

**Hood River Waterfront  
Goal 5 Economic, Social, Environmental, and Energy Analysis**

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## **OVERVIEW**

An ESEE analysis is an analysis of the potential Economic, Social, Environmental, and Energy (ESEE) consequences of prohibiting, limiting, or permitting conflicting uses to occur on resources that have been determined to be significant under Statewide Land Use Goal 5.

The intent of Statewide Land Use Goal 5 is, “to protect natural resources conserve scenic and historic areas and open spaces.” Goal 5 resources covered in the analysis are those determined to be significant by the City. The purpose of this ESEE analysis is to develop a basis for general planning policies and implementing measures adopted to provide adequate levels of protection to the Columbia River shoreline along Hood River’s waterfront.

This analysis addresses the land use consequences of protecting Goal 5 resources in the City of Hood River’s Columbia River Infill Waterfront Area or the allowance of these resources to be reduced or lost. In compliance with Goal 5 the City adopted through the legislative process, the Hood River Waterfront Riparian Inventory (*Figure 1*).

After significant resources are inventoried and identified through State Planning Goal 5 process, local governments are required to provide protection measures. Local governments are directed to either implement the safe harbor process (OAR 660-023-0090) or the ESEE Decision Process (OAR 660-023-0040). After completing the natural resource inventory process, the City determined that safe harbor would be applied to all designated significant resources within the City except those along the Columbia River waterfront as identified in the Waterfront Area map, the areas outside of the identified reaches shall be subject to safe harbor. Safe harbor was not applied to these resources because of the potential conflicts with abutting development around almost all of the inventoried sites. Therefore, the City chose to implement the ESEE process and analyze the consequences for protection of the significant sites in the Columbia River Infill Waterfront Area. This area is defined as the infill area within City limits north of I-84.

OAR 660-023-0040(1) states that the ESEE analysis need not be lengthy or complex, but shall enable reviewers to gain a clear understanding of the conflicts and the consequences expected.

## **DETERMINATION OF SIGNIFICANT RIPARIAN CORRIDORS**

Criteria for identifying significant riparian corridors using the standard inventory process were developed by the City based on recommendations by Wetland Consulting and the Technical Advisory Committee (TAC). Objectives for the criteria were:

- To identify riparian corridors that provide medium or high levels of one or more riparian corridor functions.

- To identify riparian corridors that provide habitat for rare, threatened, endangered or sensitive species or are important fish and wildlife habitat.
- To minimize the affect of riparian corridor setbacks on property owners while still protecting riparian corridor functions.

***Criterion 1:** Reaches with a medium or high ranking for one or more functions are significant.*

**Rationale:** Riparian corridors are part of an integrated hydrological system. All reaches that contribute to riparian corridor functions are important components of the hydrological system.

***Criterion 2:** Reaches that provide fish habitat are significant and shall include riparian area setbacks as specified in the safe harbor approach.*

**Rationale:** Fisheries are a major component of the ecosystem and an important cultural, economic, and recreational resource. Steelhead, Chinook and chum salmon in the Columbia River are listed as threatened under the Federal endangered species act (ESA). Coho salmon are a candidate for federal listing. Steelhead and bull trout in the Hood River are listed as threatened under the federal ESA. Protection of fish habitat are necessary to protect and restore fish population.

***Criterion 3:** Reaches that provide habitat for rare, threatened, endangered or sensitive species are significant.*

**Rationale:** Protection of rare, threatened, endangered or sensitive species to maintain biological diversity is a community objective as well as a responsibility under the state and Federal ESA. Protection of the habitat these species depend on is essential to maintaining and restoring viable populations.

## **ESEE ANALYSIS**

The ESEE analysis for the Hood River waterfront will be conducted on 12 riparian reaches that were determined to be significant using the significance criteria approved by the City. The reaches determined to be significant include the following: CO-R1, CO-R2, CO-R3, CO-R4, CO-R6, CO-R7, CO-R8, CO-R9, CO-R10, HO-R1R, HO-R1R, HO-R1L and HO-R2L, and will be evaluated further in this document.

## **EXISTING USES**

According to the Goal 5 Administrative Rule, a conflicting use is one that if allowed, could negatively impact a significant resource site. To identify such conflicts, the rule directs local governments to examine the uses allowed within broad zoning categories (e.g., mixed use, open space). As part of the project current zoning designations were used to examine potential uses. The analysis considers uses allowed by right, uses

subject to limitations or conditions (i.e., conditional uses) and certain uses that may not be allowed in a base zone but may be permitted by recognition of legal nonconforming status or a temporary activity. Existing land uses, including legal nonconforming uses are also examined.

In an effort to determine uses that are in conflict or are compatible with the significant resources the City has identified the zoning designations of the subject, abutting and adjacent properties. The location of the proximity of a resource to the subject, abutting or adjacent properties may be impacted by uses on these properties.

Significant Resource	Resource Feature	Zoning Designation
CO-R1	Columbia River	General Commercial (C-2)
CO-R2	Columbia River	General Commercial (C-2) and Open Space/Public Facilities (OS)
CO-R3	Columbia River	Open Space/Public Facilities (OS/PF)
CO-R4	Columbia River	Industrial (I)
CO-R5	Columbia River	Industrial (I)
CO-R6	Columbia River	Industrial (I)
CO-R7	Columbia River	Light Industrial (LI) Columbia River Recreational/Commercial (RC)
CO-R8	Columbia River	Light Industrial (LI)
CO-R9	Columbia River	Light Industrial (LI)
CO-R10	Columbia River	Light Industrial (LI), Open Space/Public Facility (OS/PF)
HO-R1R	Hood River	Open Space/Public Facility (OS/PF)
HO-R2R	Hood River	Open Space/Public Facility (OS/PF)
HO-R1L	Hood River	Industrial (I)
HO-R2L	Hood River	Industrial (I)

**Industrial Zone (I)**

**A. Permitted Uses.**

1. Caretaker's residence for an on-site industrial use
2. Temporary uses not exceeding thirty (30) days
3. Transportation Facilities pursuant to 17.20.050(1)

**B. Conditional Uses.**

Public facilities and uses, including change of use

**Light Industrial Zone (LI)**

**A. Permitted Uses.**

1. Temporary uses not exceeding thirty (30) days
2. Caretaker's residence for an on-site industrial use
3. Transportation facilities pursuant to 17.20.050(1)

**B. Conditional Uses.**

Public facilities and uses, including change of use

**Columbia River Recreational/Commercial Zone (RC)**

**A. Permitted Uses.**

1. Wildlife viewing area
2. Public bike and jogging paths
3. Windsurfing launch sites
4. Swimming beaches
5. Fishing sites
6. Boardwalks
7. Transient vending carts
8. Recreational and cultural events
9. Open space
10. Restrooms

**General Commercial Zone (C-2)**

**A. Permitted Uses.**

1. Single-family dwellings and accessory structures
2. Townhouse projects
3. Duplexes and triplexes
4. Rooming and boarding houses
5. Manufactured homes
6. Home occupations
7. Bed and breakfast
8. Family day care
9. Residential care facility
10. Group residential, if less than 15 persons
11. Transportation facilities pursuant to 17.20.050(1)

**B. Conditional Uses.**

1. Hospitals, sanitariums, rest homes, nursing or convalescent home
2. Schools and day care facilities
3. Public parks, playgrounds, and related facilities
4. Utility or pumping substations
5. Churches
6. Planned unit developments
7. Public facilities and uses
8. Hostels

## **Open Space/Public Facility Zone (OS/PF)**

### **A. Permitted Uses.**

1. Public parks, playgrounds, temporary concessions incidental to and serving park/recreation user, swimming pools, and tennis courts.
2. Municipal and governmental services and functions.

## **COMPATIBLE USES**

The Goal 5 significant natural resources in the City of Hood River waterfront are riparian areas<sup>1</sup>. The essential functions that are being provided by riparian areas include, but are not limited to, water quality, fish habitat, and erosion control/bank stabilization. Human disturbance or alteration can further impair riparian functions. Determination of compatible uses that do not impair the structure and integrity of riparian areas is the goal for the implementation of protection measures.

Compatible uses are those that can be conducted in a manner that will not degrade the resource or resource area. Human disturbance that impairs the structure and integrity of the resource is not compatible. Examples of compatible uses are the following:

- Educational use of a natural area by individuals, groups, and schools.
- Aesthetic enjoyment of natural areas from existing roads, sidewalks, trails, and paths.
- Passive, low impact recreation that does not disturb native soil and vegetation; including trails and paths.
- Restoration and enhancement of resource sites to native vegetation.

## **CONFLICTING USES**

Conflicting uses are those which are incompatible with natural resource protection, but allowed under current City zoning designations. Conflicting uses negatively impact the resource. A healthy functional resources, such as a wetland or riparian area would include intact soil conditions, diverse native vegetation, and structural diversity. Disturbances by development or redevelopment could adversely affect a resource area. All of the permitted uses identified above require human disturbance, development or redevelopment of property or land to some degree. If uncontrolled commercial, industrial, mixed use or their accessory uses occur as permitted by City zoning, it could impair or degrade the natural resource or its function.

Activities associated with all permitted development/redevelopment that are generally detrimental to wetlands and riparian areas and their function include, but are generally limited to:

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<sup>1</sup> Riparian areas are areas adjacent to a river, stream, lake, or pond consisting of the area of transition from an aquatic ecosystem to a terrestrial ecosystem. Riparian areas provide fish and wildlife and wildlife habitat.



- Construction of impervious surface
- Reduction and removal of vegetation
- Filling, grading, or altering topography
- Deterioration and erosion of banks
- Replacement of existing vegetation with exotic and ornamental landscape materials.
- Introduction of pollutants such as fertilizers, pesticides, herbicides, and insecticides from managed yards and gardens.

Activities associated with industrial, commercial, mixed use, open space/public facility would have similar effects on the resource, although it is recognized that some development types may have greater impacts than others based on the intensity of the use and large site modification.

## **CONSEQUENCES OF PERMITTING, LIMITING OR PROHIBITING CONFLICTING USES**

The analysis for each reach (i.e., the comparison of impacts on development and on resource values) was repeated for three development level assumptions: allowing conflicting uses, limiting conflicting uses, and prohibiting conflicting uses.

For each development level assumption, the impact on conflicting use development and the impact on the resource were evaluated using a set of standard assumptions and calculations. Each reach is given one of three assessments: negative, neutral, or positive. A comparison of the different levels of development (allowing, limiting, and prohibiting) for the reach provides the basis for the impact determination.

The first step of the analysis determines the consequences of fully allowing conflicting uses on parcels within the site that contain significant resources. As a result of this action, some or all of the significant resources may be destroyed or degraded and their various resource values would be lost. A determination is made on the type and quantity of values and functions that are at risk with the loss of these resources.

The next step of the analysis determines the impact of limiting conflicting uses. In this case, the conflicting uses are not expected to completely degrade the significant resources within a site. However, in situations where any conflicting use activity would degrade the resource, the consequences could be as severe as fully not allowing the conflicting uses. In other situations, limiting the conflicting uses creates fewer impacts or could improve the resource by controlling erosion, restoring vegetation, and treating stormwater runoff.

The last step of the analysis determines the impact of prohibiting conflicting uses. As a result of prohibiting conflicting uses, the resource would remain unchanged or could be enhanced without the interference of a conflicting use.

**Protection Benefits/Development Costs** – Development in wetland and riparian areas generally require costs that are higher than for development of land outside of a resource area. The development costs are reflected in the factors discussed below and result in higher costs to the consumer for residential, commercial and industrial space.

**Protection Costs/Development Benefits** – The development of property that contains or abuts a natural resource site would result in benefit from the City and its citizens. If these same benefits did not occur because protection measures were implemented for natural resource sites it would result in a cost to the City and its citizens.

The ESEE analysis focused on how the individual conflicting uses contributes to create positive or negative economic consequences. Each reach has a table that assesses the impacts on the resource. For each reach there is a discussion of the specific uses and economic consequences.

## **IMPACT AREA**

OAR 660-023-0040(3) states that local government shall determine an impact area for each significant resource site. The impact area shall be drawn to include only the area in which allowed uses could adversely affect the identified resource. The impact area defines the geographic limits within which to conduct an ESEE analysis for the identified significant resources. *The impact area will include the riparian area and 75 feet landward from the top of the bank<sup>2</sup> on resource site property and properties which abut the resource site.*

## **ECONOMIC CONSEQUENCES**

In order to provide a consistent economic analysis, existing and potential conflicting uses for each site were identified. Specific economic factors considered in the evaluation include:

- total parcel acreage;
- total parcel acreage within 75 of the top of the bank
- parcel zoning
- development potential
- parcel characteristics (e.g., vacant or developed)
- proposed zoning

It is important to separate the economic consequences on conflicting uses that exist due to physical constraints and those associated with protecting significant resources. In determining the economic consequences of protecting significant resources, it is first necessary to define value with respect to a significant resources. Many of the benefits of environmental policies are not readily apparent in the form of immediate monetary gains.

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<sup>2</sup> Top of bank definition shall be the break in slope between the bank and the surrounding terrain; where top of bank is not clear defer to bankfull stage as defined in 17.22.020. .

The benefits are found more in an increase in the quality of life than in any increment to a region's economic output.

Environmental features have been shown to increase property values as they provide aesthetic and recreational pleasures and more livable environment. As a result, properties next to these features have higher property values and produce greater tax revenues.

### **Infrastructure Costs**

Development that is displaced because of protection measures may still be constructed outside of the resource site. If it takes the form of clustered development it could result in a more efficient provision of facilities and services (water, sewer, etc) with less cost for infrastructure.

### **Property Value and Tax Base**

The Columbia River is an economic amenity to commercial development. Protecting the view of the Columbia River and access to it will provide a higher property value, which will have a positive consequence to the City tax base. However, providing resource protection could directly affect the development potential. Property values are largely based on market demand. Market demand is influenced by a number of factors including infrastructure, development potential, aesthetics, surrounding development, character, and access.

Property value translates into the City taxes, which result in income for the City. Developed property in many cases adds to the property value and hence the tax base of the City. As property values fluctuate, property taxes will vary proportionally. Therefore, natural resource sites that are protected and lost to development in some cases may not add value to the property or tax base. Environmental resources have "irreversibility" properties. If the resource is not preserved, it is likely to be eliminated with little or no chance of regeneration in any meaningful timeframes, if ever. Many environmental resources are considered "positive undepletable externalities" or public goods. If one person increases their consumption of the good, it does not preclude or reduce its availability to others.

Some benefits from significant resources can be found beyond the immediate resource area. For example, the capacity for shallow water habitat to provide refuge may benefit an entire Evolutionally Significant Unit of a listed salmonid species. As a result, the market price per acre of riparian habitat does not fully reflect a true exchange value relative to other goods. In fact, most environmental resources are not priced because they have no direct market when they are bought and sold like other products. This makes the establishment of value difficult. Therefore, it is necessary to use other methods of identifying value in order to perform economic analysis, such as valuing environmental goods in terms of intermediate goods, final goods, and future goods.

*Intermediate Goods.* When environmental resources provide goods or services that are part of a production process and have commercial value, they are considered intermediate

goods. These goods include factors that support commercial fisheries, water storage, and the assimilation of wastes. Intermediate goods also include environmental resources that contribute to damage prevention such as a pollution reduction, water purification, slope stabilization, and erosion control. An example of an intermediate good is the wetland included in reach HO-R1R which provides flood control and bank stabilization.

*Final Goods.* Environmental resources also provide final goods. These good include recreational opportunities such as fishing, boating, windsurfing, and bird watching. In addition, the amenities produced by environmental resources (e.g., scenic views, proximity to wildlife habitat, educational opportunities) are reflected in increases in residential and commercial property values, cleaner water supply and better fish habitat. A good example of a final good is the fish habitat located at the Hood, Reaches CO-8, CO-9, C-10.

*Future Goods.* Environmental resources could potentially provide yet undiscovered benefits or benefits to future generations in the form of future goods and services. Although there is a high level of uncertainty for future goods, it is important to consider them in determining the resource values. The future presence of fish habitat is an example of future good.

The following table classifies the resource values into their respective environmental goods categories.

Resource Value	Nature of the Environmental Good
Fish Habitat	Intermediate Good Final Goods and Services Future Goods and Services
Slope/Soil Stabilization	Intermediate Good
Water Quality	Intermediate Good Future Goods and Services
Flood Storage and Desynchronization	Intermediate Good
Historic and Cultural	Final Goods and Services Future Goods and Services
Education	Final Goods and Services Future Goods and Services
Recreation	Final Goods and Services Future Goods and Services
Aesthetics/Scenic Amenity	Final Goods and Services Future Goods and Services
Buffering Land Uses	Intermediate Good

Economic costs associated with fully allowing the conflicting uses are greatest when the resource provides a variety of intermediate goods (alternative substitutes for commercial services). For example, the Hood River and associated wetlands provide irreplaceable fish habitat, pollution assimilation/water purification services and flood attenuation and

storage functions. In addition, the functions provided by the wetland area represent a large cost savings over a traditional treatment system.

### **Land Loss/Erosion**

Erosion of shorelines can result in a loss of stream bank and land area. Stream bank alterations that result in cuts can cause soil erosion and may reduce the actual square footage of a parcel that abuts a riparian area. The loss of land may affect potential or existing development.

### **Employment Growth**

The development of commercial and industrial property may result in the creation of sustainable job opportunities for the City. If the full land area of a parcel cannot be developed because of protection measures it may affect the size of the business and its ability to provide employment. Most residential and commercial properties plan for as much density as the zoning permits to maximize efficiency of a site. Therefore, a reduction in land area may directly affect development potential. The actual development of residential, commercial, and industrial property also contributes to employment during the construction process. Although job opportunities may be created both short and long term, there is no guarantee of employment for the citizens of Hood River.

### **Development Potential**

Development potential relates to the amount of development that can be placed on property. The protection of natural resources such as wetlands and riparian areas may reduce development potential, if there are no other development alternatives. Existing developed sites may be restricted or prevented from re-development or additional development, if protection measures are in place. According to the buildable lands inventory for Hood River, resource lands (the area 75 feet land ward of the top of the bank) are not necessary to meet the housing lands needs, and the industrial land base has been justified for reduction in the staff analysis for the Waterfront Plan and Zone Change.

## **SOCIAL**

The social analysis evaluated the social consequences of prohibiting, limiting, or allowing conflicting uses for each resource site. Allowing, limiting, or prohibiting conflicting uses can have social consequences in several ways. These include:

- Changes to the value of the site for recreation and education. A large portion of the recreational and educational value of a natural area can be attributed to the existence of fish, wildlife, and other environmental values.
- Changes to the quantity and nature of employment opportunities.
- Changes to the historic and cultural values of the site.
- Changes to the health, safety, and welfare benefits provided by resources. Resource areas can serve to stabilize slopes, provide flood storage, and water quality. Alteration of a stable slope or shoreline can lead to bank failure during storm events.

- Changes in the area's scenic qualities. Trees, landscaped corridors and certain types of development can add to the scenic qualities of a site (for example by increasing visual variety or enhancing view points and corridors) or detract for the scenic values of a site (placing structures in view corridors or removing scenic natural features such as trees).

The ESEE analysis focuses on how the individual conflicting uses contribute to the changes discussed above and whether they create positive or negative social consequences to each reach.

## **ENVIRONMENTAL**

The environmental analysis is based on the inventory of the location, quantity, and quality of significant resources contained in the inventory report. Riparian resource values considered in the evaluation include:

- water quality
- threatened and endangered salmonid habitat
- wetlands
- riparian vegetation
- wildlife habitat

Wetlands and riparian areas in a natural or restored state provide necessary food, buffer, migration corridors, food chain support and reproduction habitat for fish and wildlife in the form of vegetation and water. Development or encroachment into natural resource areas may eliminate the habitat or the ability of the habitat to function.

Water temperature affects the ability of a stream or water body to support viable populations of certain aquatic organisms. High water temperature is detrimental to some plant and animal species. Healthy plant material (native trees and shrubs) in riparian areas and wetland help to shade and moderate temperature in adjacent water resources. Development in wetland and riparian areas may result in the removal of shade producing vegetation and increase water temperature.

Riparian areas and wetlands filter sediment, fix and cycle many nutrients by trapping and assimilating them through plant material. Some nutrients are actually beneficial and used by the plants. A loss of wetland and riparian area vegetation and soil structure due to development results in more sediment and pollutants running off into waterbodies. Urban landscapers use chemicals in the forms of pesticides, herbicides, and fertilizers for horticulture needs. Some of these chemicals can be filtered out in wetlands and riparian areas, prior to entering a stream or river.

A degraded riparian area that has been invaded by non-native species or currently has eroding banks, that is protected from development may not provide beneficial functions. In cases such as these, management of the natural resource would prevent the spread of non-native plant species or further degrading the resource.

All vegetation to some degree absorbs carbon dioxide (a pollutant) and produces oxygen (a human requirement). Vegetation also acts to collect air particulate matter on its leaves and branches, which is deposited to the ground during rainfall. When vegetation is removed, air quality may be affected negatively.

## **ENERGY**

Energy analysis focuses on transportation, infrastructure, and the heating and cooling of structures. The assumption was made that energy use would be similar for all potential future uses within each reach.

## **Reach CO-R1**

<b>Basin:</b>	Columbia River
<b>Size of Site:</b>	0.74 acres
<b>Location:</b>	East end of the water front, stretching from I-84 to the east opening of the marina.

### **Description of Resource:**

CO-R1 is the shoreline of the Columbia River that extends from I-84 at the east end of the study area west to the marina. This reach is 1,895 feet long. The shoreline and riparian area are composed of fill material that was placed after construction of the Bonneville Dam in the 1930s. The entire riparian area is developed with a hotel, restaurants, parking lots, and access roads. The only vegetation is limited to mowed lawn and a few ornamental plants. The ornamental shrubs are primarily in front of the restaurants and are pruned to prevent them from growing too tall to obstruct views.

### **Existing Uses:**

- Hood River Inn Hotel- Current use is a commercial business. Possible expansion in the future.
- Windsurfing school- Operates seasonally at the sandy beach on the east end of the reach. Public trail- Exists along the top of the rip rap.
- Public access for event staging.

## **ESEE ANALYSIS**

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.



Conflicting Use	Prohibit	Limit	Allow
C-2	<ul style="list-style-type: none"> <li>• loss of capitalized amenity values from water features</li> <li>• reduces employment opportunities</li> <li>• reduces expansion opportunities for recreation uses</li> <li>• retains the screening and buffering benefits</li> <li>• protects the functional value of the resource</li> <li>• preserves water quality</li> <li>• preserves fish habitat</li> <li>• loss of flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• conserves functional value of resource</li> <li>• improves water quality</li> <li>• limits habitat loss and possibly improves habitat quality</li> <li>• supports visual variety and impact</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> <li>• supports educational and recreational values</li> <li>• provides for flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• supports services and employment opportunities</li> <li>• supports recreational values</li> <li>• decreases screening and buffering</li> <li>• detracts from site's scenic qualities</li> <li>• vegetation removal and increased impervious surfaces degrade water quality and quantity</li> <li>• soil erosion and bank destabilization</li> <li>• loss of sediment trapping capacity</li> <li>• habitat fragmentation and fish habitat loss</li> </ul>

## CONCLUSION

The amenities of the Columbia River are extremely valuable from an economic, social, and environmental perspective. The Columbia River is an economic amenity to commercial development. Protecting the view of the Columbia River and access to it will provide a higher property value, which will have a positive consequence to the City tax base. However, providing resource protection could directly affect the development potential.

The public trail and water access provides recreational and education opportunities. Expansion of the trail and adding amenities would provide an opportunity for the community to explore the recreation and education potential of the resource. The opportunity to provide educational and visual opportunities would be lost if development were allowed to occur without limits.

The Columbia River supports several listed salmonid species. Fish habitat generally deteriorates as land use becomes more intensive. Development of this site would result in increased run-off, pollutant loading and sedimentation to the Columbia River, which would negatively impact fish populations.

Prohibiting conflicting uses would have a negative social and economic consequence to the City of Hood River. These uses shall be allowed to continue with limits placed on them to protect the environment and provide for visual, recreation and education opportunity growth.

## **ESEE DECISION**

Development shall be allowed to occur with certain limits. In addition to meeting current development standards, conflicting uses shall be allowed to occur provided the following limits are met to protect the resource:

- Any bank stabilization or bank alteration will be done using bio-engineering techniques.
- Stormwater runoff from all new impervious surfaces needs to be treated to DEQ stormwater discharge standards for the Columbia River prior to discharge off of the site.
- Public view points, benches and educational information shall be provided at regular intervals with a minimum of every 0.5 miles of trail.
- A public trail and water access shall be provided for recreational and educational opportunities.
- The use of herbicides and pesticides shall be limited to non-persistent, biodegradable products that are used according to the manufacture's recommendations.
- There shall be a 75 foot setback for all structures from top of bank with the exception of structures associated with these specific uses; non-motorized water sport schools and rentals and landscaping.

## **Reach CO-R2**

**Basin:** Columbia River  
**Size of Site:** 0.085 acres  
**Location:** The marina.

### **Description of Resource:**

CO-R2 is the shoreline of the Columbia River that is the marina. This reach is 3,727 feet long. The shoreline and riparian area are composed of fill material that was placed after construction of the Bonneville Dam in the 1930s. A portion of the riparian area is developed with office buildings, boat launch, parking lots, access roads and pedestrian way. The only vegetation is limited to mowed lawn and a few ornamental plants. The northern area of the reach is undeveloped dirt road and the SternWheeler docking area.

### **Existing Uses:**

- Port of Hood River office buildings, a commercial building that used to be Mid-Columbia Marina, and other office buildings.
- Marina.
- Public trail- Exists along the top of the rip rap.
- Public access for boat launching.
- Docking area for the Sternwheeler.

## **ESEE ANALYSIS**

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.

Conflicting Use	Prohibit	Limit	Allow
<i>C-2/Open Space/Public Facilities OS</i>	<ul style="list-style-type: none"> <li>• loss of capitalized amenity values from water features</li> <li>• reduces employment opportunities</li> <li>• reduces expansion opportunities for recreation uses</li> <li>• protects the functional value of the resource</li> <li>• preserves water quality</li> <li>• preserves fish habitat</li> <li>• loss of flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• conserves functional value of resource</li> <li>• improves water quality</li> <li>• limits habitat loss and possibly improves habitat quality</li> <li>• supports visual variety and impact</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> <li>• supports educational and recreational values</li> <li>• provides for flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• supports services and employment opportunities</li> <li>• supports recreational values</li> <li>• decreases screening and buffering</li> <li>• detracts from site's scenic qualities</li> <li>• vegetation removal and increased impervious surfaces degrade water quality and quantity</li> <li>• loss of sediment trapping capacity</li> <li>• habitat fragmentation and fish habitat loss</li> </ul>

## CONCLUSION

The amenities of the Columbia River are extremely valuable from an economic, social, and environmental perspective. The Columbia River is an economic amenity to commercial development. Protecting the view of the Columbia River and access to it will provide a higher property value, which will have a positive consequence to the City tax base. However, providing resource protection could directly affect the development potential.

The Columbia River supports several listed salmonid species. Fish habitat generally deteriorates as land use becomes more intensive. Development of this site would result in increased run-off, pollutant loading and sedimentation to the Columbia River, which would negatively impact fish populations.

Prohibiting conflicting uses would have a negative social and economic consequence to the City of Hood River. These uses shall be allowed to continue with limits placed on them to protect the environment and provide for visual, recreation and education opportunity growth.

## ESEE DECISION

Development shall be allowed to occur with certain limits. In addition to meeting current development standards, conflicting uses shall be allowed to occur provided the following limits are met to protect the resource:

- Any bank stabilization or bank alteration will be done using bio-engineering techniques.

- Stormwater runoff from all new impervious surfaces needs to be treated to DEQ stormwater discharge standards for the Columbia River prior to discharge off of the site.
- Public view points, benches and educational information shall be provided at regular intervals with a minimum of every 0.5 miles of trail.
- A public trail and water access shall be provided for recreational and educational opportunities.

**The use of herbicides and pesticides shall be limited to non-persistent, biodegradable products that are used according to the manufacture's recommendations.**

## REACH: CO-R3

**Basin:** Columbia River  
**Size of Site:** 0.92 acres  
**Location:** Port Marina Park

### Description of Resource:

CO-R3 is the shoreline of the Columbia River that extends from the Marina west to the Hood River. This reach is 1,742 feet long. The shoreline and riparian area are composed of fill material that was placed after construction of the Bonneville Dam in the 1930s. The entire riparian area is developed and the top of the slope consists of an access road. Two jetties were created with the placement of the fill that has resulted in three swimming beaches. The western most area is the largest and has developed a pretty wide beach. Vegetation is limited to weeds and one Ponderosa pine tree. The top of the slope is well-compressed fill and gravel. The area outside of the city limits is not subject to this analysis.

### Existing Uses:

- Park- Current use is a public park with an access road, parking, picnic areas, bathroom facilities, swimming beaches, lesson and rental stands, and windsurfing launch sites.

## ESEE ANALYSIS

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.

Conflicting Use	Prohibit	Limit	Allow
<i>OS/PF</i>	<ul style="list-style-type: none"> <li>• decreases recreation opportunities</li> <li>• retains the screening and buffering benefits</li> <li>• maintains the functional value of the resource</li> <li>• maintains water quality</li> <li>• loss of flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• conserves functional value of resource</li> <li>• reduces impact on water quality</li> <li>• supports educational and recreational values</li> <li>• limits habitat loss and possibly improves habitat quality</li> <li>• supports visual variety and impact</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> <li>• provides flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• decreases screening and buffering</li> <li>• detracts from site's scenic qualities</li> <li>• vegetation removal and increased impervious surfaces degrade water quality and quantity</li> <li>• impacts to shallow water fish habitat</li> </ul>

## **CONCLUSION**

There are currently no user fees at the Port Marina Park, therefore it does not generate revenue. Imposing limits on development or limiting park expansion would have a negative economic consequence by making development more expensive. Allowing expansion of park facilities without limits would have a neutral impact on economics.

The Port Marina Park is a public park that provides recreational opportunities to the community. Prohibiting development would limit expansion of these facilities and may have a negative social consequence.

The Columbia River supports several listed salmonid species. Fish habitat generally deteriorates as land use becomes more intensive. Development of this site could result in increased run-off, pollutant loading and sedimentation to the Columbia River, which would negatively impact fish populations.

Prohibiting conflicting uses to occur would have a negative social consequence to the community, and neutral economic and environmental consequences. These uses shall be allowed with limits placed on them to protect the environment and provide for recreation and educational opportunities.

## **ESEE DECISION**

Development shall be allowed to occur with certain limits. In addition to meeting current development standards, conflicting uses shall be allowed to occur provided the following limits are met to protect the resource:

- Any bank stabilization or bank alteration will be done using bio-engineering techniques.
- Pedestrian safety shall be provided for in accordance with the Transportation System Plan.
- Dust control shall be provided for.
- Stormwater runoff from all new impervious surfaces needs to be treated to DEQ stormwater discharge standards for the Columbia River prior to discharge off of the site.
- Public view points, benches and educational information shall be provided at regular intervals with a minimum of every 0.5 miles of trail.
- A public trail and water access shall be provided for recreational and educational opportunities.
- The use of herbicides and pesticides shall be limited to non-persistent, biodegradable products that are used according to the manufacture's recommendations.

## REACH: CO-R4

**Basin:** Columbia River  
**Size of Site:** 0.67 acres  
**Location:** The east bank of the abandoned boat works basin.

### Description of Resource:

This reach is 1,064 feet long. The shoreline and riparian areas are composed of fill material that was placed after construction of the Bonneville Dam in the 1930s. The entire riparian area is developed and the top of the slope consists of an access road. The slope consists of an immature forested riparian community consisting of red-osier dogwood, black cottonwood, red alder, and Himalayan blackberry.

### Existing Uses:

- Industrial- this area is currently zoned light industrial but no development currently occurs within this reach.
- Water Recreation- boating and jet skiing.
- Public Access- a gravel road runs along the entire length of the spit.

## ESEE ANALYSIS

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.

Conflicting Use	Prohibit	Limit	Allow
<i>Industrial</i>	<ul style="list-style-type: none"> <li>• reduces employment opportunities</li> <li>• loss of flexibility for new development or redevelopment</li> <li>• loss of capitalized amenity values from water features</li> <li>• enhances recreation opportunities</li> <li>• retains the screening and buffering benefits</li> <li>• protects the functional value of the resource</li> <li>• preserves water quality</li> <li>• preserves fish habitat</li> </ul>	<ul style="list-style-type: none"> <li>• conserves functional value of resource</li> <li>• reduces impact on water quality</li> <li>• limits habitat loss and possibly improves habitat quality</li> <li>• supports visual variety and impact</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> <li>• supports educational and recreational values</li> <li>• provides for flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• supports services and employment opportunities</li> <li>• supports educational and recreational values</li> <li>• decreases screening and buffering</li> <li>• detracts from site's scenic qualities</li> <li>• vegetation removal</li> <li>• soil erosion and bank destabilization</li> <li>• loss of sediment trapping capacity</li> <li>• fish habitat loss</li> </ul>



## **CONCLUSION**

Well established vegetation riparian habitat along the Columbia River is limited. The riparian vegetation along the east bank is becoming well established and hangs over the water in places, providing shade and nutrients in the form of leaf litter. The Columbia River supports several listed salmonid species. Fish habitat generally deteriorates as land use becomes more intensive. Development of this site would result in increased run-off, pollutant loading and sedimentation to the Columbia River, which would negatively impact fish populations.

Prohibiting development to occur would have a negative economic consequence, a neutral social consequence and a negative environmental consequence. Allowing the conflicting uses to occur with limits would have positive social and economic consequences. The jetty itself is relatively narrow (less than 100 feet wide) which limits its development potential and economic feasibility.

## **ESEE DECISION**

Development shall be allowed to occur with certain limits. In addition to meeting current development standards, conflicting uses shall be allowed to occur provided the following limits are met to protect the resource:

- Any bank stabilization or bank alteration will be done using bio-engineering techniques.
- Safe pedestrian passage needs to be provided in compliance with the Transportation System Plan.
- A public trail and water access shall be provided for recreational and educational opportunities.
- Future development needs to provide for dust control.
- Vegetation removal from the water's edge to the top of the bank shall be prohibited.
- Stormwater runoff from all new impervious surfaces needs to be treated to DEQ stormwater discharge standards for the Columbia River prior to discharge off of the site.
- Public view points, benches and educational information shall be provided at regular intervals with a minimum of every 0.5 miles of trail.
- The use of herbicides and pesticides shall be limited to non-persistent, biodegradable products that are used according to the manufacture's recommendations.
- There shall be a 75 foot setback for all structures from top of bank with the exception of structures associated with these specific uses; non-motorized water sport schools and rentals and landscaping.

## REACH: CO-R6

**Basin:** Columbia River  
**Size of Site:** 0.04 acres  
**Location:** The west bank of the abandoned boat works marina.

### Description of Resource:

This reach is 1,776 feet long. The shoreline and riparian area are composed of fill material that was placed after construction of the Bonneville Dam in the 1930s. The entire riparian area is developed and the majority of the reach has sheet piling along the banks. There is a boat launch at the north end. No vegetation is growing along the shoreline. The top of the bank consists of either asphalt or well-compressed fill and gravel.

### Existing Uses:

- Industrial- part of this reach is zoned industrial. Current development includes a vacant building and a gas station.
- Open Space- event site and park with access roads

## ESEE ANALYSIS

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.

Conflicting Use	Prohibit	Limit	Allow
OS/PF	<ul style="list-style-type: none"> <li>• loss of capitalized amenity values from water features</li> <li>• decreases recreation opportunities</li> <li>• maintains the functional value of the resource</li> <li>• maintains water quality</li> <li>• loss of flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• conserves functional value of resource</li> <li>• improves water quality</li> <li>• limits habitat loss and improves habitat quality</li> <li>• supports educational and recreational values</li> <li>• supports visual variety and impact</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> <li>• provides flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• decreases screening and buffering</li> <li>• detracts from site's scenic qualities</li> <li>• vegetation removal and increased impervious surfaces degrade water quality and quantity</li> <li>• soil erosion and bank destabilization</li> </ul>

Conflicting Use	Prohibit	Limit	Allow
<i>I</i>	<ul style="list-style-type: none"> <li>• loss of capitalized amenity values from water features</li> <li>• reduces employment opportunities</li> <li>• maintains the functional value of the resource</li> <li>• maintains water quality</li> <li>• preserves fish habitat</li> <li>• loss of flexibility for new development or redevelopment</li> <li>• reduces recreation opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• conserves functional value of resource</li> <li>• improves water quality</li> <li>• limits habitat loss and possibly improves habitat quality</li> <li>• supports educational and recreational values</li> <li>• supports visual variety and impact</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> <li>• supports educational and recreational values</li> <li>• provides for flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• supports services and employment opportunities</li> <li>• decreases screening and buffering</li> <li>• detracts from site's scenic qualities</li> <li>• vegetation removal and increased impervious surfaces degrade water quality and quantity</li> <li>• soil erosion and bank destabilization</li> </ul>

## CONCLUSION

The amenities of the boat works basin are extremely valuable from an economic and social perspective. In Hood River, the only industrial land with water access to the Columbia is the boat works basin. This provides significant economic and social opportunities to the City and surrounding region. In the current regulatory environment, getting the required environmental approvals to construct a new marina along the Columbia would be very expensive and lengthy, with no guarantee of approval. Allowing development to occur would provide revenue, property taxes, and industrial job opportunities. Putting limits on development would result in higher development costs and could have a negative economic impact.

This area contains the area locally know as slackwater beach. This is an unimproved area that is moderately used for launching jet skis and small boats.

The Columbia River supports several listed salmonid species. Fish habitat generally deteriorates as land use becomes more intensive. Development of this site would result in increased run-off, pollutant loading and sedimentation to a man-made basin on the Columbia River. This could negatively impact fish populations using the boat works basin.

## ESEE DECISION

The riparian habitat along this reach is heavily degraded. The economical and social opportunities this site provides are unique within the City limits and outweigh the

environmental consequences. Development shall be allowed to occur with minimal limits.

- A public trail and water access shall be provided for recreational and educational opportunities.
- Any bank stabilization or bank alteration will be done using bio-engineering techniques.
- Safe pedestrian passage needs to be provided in compliance with the Transportation System Plan.
- Future development needs to provide for dust control.
- Stormwater runoff from all new impervious surfaces needs to be treated to DEQ stormwater discharge standards for the Columbia River prior to discharge off of the site.
- Public view points, benches and educational information shall be provided at regular intervals with a minimum of every 0.5 miles of trail.
- The use of herbicides and pesticides shall be limited to non-persistent, biodegradable products that are used according to the manufacture's recommendations.

## Reach: CO-R7

**Basin:** Columbia River  
**Size of Site:** 2.8 acres  
**Location:** The shoreline of the Columbia River that extends from the abandoned boat works basin west to the hook.

### Description of Resource:

This reach is 4,639 feet long. The shoreline and riparian area are composed of fill material that was placed after construction of the Bonneville Dam in the 1930s. The entire riparian area consists of industrial development, parking lots, and a gravel jetty with an access road. The vegetation is limited to five Douglas fir trees growing at the top of the bank.

### Existing Uses:

- Recreational/Commercial- this includes the Event center which has bathroom facilities, parking lots, picnic areas, and water access.
- Light Industrial- there are currently two light industrial developments along this reach which includes the building and parking areas.
- Water recreation- windsurfing, swimming and kiteboarding.

## ESEE ANALYSIS

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.

Conflicting Use	Prohibit	Limit	Allow
LI	<ul style="list-style-type: none"> <li>• reduces employment opportunities</li> <li>• loss of capitalized amenity values from water features</li> <li>• enhances recreation opportunities</li> <li>• maintains the functional value of the resource</li> <li>• maintains water quality</li> <li>• preserves fish habitat</li> <li>• loss of flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• conserves functional value of resource</li> <li>• improves water quality</li> <li>• limits habitat loss and possibly improves habitat quality</li> <li>• supports educational and recreational values</li> <li>• supports visual variety and impact</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• supports services and employment opportunities</li> <li>• decreases screening and buffering</li> <li>• detracts from site's scenic qualities</li> <li>• increased impervious surfaces degrade water quality and quantity</li> <li>• soil erosion and bank destabilization</li> <li>• loss of sediment trapping capacity</li> </ul>

Conflicting Use	Prohibit	Limit	Allow
<i>RC/OS</i>	<ul style="list-style-type: none"> <li>• retains the screening and buffering benefits</li> <li>• maintains the functional value of the resource</li> <li>• maintains water quality</li> <li>• loss of flexibility for new development or redevelopment</li> <li>• maintains recreation opportunities</li> <li>• loss of development and redevelopment flexibility</li> </ul>	<ul style="list-style-type: none"> <li>• conserves functional value of resource</li> <li>• improves water quality</li> <li>• limits habitat loss and possibly improves habitat quality</li> <li>• supports educational and recreational values</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> <li>• provides for flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• decreases screening and buffering</li> <li>• supports recreation opportunities</li> <li>• vegetation removal</li> <li>• soil erosion and bank destabilization</li> <li>• loss of sediment trapping capacity</li> </ul>

## CONCLUSION

There are currently user fees at the event center which generates revenue for the Port. Imposing limits on development or limiting expansion would have a negative economic consequence. Allowing expansion of park facilities without limits would have a neutral impact on economics. The same is true for the proposed park along the waterfront. Putting development limits and standards that need to be met would cause development to be more expensive.

Prohibiting a development of a new waterfront park would have a negative social impact to the community. Prohibiting or limiting development of industrial land would impact the development potential. The Columbia River supports several listed salmonid species. Fish habitat generally deteriorates as land use becomes more intensive. Development of this site could result in increased run-off, pollutant loading and sedimentation to the Columbia River, which would negatively impact fish populations.

## ESEE DECISION

Development shall be allowed to occur with certain limits. In addition to meeting current development standards, conflicting uses shall be allowed to occur provided the following limits are met to protect the resource:

- Any bank stabilization or bank alteration will be done using bio-engineering techniques.
- There shall be a 75 foot setback for all structures from the top of bank with the exception of structures associated with these specific uses; non-motorized water sport schools and rentals and landscaping for a park on lot 6.

- Stormwater runoff from all new impervious surfaces needs to be treated to DEQ stormwater discharge standards for the Columbia River prior to discharge off of the site.
- Public view points, benches and educational information shall be provided at regular intervals with a minimum of every 0.5 miles of trail.
- A public trail and water access shall be provided for recreational and educational opportunities.
- The use of herbicides and pesticides shall be limited to non-persistent, biodegradable products that are used according to the manufacture's recommendations.

## Reach: CO-R8

**Basin:** Columbia River  
**Size of Site:** 0.5 acres  
**Location:** The hook at the end of the man-created jetty.

### Description of Resource:

This reach is 499 feet long and consists of a mature forested point that appears to be on a native or natural landform of very large boulder. The vegetation is dense, with extensive coverage by Himalayan blackberry in the shrub layer.

### Existing Uses:

- Natural area- heavily used wintering waterfowl area.
- Water recreation- swimming, windsurfing lessons.

## ESEE ANALYSIS

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.

Use	Prohibit	Limit	Allow
<i>LI</i>	<ul style="list-style-type: none"> <li>• retains the screening and buffering benefits</li> <li>• maintains the functional value of the resource</li> <li>• maintains water quality</li> <li>• loss of flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• loss of functional value of resource</li> <li>• habitat loss</li> <li>• supports educational and recreational values</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• supports recreation opportunities</li> <li>• vegetation removal</li> <li>• soil erosion and bank destabilization</li> <li>• loss of sediment trapping capacity</li> <li>• habitat loss</li> </ul>

## CONCLUSION

This is the only stretch of natural riparian vegetation that is remaining along the waterfront. This is a natural landform covered with dense vegetation. Well established vegetation riparian habitat along the Columbia River is limited.

## ESEE DECISION

Protect the resource at the highest level. Conflicting uses shall not be allowed on the subject property.



## REACH: CO-R9 & CO-R10

**Basin:** Columbia River  
**Size of Site:** 1.27 acres  
**Location:** CO-R9 is the interior shoreline of the hook and CO-R10 is the interior, east shoreline of the hook

### Description of Resource:

CO-R9 is 905 feet long. The shoreline and riparian area are composed of fill material that was placed after construction of the Bonneville Dam in the 1930s. This man-created jetty is heavily used by people and has resulted in limited vegetation able to become established. Vegetation is limited to black cottonwood, red-osier dogwood, willow, and a few weeds.

CO-R10 is 1,329 feet long. The shoreline and riparian area are composed of fill material that was placed after construction of the Bonneville Dam in the 1930s. This portion of the shoreline has not been as impacted by recreational uses as the western portion. At the toe of the rip rap slope is a 25 foot wide wetland bench that is vegetated by black cottonwood, Himalayan blackberry, willow, cattail, and reed canary grass.

### Existing Uses:

- Water recreation- swimming, windsurfing lessons.
- Light Industrial- most of this area is currently zoned light industrial although there is currently no light industrial development along this reach.
- Open Space/Public Facility- the Hood River Wastewater Treatment Plant is located at the eastern end of CO-R10.
- Natural area- heavily used winter waterfowl area.

## ESEE ANALYSIS

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.

Conflicting Use	Prohibit	Limit	Allow
<i>LI OS/PF</i>	<ul style="list-style-type: none"> <li>• reduces recreation opportunities</li> <li>• retains the screening and buffering benefits</li> <li>• protects the functional value of the resource</li> <li>• preserves water quality</li> <li>• preserves fish habitat</li> <li>• loss of flexibility for new development or redevelopment</li> <li>• may reduce employment opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• improves water quality</li> <li>• supports educational values</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> <li>• provides for flexibility for new development or redevelopment</li> <li>• conserves functional value of resource</li> <li>• limits habitat loss and possibly improves habitat quality</li> <li>• improves recreational opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• decreases screening and buffering</li> <li>• vegetation removal</li> <li>• soil erosion and bank destabilization</li> <li>• loss of sediment trapping capacity</li> <li>• supports services and employment opportunities</li> <li>• detracts from site's scenic qualities</li> </ul>

## **CONCLUSION**

This area is currently zoned LI. This area is currently undeveloped and heavily used by the community for recreational purposes. There is no formal access to the water, and bank erosion is occurring in places that are heavily used.

The hook itself is a relatively narrow (less than 100 feet wide), land form which limits its development potential and economic feasibility.

Because this area is a heavily used recreation area, prohibiting development to occur or causes a major change in how this area is used would have a negative social consequence.

The interior of the hook provides off-channel, shallow water habitat that is limited along this reach of the Columbia River. In-water or over-water development would have a negative impact on listed salmonid species.

## **ESEE DECISION**

Development shall be allowed to occur with certain limits. In addition to meeting current development standards, conflicting uses shall be allowed to occur provided the following limits are met to protect the resource:

- There shall be a 75 foot setback for all structures from top of bank with the exception of structures associated with specific uses; non-motorized water sport school and rentals and landscaping.
- Any bank stabilization or bank alteration will be done using bio-engineering techniques.
- Stormwater runoff from all new impervious surfaces needs to be treated to DEQ stormwater discharge standards for the Columbia River prior to discharge off of the site.
- Public view points, benches and educational information shall be provided at regular intervals with a minimum of every 0.5 miles of trail.
- A public trail and water access shall be provided for recreational and educational opportunities.
- The use of herbicides and pesticides shall be limited to non-persistent, biodegradable products that are used according to the manufacture's recommendations.
- Safe pedestrian passages shall be provided for in accordance with the Transportation System Plan.
- Future development shall provide for dust control.
- Educational interpretive signs shall be posted that emphasize the ecologically sensitive nature of the site.
- In-water or over-water development shall be prohibited.

## **REACH: HO-R1R and HO-R2R**

<b>Basin:</b>	Hood River
<b>Size of Site:</b>	1.09 acres
<b>Location:</b>	HO-R1R is the east side of the Hood River and extends from I-84 north a forested sandbar. HO-R2R is the east side of the Hood River and extends from a forested sandbar to the confluence with the Columbia River.

### **Description of Resource:**

HO-R1R includes a forested wetland that has become established on a naturally occurring sandbar. Behind the sandbar, fill material has been placed. The wetland is dominated by a canopy of black cottonwood trees, and a shrub layer of red-osier dogwood, Himalayan blackberry, and willow. The ground cover consists of reed canary grass and horsetail. The wetland is 92 feet wide.

The shoreline of HO-R2R is fill material that was placed after Columbia River levels were raised following construction of the Bonneville Dam. The shoreline is a steep, rip rapped bank that includes part of the Port of Marina Park. Vegetation is limited to a rush species growing along the edge of the water and three ornamental trees that have become colonized. The top of the bank is an asphalt access road to the park.

### **Existing Uses:**

- Park- Current use is a public park with an access road, parking, picnic areas, bathroom facilities, swimming beaches, lesson and rental stands, and windsurfing launch sites.
- Museum- maintenance road, museum building and parking lot.
- Water Recreation- fishing, kayaking, wildlife viewing

## **ESEE ANALYSIS**

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.

Conflicting Use	Prohibit	Limit	Allow
<i>OS/PF</i>	<ul style="list-style-type: none"> <li>• loss of capitalized amenity values from water features</li> <li>• decreases recreation opportunities</li> <li>• retains the screening and buffering benefits</li> <li>• maintains the functional value of the resource</li> <li>• maintains water quality</li> <li>• loss of flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• conserves functional value of resource</li> <li>• supports educational and recreational values</li> <li>• reduces impact on water quality</li> <li>• limits habitat loss and possibly improves habitat quality</li> <li>• supports visual variety and impact</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> <li>• provides flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• decreases screening and buffering</li> <li>• detracts from site's scenic qualities</li> <li>• vegetation removal and increased impervious surfaces degrade water quality and quantity</li> <li>• soil erosion and bank destabilization</li> <li>• loss of sediment trapping capacity</li> </ul>

## CONCLUSION

There are currently no user fees at the Port Marina Park, but the museum does ask for a donation to cover operation and maintenance costs. Imposing limits on development or limiting park expansion would have a negative economic consequence by making development more expensive. Allowing expansion of park facilities without limits would have a neutral impact on economics.

The Port Marina Park is a public park that provides recreational opportunities to the community. Prohibiting development would limit expansion of these facilities and have a negative social consequence.

The Hood River supports listed salmonid species. Fish habitat generally deteriorates as land use becomes more intensive. Development of this site could result in increased run-off, pollutant loading and sedimentation to the Columbia River, which would negatively impact fish populations.

## ESEE DECISION

Development shall be allowed to occur with certain limits. In addition to meeting current development standards, conflicting uses shall be allowed to occur provided the following limits are met to protect the resource:

- There shall be a 100 foot setback for all structures from top of bank with the exception of structures associated with specific uses; non-motorized water sport schools and rentals and landscaping. A conditional use permit may be applied for development up to 75 feet of top of bank.
- Expansion of the museum, for museum purposes only, to the east, south or north may be permitted with a conditional use permit.
- Development shall not occur below the top of bank.

- Any bank stabilization or bank alteration will be done using bio-engineering techniques.
- Stormwater runoff from all new impervious surfaces needs to be treated to DEQ stormwater discharge standards for the Hood River prior to discharge off of the site.
- Public view points, benches and educational information shall be provided at regular intervals with a minimum of every 0.5 miles of trail.
- A public trail and water access shall be provided for recreational and educational opportunities.
- The use of herbicides and pesticides shall be limited to non-persistent, biodegradable products that are used according to the manufacture's recommendations.
- Educational interpretive signs shall be posted that emphasize the ecologically sensitive nature of the site.
- A frontage road is be allowed in this reach parallel to I-84 with a bridge across the Hood River with the proper permitting from the City, State and Federal government, if applicable.

## REACH: HO-R1L

**Basin:** Hood River  
**Size of Site:** 0.94 acres  
**Location:** HO-R1L is the west bank the Hood River and extends from I-84 to the confluence with the Columbia River.

### Description of Resource:

The shoreline is fill material that was placed after Columbia River levels were raised following construction of the Bonneville Dam. The shoreline is a steep, rip rapped bank. Vegetation along the bank is sparse and limited red-osier dogwood and cascara. Willows and slough sedge are growing at the edge of the water. The top of the bank is an access road to the end of the jetty that is composed of well-compacted fill and gravel.

### Existing Uses:

- Industrial- this area is currently zoned industrial but it is currently undeveloped.
- Water Recreation- fishing, swimming kayaking.
- Public Access- unpaved road to access the point and unpaved, unmarked parking lot.

## ESEE ANALYSIS

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.

Conflicting Use	Prohibit	Limit	Allow
<i>I</i>	<ul style="list-style-type: none"> <li>• retains the screening and buffering benefits</li> <li>• protects the functional value of the resource</li> <li>• preserves water quality</li> <li>• preserves fish habitat</li> <li>• loss of flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• reduces impact on water quality</li> <li>• supports educational and recreational values</li> <li>• supports increase screening and buffering benefits</li> <li>• provides for flexibility for new development or redevelopment</li> <li>• conserves functional value of resource</li> <li>• limits habitat loss and possibly improves habitat quality</li> <li>• improves access to the river</li> <li>• controls bank erosion</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• decreases screening and buffering</li> <li>• vegetation removal</li> <li>• soil erosion and bank destabilization</li> <li>• loss of sediment trapping capacity</li> <li>• supports services and employment opportunities</li> <li>• detracts from site's scenic qualities</li> </ul>

## **CONCLUSION**

This area is currently zoned Industrial. This area is currently undeveloped and heavily used by the community for recreational purposes. There is no formal access to the water, and bank erosion is occurring in places that are heavily used.

The jetty itself is relatively narrow (less than 100 feet wide) which limits its development potential and economic feasibility.

This area is a heavily used recreation area. Allowing development to occur or causes a change in how this area used would have a negative social consequence.

The Hood River supports several salmonid species. Fish habitat generally deteriorates as land use becomes more intensive. Development of this site could result in increased runoff, pollutant loading and sedimentation to the Columbia River, which would negatively impact fish populations.

## **ESEE Decision**

Development shall be allowed to occur with certain limits. In addition to meeting current development standards, conflicting uses shall be allowed to occur provided the following limits are met to protect the resource:

- There shall be a 75 foot setback for all structures from the top of bank with the exception of structures associated with specific uses; non-motorized water sport schools and rentals and landscaping.
- Any bank stabilization or bank alteration will be done using bio-engineering techniques.
- Stormwater runoff from all new impervious surfaces needs to be treated to DEQ stormwater discharge standards for the Hood River prior to discharge off of the site.
- Public view points, benches and educational information shall be provided at regular intervals with a minimum of every 0.5 miles of trail.
- A public trail and water access shall be provided for recreational and educational opportunities.
- The use of herbicides and pesticides shall be limited to non-persistent, biodegradable products that are used according to the manufacture's recommendations.
- Safe pedestrian passages shall be provided for in accordance with the Transportation System Plan.
- Future development shall provide for dust control.
- A frontage road is be allowed in this reach parallel to I-84 with a bridge across the Hood River with the proper permitting from the City, State and Federal government, if applicable.

## Reach: HO-R2L

**Basin:** Hood River  
**Size of Site:** 0.44 acres  
**Location:** End of jetty on west bank of Hood River

### Description of Resource:

HO-R2L consists of scrub shrub wetland that as developed at the confluence of the Hood River and Columbia River from the fill placed along the west bank of the Hood River. Dominant vegetation species included willow, red-osier dogwood, slough sedge, reed canary grass and cattail.

### Existing Uses:

- Industrial- this area is currently zoned industrial but is currently undeveloped.
- Water Recreation- fishing, swimming and kiteboarding.
- Public Access- unpaved road to access the point and unpaved, unimproved parking lot.

## ESEE ANALYSIS

The following table indicates the impacts on the resource of fully allowing the conflicting uses to occur, limiting the conflicting use, or prohibiting the conflicting use.

Conflicting Use	Prohibit	Limit	Allow
<i>I</i>	<ul style="list-style-type: none"> <li>• reduces recreation opportunities</li> <li>• protects the functional value of the resource</li> <li>• preserves water quality</li> <li>• preserves fish habitat</li> <li>• loss of flexibility for new development or redevelopment</li> </ul>	<ul style="list-style-type: none"> <li>• reduces impact on water quality</li> <li>• supports educational and recreational values</li> <li>• supports increase screening and buffering benefits</li> <li>• allows for maintenance of existing facility</li> <li>• provides for flexibility for new development or redevelopment</li> <li>• conserves functional value of resource</li> <li>• limits habitat loss</li> </ul>	<ul style="list-style-type: none"> <li>• retains development flexibility</li> <li>• vegetation removal</li> <li>• soil erosion and bank destabilization</li> <li>• loss of sediment trapping capacity</li> <li>• supports employment opportunities</li> <li>• decreases screening and buffering</li> <li>• detracts from site's scenic qualities</li> <li>• high value habitat loss</li> </ul>



## **CONCLUSION**

This area is currently zoned I. This area is currently undeveloped and heavily used by the community for recreational purposes. There is no formal access to the water, and bank erosion is occurring in places that are heavily used.

The jetty itself is relatively narrow (less than 100 feet wide) which limits its development potential and economic feasibility.

This area is a heavily used recreation area locally known as Kiteboard Beach. Allowing development to occur or a change in how this area used would have a negative social consequence.

The Hood River supports listed salmonid species. Fish habitat generally deteriorates as land use becomes more intensive. Development of this site could result in increased runoff, pollutant loading and sedimentation to the Columbia River, which would negatively impact fish populations.

## **ESEE DECISION**

Development shall be allowed to occur with certain limits. In addition to meeting current development standards, conflicting uses shall be allowed to occur provided the following limits are met to protect the resource:

- There shall be a 75 foot setback for all structures from the top of bank with the exception of structures associated with these specific uses; non-motorized water sport schools and rentals and landscaping.
- No development shall occur below the top of the bank.
- Educational interpretive signs shall be posted that emphasize the ecologically sensitive nature of the site. Signs and pasture fencing shall be placed around the wetland area to educate people about the ecologically sensitive nature of the area and to keep people out.
- Any bank stabilization or bank alteration will be done using bio-engineering techniques.
- Stormwater runoff from all new impervious surfaces needs to be treated to DEQ stormwater discharge standards for both the Columbia River and the Hood River prior to discharge off of the site.
- Public view points, benches and educational information shall be provided at regular intervals with a minimum of every 0.5 miles of trail.
- A public trail and water access shall be provided for recreational and educational opportunities.
- The use of herbicides and pesticides shall be limited to non-persistent, biodegradable products that are used according to the manufacture's recommendations.
- Safe pedestrian passages shall be provided for in accordance with the Transportation System Plan.

- Specific beach access ways shall be provided to help prevent further erosion of the bank.
- Future development shall provide for dust control.