation of the collection requires the time of Mr. Hussey, a local resident, as well as a professional archeologist/museum curator. There is no need to consolidate the Hussey materials into the professionally-excavated site collections at WSU's Museum of Anthropology and the University of Idaho Anthropology Laboratory but, ultimately, the three collections should be reunited. In order to accomplish this, however, the Hussey Collection must first be made professionally acceptable (*e.g.*, field notes/maps must correlate with field artifacts/samples).

Appendix C:

Plant Lists

Riparian Vegetation	
Trees	
Black cottonwood	*Populus trichocarpa*
Red alder	*Alnus rubra*
Water birch	*Betula occidentalis*
Rocky mountain maple	*Acer glabrum*
Thinleaf alder	*Alnus incana*
Sitka alder	*Alnus sinuate*
Western redcedar	*Thuja plicata*
Ponderosa pine	*Pinus ponderosa*
Pacific willow	*Salix lasiandra*
Mackenzie's willow	*Salix prolixa*
Sitka willow	*Salix sitchensis*
Coyote willow	*Salix exigua*
Drummond's willow	*Salix drummondiana*
Peachleaf willow	*Salix amygdaloides*
Shrubs	
Ninebark	*Physocarpus malvaceus*
Baldhip rose	*Rosa gymnocarpa*
Nootka rose	*Rosa nutkana* var. *hispida*
Thimbleberry	*Rubus parviflorus*
Chokecherry	*Prunus virginiana*
Golden currant	*Ribes aureum*
Wax currant	*Ribes cereum*
Red osier dogwood	*Cornus sericea*
Blue elderberry	*Sambucus cerulea*
Black hawthorne	*Crataegus douglasii*
Common snowberry	*Symphoricarpos albus*
Mock orange	*Philadelphus lewisii*
Woods rose	*Rosa woodsii*
Sumach	*Rhus trilobata*
Birchleaf spirea	*Spirea betulafolia*
Deerbrush	*Ceanothus integerriumus*
Oceanspray	*Holodiscus discolor*

Forbs	
Baltic rush	*Juncus balticus*
Hardstem bulrush	*Scirpus acutus*
Cattail	*Typha latifolia*
Water sedge	*Carex aquatilis*
Beaked sedge	*Carex utriculata*
American milkvetch	*Astragalus americanus*
Pulse milkvetch	*Astragalus tenellus*
White clematis	*Clematis ligusticifolia*
Cutleaf daisy	*Erigeron compositus*
Northern sweetvetch	*Hedysarum borealis*
Cow parsnip	*Heracleum lanatum*
Mountain hollyhock	*Iliamna rivularis*
Pink flower monkey flower	*Mimulus lewisii*
Self heal	*Prunella vulgaris*
Little buttercup	*Ranunculus uncinatus*
Streambank butterweed	*Senecio pseudaureus*
Native goldenrod	*Solidago gigantean*
Globeflower	*Trollius laxus*
Sitka valerian	*Valeriana sitchensis*
Stream violet	*Viola glabrella*
Douglas' aster	*Aster subspicatus*
Brook cinquefoil	*Potentilla rivalis*
Douglas' clover	*Trifolium douglasii*
Riverbank lupine	*Lupinus rivalaris*
Creeping spikerush	*Eleocharis palustris*
Bog violet	*Viola nephrophylla*
Grasses	
Great basin wildrye	*Elymus cinereus*
Streambank wheatgrass	*Elymus lanceolatus*
Bluejoint reedgrass	*Calamagrostis Canadensis*
Water sedge	*Carex aquatilis*
Nebraska sedge	*Carex rostrata*
Bob bluegrass	*Poa leptochloa*
Tufted hairgrass	*Deschampsia cespitosa*
Slender wheatgrass	*Elymus lanceolatus*
Sweetgrass	*Hierachloa oderata*
Oniongrass	*Melica subulata*
Threesquare bulrush	*Scirpus pungens*
Nodding trisetum	*Trisetum cernuum*

Shrub-Steppe Plants	
Trees/Shrubs	
Scabland sagebrush	*Artemesia rigida*
Big basin sagebrush	*Atremisia tridentata ssp. Tridentata*
Rubber rabbitbrush	*Ericameria nauseosa*
Green rabbitbrush	*Ericameria teretifolia*
Broom snakeweed	*Gutierrezia sarothrae*
Western Juniper	*Juniperus occidentalis*
Forbs	
Common yarrow	*Achillea millefolium*
Agoseris	*Agoseris*
Onion	*Allium*
Pussytoes	*Antennaria*
Rockcress	*Arabis*
Basalt milkvetch	*Astagalus filipes*
Milkvetch	*Astargalus*
Carey's balsamroot	*Balsamorhiza careyana*
Arrowleaf balsamroot	*Balsamorhiza sagittata*
Serrate balsamroot	*Balsamorhiza serrata*
Brodiaea	*Brodiaea*
Naked mariposa lily	*Calochortus nudus*
Hawksbeard	*Crepis*
Willowherb	*Epilobium*
Fleabane	*Erigeron*
Desert yellow fleabane	*Erigeron linearis*
Buckwheat	*Eriogonum*
Bitter root	*Lewisia rediviva*
Flax	*Linum*
Desert parsley	*Lomatium*
Bigseed biscuitroot	*Lomatium macrocarpum*
Nineleaf biscuitroot	*Lomatium triternatum*
Lupine	*Lupinus*
Silky lupine	*Lupinus serceus*
Beardtongue	*Penstemon*
Longleaf phlox	*Phlox longifolia*
Wooly plantain	*Plantago patagonica*
Phlox	*Plox*
Death camas	*Zigadenus*
Grasses	
Thurber's needlegrass	*Achnatherum thurberianum*
Squirreltail	*Elymus elymoides*
Idaho fescue	*Festuca idahoensis*
Needle and thread grass	*Hesperostipa comata*
Prairie junegrass	*Koeleria macrantha*
Cusick's bluegrass	*Poa cusickii*
Sandberg bluegrass	*Poa secunda*
Bluebunch wheatgrass	*Pseudoroegneria spicata*
Sixweeks fescue	*Vulpia octoflora*

Appendix D:

Shrub-Steppe Establishment Method

Establishing shrub-steppe vegetation in dry upland areas will not only improve the natural setting of the park, but will also help with the control of noxious weeds. The following paragraph describes a technique that can be used when restoring dryland areas to shrub-steppe.

The target area is deeply disked and fallowed for one growing season. Exotic plants are then treated with herbicide. After the regrowth dies back, the field should be disked again. In mid to late fall, the field could be planted with a mix of bluebunch wheatgrass and Sandberg's bluegrass. The mix would be about 50-50. Plant at about 10-15 pounds pure live seed per acre. The seed can be drilled, or broadcast and raked in. After seeding, the area could be planted with big sagebrush (*Artemesia tridentada*) tublings, at about 350 plants per acre. Other shrubs such as green rabbitbrush and serviceberry (*Amelanchier alnafolia*) could be added to the mix. The tublings should be planted randomly, with a minimum of 5 feet between plants. This area would need to be isolated to discourage foot traffic and restrict all vehicles. Light irrigation several times during the following growing season would speed up the development of these plants. Overwatering will only encourage the growth of exotic species. Some exotics, such as yellow star thistle and cheatgrass, will invade the site to some degree. These species can be controlled with the careful use of herbicides and/or manual labor.