APPENDIX “A”

Comprehensive Plan & Zone Designation, Wells Island (Benkendor Report)

Comprehensive Plan
and
Zone Designation

Wells Island

February 11, 1985

Prepared for:

CITY OF HOOD RIVER
P.O. Box 27
Hood River, Oregon 97031

Prepared by:

PORT OF HOOD RIVER
P.O. Box 239 Port Marina Park
Hood River, Oregon 97031

Consulting Planners
Benkendorf & Associates
522 S.W. Fifth Avenue
Portland, Oregon 97204

Consulting Wildlife Ecologists
BEAK
Lynn Sharp, Environmental Biologist
317 S.W. Alder Street, Suite 800
Portland, Oregon 97204
February 11, 1985

Planning Commission Members
City of Hood River
P.O. Box 27
Hood River, Oregon 97031

Re: Port of Hood River's Plans for Wells Island

Dear Commission Members:

The enclosed information is all of the background material for the February 28th, 1985 Planning Commission hearing on Wells Island. This packet includes:

- Information detailing the Port of Hood River's plans for an Interpretive/Conference Facility on Wells Island.
- Justification for including the portion of the island in the City limits within the UGB.
- An analysis of Goal 5 Resources and how to preserve them.
- Policies to be added to Goals 5 & 14 of the Comprehensive Plan of new Tourist/Cultural Zone.
- A new Tourist/Cultural Zone.
- Amended Plan and Zoning Maps.

As you know, the City's Comprehensive Plan has been acknowledged by LCDC with the exception of Wells Island. This information is submitted in order to complete that acknowledgement process. The following schedule has been prepared:

| Hood River Planning Commission | February 28 |
| Hood River City Council | March 11 |

Coordinate with Hood River County Planning Director

| Hood River County Planning Commission | March 27 |
| Hood River County Board of Commissioners | April 8 |

Submit to DLCD for staff review and scheduling for LCDC acknowledgement hearing.

Even though we are proposing additions or alterations to the Background Report, Comprehensive Plan and Zoning Ordinance, it is important to note that this proposal also complies with many policies already adopted by the City and acknowledged by LCDC.

522 Southwest Fifth Avenue Portland, Oregon 97204  503-226-0068
Goal 5

The proposed use of Wells Island complies with the following Goal 5 Policies and Implementation Strategies in the City’s Comprehensive Plan. Policies 1, 4, 6, 7, 8 and 9. Implementation Strategies 4.

Goal 13

The inclusion of a portion of Wells Island in the UGB facilitates response to specifically identified needs and complies with the following Goal 13 Policies and Implementation Strategies in the City’s Comprehensive Plan. Policies 1, 2, 3, 4, 5 and 6. Implementation Strategies 2, 3, 5 and 6.

The Port’s plan for Wells Island is simple and straightforward and is illustrated on Exhibit 3, Section 14A of the Background Report. The Port intends to develop a conference center and interpretive facility on Wells Island. Access to the island will be limited taking into account particularly sensitive habitat areas and the seasonal behavior of the heron and goose population. Mitigation will occur where adverse impacts cannot be eliminated. Allowed uses on Wells Island were derived after analyzing possible impacts on the wildlife habitat. The trail system and location of improvements also reflects this concern for maintaining the values that will attract visitors to Wells Island.

The uses on the island require City water and sewer service. For this reason, the Port proposes that that portion of the island already inside the City limits, be included in the UGB. Accordingly, we have developed justification which responds to LCDC Goal 13 requirements which are proposed to be included as Section 14A of the Background Report of the Comprehensive Plan. Additionally, we have analyzed the impacts of the proposed uses in accordance with LCDC’s Goal 3 Administrative Rule which we propose be included as Section 3B of the Background Report. Finally, we have developed policies, implementation strategies and a new Tourist/Cultural Zone to regulate future use of the island.

Yours Sincerely,

Al Benkendorf, AICP

ABinc

Enclosures
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I. COMPREHENSIVE PLAN

A. GOAL 5: OPEN SPACES, SCENIC AND HISTORIC AREAS AND NATURAL RESOURCES

1. Section 5B: Evaluation of Potential Conflicting Uses - Proposed Addition 5B to the Background Report

Introduction

Wells Island is located in the Columbia River near river mile 168, approximately 850 feet west of West Cove. Wells Island actually consists of three islands; the main island is approximately 51 acres and two smaller islands to the south provide nearly eight (8) additional acres. The island is within the Bonneville Pool, created by the Bonneville Dam located downstream. The U.S. Army Corps of Engineers holds flowage easements on the island limiting the amount of land not subject to flooding to approximately 10 acres. Only the large main island has any land not subject to these flowage easements.

The eastern portion of Wells Island has been within the City of Hood River for ninety (90) years and has had a land use zone designated and administered by the City.

The upstream, or eastern end of the island shows signs of erosion, according to observations made by Ogden Beeman & Associates on April 4, 1983. Those observations were described as follows:

“There are sandy, flat beaches eroded back to grass and cottonwood trees. Such erosion at the head end of the island is to be expected from vessel or wind generated waves stirring up sand which is then carried downstream by current action. The north side of the island has a low ground cover and old growth trees are in evidence. This edge of the island has a flat bench at or around maximum pool elevation. Vertical or near vertical banks of exposed sand are partially protected by fallen trees and drift washed along the shore. As the downstream end of the island is approached there is evidence of erosion. The downstream or westerly end of the island has rather severe erosion which has eaten into the vegetation and the clayey soil. This type of erosion would not be expected at the downstream end of a river island and is probably attributable to wind driven waves attacking the bank at various elevations with pool fluctuations. The southerly side of the island and the channel between the large and small islands shows evidence of accretion nearly filling this gap at mid pool elevations. The downstream end of the island has more recent vegetation over a fairly low bench. Several tall cottonwood and willow trees grow in this area. The upstream end of the island has older growth trees on two hummocks rising more than 40 feet above pool level. There are several open meadows on the upstream end of the island.”

The origin of these meadows is unclear, as little evidence of clearing in the past could be found. The meadows were maintained by livestock grazing until the summer of 1984, when grazing
ceased with the change in ownership. Invasion of these meadows by cottonwoods and willows is rapidly occurring in the absence of grazing.

The island is owned and managed by the Port of Hood River. The Port has undertaken a Waterfront Plan which includes the maintenance of Wells Island as a wildlife habitat area while including limited public use of the island for low intensity recreational and nature-oriented uses. Intended uses include Columbia Gorge Interpretive Center and display facilities, a caretaker's residence and limited, strictly managed recreational uses such as canoeing, hiking, picnicking, and nature study. This proposed public use of Wells Island may impact fish and wildlife areas and habitats, and scenic views and sites as identified resources within Goal 5. Other categories and areas of concern within Goal 5 will not be impacted. Following is an evaluation of each resource included within Goal 5.

Resources Not Significantly or Adversely Impacted

Most of the Goal 5 categories would not be significantly or adversely impacted by the limited public use of Wells Island. The following listing describes those categories and resources which possess no potential for being significantly or adversely impacted.

<table>
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<th>RESOURCE</th>
<th>REASON</th>
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<td>Mineral and Aggregate Resources</td>
<td>No important mineral or aggregate reserves have been identified on the island.</td>
</tr>
<tr>
<td>Energy Sources</td>
<td>No energy sources or resources have been identified on the island.</td>
</tr>
<tr>
<td>Wilderness Areas</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Historic Areas, Sites, Structures and Objects</td>
<td>No historic structures or objects have been identified on Wells Island nor is the island part of a specific historic area or site.</td>
</tr>
<tr>
<td>Cultural Areas</td>
<td>No cultural areas have been identified within Hood River.</td>
</tr>
<tr>
<td>Potential and Approved Oregon Recreation Trails</td>
<td>There are plans for a potential trail through Hood River which will connect to the Columbia Gorge Trail. The specific site has not yet been determined, though the tentative plan is to come into the urban growth area via Post Canyon Road and connect to Country Club, then to Cascade. This would not affect Wells Island.</td>
</tr>
</tbody>
</table>
Potential and Approved Wild and Scenic Waterways

None exist or are proposed within the planning area.

Water Areas, Wetlands, Watersheds and Ground Water Resources

There are no identified significant watersheds or ground water resources. The island is surrounded by the Columbia River, a major water area. However, the intended use will not negatively impact the quality or size of the water area.

Ecologically and Scientifically Significant Natural Areas

Much of the area of ‘willow forest’ (shown in the vegetation map later in this document) could be classified as wetland. The under-story is dominated by reed canary grass, a hydrophytic species indicative of wetlands (Cowardin et al. 1977). The development plan does not call for alteration of any of the willow forest-reed canary grass areas.

Resources Potentially Impacted

The limited public use of Wells Island under the management of the Port of Hood River may affect the location, quality or quantity of the following Goal 5 resources:

- Fish and Wildlife Areas and Habitats
- Outstanding Scenic Views and Sites
- Fish and Wildlife Areas and Habitats

Habitats

Wells Island is the largest of the 21 islands (excluding its two satellite islands) that exist in the Bonneville Pool of the Columbia River, and it is the only island complex with extensive stands of large willows and cottonwoods (island count and habitat information are derived from examination of air photo maps in Tabor (1976b). Wells Island is also the only island in the Bonneville Pool which contained grazed pasture according to Tabor (1976b). Habitats on the other 20 islands are as follows: 1 with coniferous-broadleaf tree mix, 2 with douglas fir, 9 with rock, 1 with grassland-oak, 1 with grassland, oak-douglas fir and douglas fir which is also a residence (18 mile island), 4 with rock and grassland, 1 with grassland, and 1 with small willow habitat (Tabor 1976b). Habitats of the Wells Island complex are shown in Exhibit 1. These habitats were classified and mapped in the
field during site visits in December 1984 and January 1985, and are shown in more detail than the map in Tabor (1976b).

The most abundant habitat on Wells Island complex is large willow forest. This habitat occupies the lowest portions of Wells Island, and all of the two smaller islands of the complex. Other trees and shrubs present include scattered cottonwoods, black locust, Oregon ash, elderberry, hawthorn, wild rose, himalayan blackberry, trailing blackberry and snowberry. There are two distinguishable types of understory in the willow habitat. In the wetter sites, reed canary grass and sedges are the dominant species. Reed canary grass also dominates the western and southern shorelines of Wells Island. In two other areas, the region of the great blue heron rookery and the extreme northeast corner of the island, dense thistles and stinging nettles, which probably were up to 5 feet tall during late summer dominate the understory.

Large cottonwood forest is the other forest type on Wells Island. This forest occupies higher elevations and knolls on the northeastern portion of Wells Island. Other species in this forest type include black locust, Oregon ash, scotch broom, himalayan and trailing blackberries, snowberry and wild rose. Little ground cover vegetation was evident in this forest type, however, many herbaceous species are not detectable during one winter. Several large (24 in dbh) cottonwood snags are present. Some of these snags have cavities which may be suitable for use by nesting wood ducks, mergansers, or owls. Smaller cavities excavated by woodpeckers are also present in snags and living trees. Many large cottonwoods along the north shore of Wells Island have been or are in the process of being cut down by beavers. Smaller cottonwood shoots (1-2 inches in diameter) in this area show evidence of being repeatedly cut to 3-6 inches in height by beavers, and were probably also browsed by cattle. The nearly total lack of small and intermediate sized cottonwoods indicates that grazing (and possibly beaver activity) has suppressed cottonwood reproduction for a number of years on Wells Island. This lack of smaller cottonwoods has forced the resident beaver population to rely on the much larger mature cottonwoods for food. Little evidence of use of willows by beaver was observed.

The upland meadows, classified by Tabor (1976b) as pasture, contain a variety of grasses and forbs, but do not include significant amounts of reed canary grass or other wetland indicators. Goose droppings, many of which were fresh, were common in areas where the meadow grasses were less than 3 to 4 inches tall.

Invading cottonwood and willow sprouts, some of which reached heights of over 6 feet this summer in the absence of grazing, are abundant in the upland meadows of the western portion of the island. Meadows on the eastern portion of the island support tall grasses, thistles, and cottonwood and willow sprouts. Invading cottonwood and willow sprouts are not as common in the eastern portion of the meadows. The boundary between the upland meadows and the willow forest and reed canary grass understory are quite abrupt in the southern part of the island.
An intergrade between the meadow and willow forest type, termed meadow savannah, extends through the center of the western part of Wells Island. Scattered willows, black locusts and hawthorns, and dense, tall cottonwood and willow shoots are present in this area. Ground cover consists predominantly of reed canary grass and sedges.

Wildlife

The most conspicuous wildlife values of the Wells Island complex are the great blue heron rookery and the nesting population of Canada geese.

Great Blue Heron Rookery

The location of the heronry is shown on Exhibit 1. The reason that this portion of the island was selected by nesting herons is unknown. This site supports the largest willows on the island, and herons are known to select larger trees for nesting (Taylor et al. 1982). This portion of the island is also farthest from the old homesite, which was a potential source of human disturbance. As great blue herons have been known to abandon nest sites subjected to disturbance (Jackman and Scott 1975, Werschkul et al. 1976), avoidance of disturbance from the homesite may have also been a factor.

The quantity of nests in a rookery varies from year to year, and even between pre- and post-breeding seasons in the same year (Taylor et al. 1982). At least 27 nests were counted in the Wells Island rookery in January of 1985. Several (3-5) of these nests were much smaller than the rest. The presence of inactive nests within a heron rookery appears to be typical (Werschkul et al. 1976, Taylor et al. 1982). The spatial arrangement of nests in the Wells Island rookery is also shown schematically on Exhibit 1. Approximately 18-20 of the nests are in 4 or 5 large willows (with 4-6 nests per tree) in the northwest corner of the rookery area. Another, smaller cluster of 6-8 nests is in three trees located 30-40 meters to the east of the main colony. One additional satellite nest is located in the southeast corner of the rookery. This is the only nest in a cottonwood, the remaining nests are in large willows. This arrangement of nests, a large main colony with several satellite nesting areas, is very similar to that of the great blue heron rookery at Indiana Dunes National Lakeshore studied by Taylor et al. (1982).

According to Jim Torland, Oregon Department of Fish and Wildlife (ODFW) District Wildlife Biologist, although as many as 30 herons were counted in the rookery, approximately seven or eight active nests could be documented during 1983 and 1984. Approximately 20 young were produced in 1983 (based on a helicopter survey) and the number of young produced in 1984 was thought to be similar, however, an exact count could not be made from the ground in 1984 (Torland, Pers. Comm. 1985). Tabor (1976b) reported heron activity in the large willows of Wells Island in 1975. At least some of these herons winter in the area, as 8 and 13 adults were seen, respectively, during the December 1984 and January 1985 field visits.

The quality of this heron rookery can be assessed by viewing it in regional and local perspective. Ten rookeries are known to exist along the 300 miles of the Columbia River
between the Pacific Ocean and McNary Dam (The Nature Conservancy 1979). The Wells Island rookery is among the smallest of these rookeries. The nearest other heron rookeries are located 43 miles downstream and 107 miles upstream of Wells Island. Unfortunately, detailed historical information on this rookery is lacking, and the age of this colony is unknown. According to Tabor's (1976b) observation, this rookery is at least 9 years old. Of the 21 islands in the Bonneville Pool, only four in addition to Wells Island support trees of sufficient size to provide potential heronry habitat. One additional island, 18 Mile Island, supports a small stand of trees, however this island contains a residence within 100 yards of the trees. Heronries are often located near good food supplies in shallow waters (Jackman and Scott 1975, Webb and Forbes 1982), and none of the other four possibly suitable islands have nearby shallows as extensive as those present in the vicinity of Wells Island. All of the above gives the impression that the rookery on Wells Island is a rather unique, high quality resource that exists in an area where suitable nesting and/or feeding habitat may be very limited. The fact that this rookery persists and that young are produced regularly indicates that the birds in this colony have habituated to the existing level of disturbance produced by grazing, the former human occupants, barge traffic, pleasure boaters and wind surfers.

Canada Geese

The locations of Canada goose nests found on Wells Island by Jim Torland of ODFW in 1984 are shown in Exhibit 2. The two smaller islands were not surveyed, but probably also supported nesting geese. The apparent concentration of nests on the western portion of Wells Island may be a result of disturbance by human activity and a lack of cover due to cattle grazing, rather than indicating that the habitat of the eastern portion of the island is intrinsically less suitable than that of the western portion.

The quantity of nests probably varies from year to year, and Jim Torland of ODFW estimates that as many as twenty pairs of Canada geese may have nested on the island complex in 1984. Twenty broods totaling 80 goslings were observed in 1983, and 10 broods totaling 49 goslings were counted in 1984 (Torland, Pers. Comm. 1985). During the December 1984 field visit, approximately 70 Canada geese were counted in the Wells Island area, and goose tracks were abundant on the beach at the east end of the island. Wells island is classed as a year-round concentration area for geese (Tabor 1976a:281).

The quality of the goose nesting habitat at Wells Island is high, as evidenced by the habitat characteristics of the island. Wells Island is the only site in the Bonneville Pool (RM 146-192) containing both nesting and brood-rearing habitat. Canada goose nests were found on 16 other islands in the Bonneville Pool in 1975 (Tabor 1976a:299). Some of these islands were quite small (25 feet across) and may not have been included in the count of 21 islands derived from aerial photographs in Tabor (1976b). Tabor (1976a:312) reported that Canada geese used rather “unique nesting habitat” in the Bonneville Pool, compared to other portions of the Columbia River between RM 1-300. Only four other islands in the Columbia River between RM 80 and 281 are listed as brooding areas by Tabor (1976a:301).
LEGEND

- CITY LIMITS BOUNDARY
- GOOSE NEST LOCATIONS

BIRD NESTING LOCATIONS

EXHIBIT 2
The remaining 14 areas suitable for brooding by Canada geese between RM 80-281 are located on the shoreline. Brooding habitat for Canada geese was described as very limited in the Bonneville Pool (Tabor 1976a:313), with Government Cove (RM 152), an embayment at Starvation Creek (RM 159), Well's Island (RM 167), Washington shoreline (RM 183) and Oregon shoreline (RM 198) the only brooding areas identified. Tabor (1976a:742) reported in conclusion that goose brooding areas in the Columbia from the Pacific to RM 300 “may be in critically short supply at present.” In conclusion, it appears that Wells Island is a rather unique and important resource for nesting, brooding and wintering geese in both a local and regional sense.

Other Wildlife Species

Although the great blue heron rookery and Canada goose nesting populations are the most conspicuous species utilizing the island, numerous other wildlife species are present on and near the island at various times of the year. During the December 1984 site visit, three Bald Eagles (one adult and two juveniles), which are classed as Threatened in Oregon, were observed perched in cottonwoods on the eastern end of the island. These birds were probably attracted to the concentration of waterfowl and waterbirds in the bay and around the island. During that visit, 70 Canada geese, 20 mallards, 20 American wigeon, 4 hooded mergansers, 8 buffleheads and approximately 100 American coots were observed in the near vicinity of the island. Wells Island is classed as a winter concentration area for dabbling ducks (Tabor 1976a:281).

During the January 1985 visit, approximately 20 Canada geese and a total of 50 other birds, including scaup, hooded mergansers, mallards, American wigeons, American coots and common mergansers were observed in the bay near the Columbia River south shore. A juvenile red-tailed hawk was also observed on the west end of the island. The hawk was starting to feed on a Canada goose it had apparently killed that morning, as the goose carcass had not yet developed rigor mortis. Other wildlife species or identifiable signs observed on the island during the December 1984 and January 1985 site visits included muskrat, voles, downy woodpecker, dark-eyed junco, winter wren, fox sparrow, northern flicker, rufous-sided towhee, and chickadees.

Outstanding Scenic Views and Sites

There are two scenic values to be considered. One is the scenic value of the island itself from the mainland or from the Columbia River. The other is the scenic value of the view of the Columbia River from Wells Island.

Wells Island has limited visibility from the Oregon mainland. It can be seen briefly from the west-bound lanes of I-84, from West Cove, and from the top of the large ridge south of the river. The Island is visible from the Columbia River and from the Washington shoreline. Public visibility of the island is, therefore, extremely limited. However, when it can be seen, it is a good example of vegetative species common to the Gorge and is visually attractive component of the Gorge.
More attractive, however, are the scenic views of the Columbia Gorge from the island itself. The location of those sites and the view they provide are illustrated on Exhibit 2. The quantity of those sites is also illustrated on Exhibit 2. The quality of any scenic view of the Columbia Gorge can be characterized as spectacular or magnificent. Presently, these views are virtually unavailable to the public since there is limited access to and no improvement of Wells Island.

ECONOMIC, SOCIAL, ENVIRONMENTAL AND ENERGY CONSEQUENCES

There are two Goal 5 resources, wildlife habitats and scenic views, which may conflict with the Port of Hood River's intended use of Wells Island. Therefore, the relative value of these resources and the Port's intentions must be weighed to determine the appropriate use of the island.

The Port of Hood River has developed a Master Plan for Wells Island. The Plan includes:

- Controlled access to the island via ferry.
- Two buildings to house a Columbia Gorge Interpretive Center, conference facilities, kitchen and display areas.
- Designated nature trails providing access to the nature attractions of the island and views of the Columbia Gorge.

No developments are contemplated for the two smaller islands to the south.

A. Economic Consequences

1. Wildlife Resource

It is difficult to assign specific economic values to wildlife resources. The US Fish and Wildlife Service (USFWS(1982)) reports that in 1980, 85,000 Oregon residents spent 689,000 days hunting migratory birds. The average migratory bird hunter spent 7 days hunting. This represents 26% of all Oregon hunters, and 14% of all hunter days spent. Migratory bird hunters in the U.S. spent a total of $637,949,000.00 in 1980. Average expenditure per hunter was $120.12, with an average of $15.00 spent per day. The majority of hunters were residents of towns and rural areas. Of the average expenditure, transportation costs comprised 30%, food and lodging comprised 25%, equipment costs comprised 36%, and fees and other expenditures comprises the remaining 9% of the total spending.

More specific information on the value of waterfowl hunting was obtained from Lou Nelson (Idaho Department of Fish and Game, Boise, Pers. Comm. January 18, 1985). Mr. Nelson is involved in a cooperative study with the USFWS, BLM, and University of Idaho. The final report is in press, and will be published by the Rocky Mountain Forest and Range Experiment Station in Fort Collins, Colorado. The study consisted of interviews of 7,500 hunters and fishers in Idaho. The study estimates that for a 12 hour day of waterfowl hunting, the average hunter
was willing to spend an additional $121.00 net value above and beyond what was already spent. Similar data on nonconsumptive wildlife use were not available.

In 1980 in the U.S., expenditures for nonconsumptive wildlife-associated recreational activities totaled $14.7 billion, of which 73% was spent on equipment. Food, lodging and transportation expenses comprises 27% of the total. Average expenditures were $139.00 per year and $11.00 per day. Expenditure averages were higher in the Pacific region, with a yearly average of $199.70 and daily average of $14.69 spent per participant. These yearly and daily data compare favorably with the hunting data presented above, and the total expenditures exceeded that of hunters.

Nonconsumptive wildlife users in 1980 represented 59.5% of the total population of the Pacific region (Oregon, Washington and California). In the Pacific region, the average number of days spent observing wildlife per year was 13.47, while an average of 8 days were spent photographing wildlife, 11 days were spent feeding wildlife, and 4.79 days were spent scouting. Of those taking trips that included nonconsumptive wildlife use, 85% of the participants visited any public area, 43.2% visited local or regional parks or natural areas, 48.9% visited state-owned areas, 21% visited National Wildlife Refuges, and 43.9% visited other federal areas. These percentages do not add up to 100% due to multiple responses by the participants. Of the types of wildlife observed, songbirds, birds of prey and waterfowl were observed by 60% or more of the participants.

It is obvious from the above that both consumptive and nonconsumptive uses of wildlife provide a large quantity and variety of economic benefits to communities such as Hood River.

There is a dilemma, however, inherent in exploiting such wildlife resources. The dilemma is that without proper management of the rich wildlife resources, which are attractive to visitors and thus a source of potential income to the community, increased and uncontrolled visitation or improper development will deplete or eliminate the same wildlife resource that made the site attractive to visitors in the first place. Overcrowding of such facilities also reduces the quality of the experience of the visitor, who is often searching for a quiet place to observe undisturbed wildlife or scenery without interference from other visitors.

With strict limitation of the number of visitors and areas open to visitors, and with careful scheduling and design of facilities, the geese and herons can continue to provide opportunities for wildlife viewing on the island.

2. Scenic Views

The scenic beauty of the Columbia Gorge is one of Oregon's major tourist attractions drawing some 2 million visitors annually. Wells Island is not visible from most areas of Hood River and is only briefly visible from the westbound
lane of I-84. In addition, the visiting public is not necessarily aware that the island exists. Therefore, there is no precisely measurable economic value attributable to the scenic value of Wells island.

The scenic view of the Columbia Gorge from Wells Island is also a valuable resource. However, since the island is not accessible to the public, no economic benefit is derived from this resource.

3. Port-Managed Limited Public Use

The improvements to Wells Island planned by the Port of Hood River and the subsequent managed public use of the island will result in a needed, unique facility which will be an economic asset to the community. The 1983 Travel Advertising Study prepared by the Tourism Division of the Oregon Economic Development Department provides the following facts:

a. Twenty-three percent (23%) of the visitors to Oregon spend most of their time in the Portland, Columbia Gorge, Mt. Hood Area. They stay an average of 6.3 days.

b. Fifty-three percent (53%) of visitors to Oregon seek out historic places and museums during their travels.

c. Thirty percent (30%) enjoy scientific or natural history.

d. Each visitor spends an average of $30.00 per day.

e. Each party, (consisting of 2.75 people) spends approximately $82.00 per day.

f. Eighty-eight percent (88%) travel by car or other private, individual vehicle.

g. Of the visitors who specifically seek out the Gorge area, 57.6% do so for historic places and museums while 31.9% are interested in scientific and natural history.

The City of Hood River has identified “trade leakage” (the difference between what could be sold and what is actually being sold) and seasonal unemployment as two economic deficits, while increased tourism and recreational development is identified as a “pronounced comparative economic advantage”. The Mid-Columbia Economic Development District (MCEDD) 1982-83 Annual Report notes that:
“In order to increase local revenue, employment opportunities and economic diversification, the tourism industry in the District should be expanded.” (Page 43)

“Tourism, if properly developed, could become a larger employer and revenue producer.” (Page 30)

“The District should be the forum for a coordinated effort of Ports, Chambers, Counties, Cities and local development corporations to stimulate new development and job opportunities.” (Page 39)

There is no facility in the Columbia Gorge region, under either public or private management, which provides an interpretive experience of the various plant and animal communities and natural history of the Gorge. A significant number of tourists visit the Gorge area each year and most seek experiences which provide museum, natural history and low-intensity recreational uses. The local economy suffers from a reliance on a timber and agriculture dependent industries and needs to diversify its economic base. Enhancing tourism by promoting the natural beauty of the Gorge is an important and preferred method of achieving this diversification.

Finally, nonconsumptive wildlife users spend $14.69 per average day per participant. Therefore, there is a clear economic value to maximizing the use of Wells Island for this group of visitors.

B. Social Consequences

1. Wildlife Habitat

Although Wells Island is not now accessible to the public, there is a positive social benefit of the habitat area to user groups off the island. The birds which nest or feed on the island do travel elsewhere in the Gorge where they are enjoyed by both bird watchers and hunters. This recreational use is a social value.

2. Scenic Views

Again, there are no tangible social consequences of the existence of the views of the Columbia Gorge from Wells Island, since those views have been only minimally available to the public for many years. Social consequences of the scenic view of and from Wells Island are difficult to identify since it is a resource that is not commonly known about or used by the general public. There maybe an intangible consequence in that people know or feel there is an undamaged and remote scenic view. There may also be an intangible consequence regarding anticipation. That is, people know or feel a scenic view exists and hope that someday, under conscientious management conditions, that view will be available to them.
3. Port-Managed Public Use

Under Port stewardship, social consequences discussed above will be enhanced. That is, rather than local residents vicariously appreciating the resource values of Wells Island, they could experience them first-hand. In addition the interpretive facility and associated nature trails will provide residents and visitors with information and experiences not now available to them anywhere in the Gorge. This information, once obtained by residents, helps to foster a sense of community pride. Community pride will also be enhanced when residents realize that many people from many miles away will come to Hood River to visit a facility and have an experience which is unique.

An additional social consequence is that mobility impaired persons will benefit from Port-Managed Public Use of Wells Island. Many of the existing attractions in the Columbia Gorge are not easily accessible to handicapped persons and senior citizens. The facilities on Wells Island will be accessible to such persons, resulting in a positive social consequence of the proposed use.

C. Environmental Consequences

The impacts of the development proposed for Wells Island are assessed below. Several distinct types of impacts, with different temporal characteristics and causes are identified and discussed below. Short-term impacts typically occur as a result of, and only during construction, ceasing shortly after construction is complete. Examples of short-term impacts include construction-related increases in human activity, noise, and boat traffic between the shore and the island. Long-term impacts are typically caused by changes brought about by the proposed development, and can be expected to persist throughout the life of the project. Examples include permanent loss or alteration of habitat, creation of new habitat, and increased levels of human activity on and near the island.

Direct impacts are those directly resulting from the project, which would include all of the examples given above. Indirect impacts are those likely to occur in the future as a result of additional development on or near the island which are induced or attracted by the initial development. Examples might include pressure to construct additional development on the island or the bay shoreline to the east and south.

Direct, short-term impacts expected to result from construction of the planned interpretive center are primarily represented by increased noise, human and boat activity on and near the island. Construction activity on the island would also prevent nesting by Canada geese in the vicinity of the proposed development. As no such construction is planned in the vicinity of the heron rookery, no adverse impacts are anticipated. Construction could, however, interfere with heron feeding activities in the vicinity of the island.
If sewer and water lines are installed from the shoreline to the island, additional noise, boat traffic, and sediment loading of local waters will occur over the short term, with the same probable effects as described above. The severity of these impacts will depend on the construction methods used. These should cease once installation is complete.

Direct, long-term impacts include permanent loss of goose nesting habitat in developed areas (roads, lawns, buildings and associated facilities) and increased levels of human disturbance on the eastern end of the island. These levels of disturbance may be sufficient to eliminate goose nesting from the eastern portion of the island, as nesting and brooding Canada geese are sensitive to human disturbance (Hanson and Everhardt 1971:49). Hanson and Eberhardt (1971:22) found, in a series of experimental studies of island nesting Canada geese, that approximately 20-50% of nesting females were likely to desert their first nest if they were disturbed during the egg-laying or early states of incubation. Geese which were well into the incubation period were, however, quite tolerant of disturbance by survey personnel. Nature center visitors may be more disruptive to nesting birds than trained personnel. Most of the geese which abandoned nests as a result of disturbance did attempt to renest after a delay of one or two weeks (Hanson and Eberhardt 1971:24-25). Reproductive success of renesting waterfowl, however, is typically much lower than that of birds with successful first nests (Bellrose 1978).

Unless a program of mowing or grazing the meadows of the island is instituted and maintained, these meadows will be invaded by taller grasses, trees, and shrubs. Loss of these meadows would mean that the important Canada goose brooding habitat of Wells Island will be lost. This loss would most probably cause a permanent reduction in local goose populations unless new brooding and nesting habitat is created to offset the loss caused by development of the interpretive center and its associated activities, as brooding habitat appears to be quite limited in the Bonneville Pool (Tabor 1976a).

Increased human activity on the island could also adversely affect the great blue heron rookery if strict access controls are not implemented to protect the colony from disturbance. As stated earlier, this particular heron colony has apparently become habituated to the previous level of disturbance on the island. Great blue herons are somewhat flexible and adaptable to disturbance, as colonies are known to exist in relatively isolated areas along the Oregon and British Columbia coasts (Werschkul et al. 1976, Mark 1976) as well as heavily used recreation areas in Indiana (Taylor et al. 1982) and Vancouver, British Columbia (Mark 1976). In 1981, a new heron colony was established in a row of cedars bordering the parking lot of a motel on Sea Island near Vancouver International Airport in British Columbia (Webb and Forbes 1982).

Examination of the report by Taylor et al. (1982), and conversations with Mr. Taylor and Jim Torland of ODFW in January 1985 indicate that great blue herons at Wells Island and Indiana Dunes National Lakeshore are sight-oriented when it comes to human disturbance. Taylor et al. (1982) reported that observers in a blind could carry on conversations in a normal tone of voice, and that groups of visitors conversing in normal tones of voice could approach the Indiana rookery without disturbing the herons as long
as the people were not visible to the herons. Jim Torland (ODFW) also reported that the Wells island herons were not disturbed by his presence until he was visible to them.

Increased human activity in the vicinity of the shallows south of the island could reduce the amount of time herons could spend feeding there, thereby effectively reducing their food supply, with adverse effects similar to those described above.

The proposed ferry to be used to transport visitors between the shore and the island would operate on a cable. This cable will be at an undisclosed level above the water surface. The cable could pose a hazard to flying birds, and could cause increased collision mortality and injury to birds in the area.

Finally, owing to the discussion of impacts given above, construction and operation of an interpretive center on Wells Island will preclude future use of the island as a wildlife mitigation area. Wells Island is being considered as a prime candidate for a mitigation-enhancement site under the Columbia Basin Fish and Wildlife Plan adopted by the Northwest Power Planning Council, and implemented by the US Fish and Wildlife Service and ODFW.

Although the Port of Hood River intends no development beyond what has already been described, indirect impacts, in the form of additional development on or near Wells Island, may be induced by construction of the interpretive center on the island. Increased human and boating activity on and near the island could be sufficiently severe to cause permanent abandonment of all goose and heron nesting activity on the island, and reduction of the numbers of waterfowl wintering in the vicinity.

Mitigation of Adverse Impacts

Most of the adverse impacts described above can be avoided through either management or creation of new habitat in a mitigation area to offset expected losses.

Specific mitigation recommendations are listed below.

1. Establish and enforce a visual buffer zone around the great blue heron rookery during the time the rookery is active (approximately February to August, see below). A proposed buffer zone is illustrated on Exhibit 1. This buffer zone was drawn during the January 1985 site visit. The boundary represents the distance at which the heron rookery is screened from view by vegetation. The final buffer zone should be drawn in consultation with ODFW personnel.

2. Implement a mowing or grazing program during approximately July-September to maintain the meadows on the islands in short grasses suitable for goose brooding. Grazing would probably be the most cost-effective alternative.

3. Construct a new island downstream of Wells Island. Design this island to be connected with a mosaic of shallow areas and deeper pools to provide additional
feeding habitat for ducks and herons. Seed this island with a mixture of forbs and grasses to provide goose nesting and brooding habitat. Graze or mow this new island to maintain brooding habitat. Place rocks and/or driftwood randomly throughout the island to provide cover for nesting and brooding geese.

4. Establish a long-term program to monitor nesting populations and breeding success of the heron rookery and Canada geese. This monitoring program should begin in February or March of 1985 and include at least one year of pre-construction monitoring to determine baseline conditions.

5. Eliminate visitation completely during the egg-laying and early incubation periods of the herons and geese. Detailed information on these dates will be obtained from the monitoring program. The literature indicates that herons begin courtship in February with eggs laid in early March; and Canada geese nesting begins around the first week of March, or when average daily temperatures reach 5 C (40 F) and continues through the second week of May (Henney and Bethers 1971, Tabor 1976a, Hanson and Eberhardt 1971).

6. Schedule construction during August to January, as much as possible to avoid disturbance to nesting geese and herons.

7. Permit only single small groups (15 or less) accompanied by guides to tour the island trails at one time between the end of the early nesting season (second week of May) and the end of June, the approximate end of the incubation and early rearing period for herons and geese. These dates should be adjusted, if necessary according to the results of the monitoring program.

2. Scenic Views

The environmental consequences of the existing view of and from Wells Island are generally positive. The view of the island is limited but attractive. The view from the island is not now available to the public so that its value, although positive, is not being realized under the present situation.

3. Port-Managed Public Use

There will be a limited negative environmental consequence of the Port's use of Wells Island in that as many as four identified Canada Goose nests could be disturbed since they are in the area of the intended Interpretive/Conference Center. However, the nests may be relocated to another portion of the island. Additionally, there are positive environmental consequences of port-managed public use. The Port will manage the island in such a fashion that the grazing resource is enhanced rather than lost. Management practices will also prohibit public access to sensitive portions of the island during nesting seasons of the year. The Port will also prohibit public access to the two smaller islands to the south which could enhance the nesting values there. In addition, the Port may be able to
create an additional small nesting island south of the main island. According to the Oregon Department of Fish and Wildlife there is a need to create nesting islands in the Bonneville Pool to enhance the production of water fowl.

There is an additional intangible positive environmental impact resulting from the Port's managed public use of the island. The Port's intent is to create an educational, low-intensity recreational program on Well's Island. It will focus on the significant environmental and historical aspects of the Columbia Gorge. Visitors to the island will gain a broad understanding of the environmental interplay within the Gorge that is not now available elsewhere. This knowledge is likely to result in a greater sensitivity to environmental considerations and could enhance the long term preservation of those values.

D. Energy Consequences

1. Wildlife Habitat

There are no existing or planned energy resources or expenditures which would affect this value.

2. Scenic Views

There are no existing or planned energy resources or expenditures which would affect this value.

3. Port-Managed Public Use

The only energy consequence will be the use of a small amount of energy (mostly hydro-electric) in the construction, maintenance and use of the facility on the island. However, it will not have a significant effect on local or regional energy supplies or the use of non-renewable energy sources.

CONCLUSION

Oregon Administrative Rule 660-16-000 outlines the procedures for complying with Goal 5 and permits a jurisdiction to allow a conflicting use fully based on an analysis of environmental, social, economic and energy (ESEE) consequences. Based on the above analysis of the ESEE consequences, allowing the proposed Port-managed public use of Wells Island would provide the best overall benefit to the community of Hood River. The policies in the Comprehensive Plan and the implementing measures in the Zoning Ordinance will assure that the limited negative consequences will be outweighed by the positive contribution Port-managed public use of the island will make to habitat and scenic values inherent there.
REFERENCES


2. Proposed Policies and Implementation Strategies

Add Policy No. 15

Wells Island will be managed in order to conserve, enhance and interpret the natural values of the island and the Columbia Gorge while providing the public with opportunities to experience and learn from those values.

Add Implementation Strategy No. 8

Wells Island will be managed as set forth in Section 14A and 5B of the Background Report. The following policies will govern the use of the island.

- Lost goose nesting habitat will be mitigated through the creation of a nesting island as described in Section 5B of the Background Report.

- Because herons are sensitive to visual rather than audible disturbances, a portion of the island visible from the rookery will not be available for public access. Rather, the rookery will be visible from a viewing area. This is illustrated on the Management Plan.

- A long-term program to monitor nesting populations and breeding success of the heron rookery and Canada geese will be established and begin at least one year prior to any construction on the island.

- Access to the interpretive trail system will be by guided groups of not more than 15 persons between the end of the early nesting season and the end of the incubation and early rearing period for herons and geese (approximately second week in May through end of June).

- Public access to Wells Island will be eliminated during the egg-laying and early incubation periods of the herons and geese (approximately early March through second week in May).

- The meadow areas of the island will be maintained in short grasses suitable for goose brooding.

- Construction relating to prescribed uses on Wells Island will be scheduled between August and January, as much as possible, to avoid disturbance to nesting geese and herons.

- Access to Wells Island will be limited to pedestrians, service and emergency vehicles.

- Structures on the island will be designed to be rustic in appearance with sensitivity to maintaining the scenic value of the island.
Public facility extensions (particularly City sewer and water lines) will be minimally sized to serve only the uses described in Section 14A of the Background Report.

B. GOAL 14: URBANIZATION

1. Justification of Inclusion of a Portion of Wells Island in the UGB – Proposed Addition 14A to the Background Report

The Port of Hood River has prepared a plan for limited public use of Wells Island in order to respond to the tourist and cultural needs of the local area and the region. Exhibit 3 graphically illustrates the intended uses.

Access to the island will be via a cable-stayed ferry for pedestrians and emergency and service vehicles only. The ferry will leave from the west end of West Cove and dock on the east end of Wells Island, approximately 900 feet away. Once on the island, visitors will travel by path to the small conference building or natural interpretive museum. The interpretive museum will also have a botanical garden which will contain many plant species common in or unique to the Gorge. The museum will house a variety of exhibits designed to display and explain the many natural features of the Columbia Gorge and will particularly focus on the species found on the island and the habitat conditions that accommodate them. Wells Island provides a unique environment for many small mammals and bird species which cannot be witnessed elsewhere in the Gorge.

A well planned and strictly managed trail system will guide visitors to scenic views of the Gorge, unique habitat areas, and animal species on the island. The trail system has been carefully planned so as not to intrude on fragile habitat areas or animal colonies while at the same time providing a unique visual experience. Access to some portions of the island will be prohibited during nesting seasons. Guided tours will be available.

A small caretaker residence is planned for the island so that all rules of behavior on the island will be followed.

As with the trails system, the location of the buildings was chosen so that important habitat areas would not be threatened. The conference facilities will have space for up to 150 people and a kitchen. A small utility road from the ferry dock to the caretaker’s residence and conference facilities will allow for the transport of tools and supplies. All facilities will be accessible to the handicapped.

This design for public use of Wells Island specifically provides for needs that are not accommodated elsewhere. The trail system provides both physical and visual access to the River which does not now exist in the Gorge. The Interpretive Museum will provide visitors with an understanding of plant and animal species in the Gorge and their interdependencies. Guided interpretive trails will enhance this understanding even further. The conference facility will serve
both local and regional needs by providing a moderate sized facility, easily accessible but away from distractions and centrally located in the region. Conference groups can take advantage of the interpretive facilities resulting in a service which will draw people to the area.

In order to develop these facilities to meet these identified needs, a portion of Wells Island must be included in the UGB. Following is a discussion of the Goal 14 factors pertaining to this project.

THE NEED TO ACCOMMODATE URBAN POPULATION GROWTH REQUIREMENTS, EMPLOYMENT AND LIVABILITY

The background document for the City of Hood River Comprehensive Plan includes population projections as well as calculations of land use needs to accommodate that projected urban population growth. According to those calculations, up to 137 acres of land for open space and public facilities will be needed to accommodate the needs of this anticipated population growth. The City presently has only 60 acres designated to meet this need. Clearly, there is a statistical need to include the subject 25 acres in the UGB to accommodate the projected growth.

Beyond this obvious and accurate statistical need is the regional need to provide facilities which will attract tourist dollars to the Columbia Gorge. This need results from the lagging resource-based local economy as well as from the increased awareness of the as yet unrealized potential of the Gorge to attract tourists and thus diversify the local economy. The proposed interpretive center and conference facility will respond to both the need to accommodate urban population growth requirements and the need for employment and livability in the City and region. These needs are not and cannot appropriately meet at any other location in the Columbia Gorge.

Existing Facilities in the Gorge

Below is an itemization of existing facilities in the Columbia Gorge which include some type of interpretive and conference functions.

Interpretive Facilities

  o Crown Point State Park

Crown Point is located along the Old Columbia Gorge Highway and provides a spectacular view of the Columbia Gorge. The building is open from about May to September and is staffed entirely by volunteers. At the beginning and end of the season, the building is only open on weekends, but is open all week during the height of the tourist season.

The building houses a small retail area featuring books, maps and “Made In Oregon” items for sale to the public. In addition, the main floor houses a small display area featuring photographs and narrative describing the construction of the Columbia Gorge Highway.
The primary purpose of Crown Point is to serve as a view point of the Columbia Gorge.

o Bonneville Vistors Center and Fish Hatchery

The Bonneville Vistors Center is open to the public from 9:00 a.m. to 5:00 pm. daily. It features displays describing the history of the Gorge, the U.S. Army Corps of Engineers and electrical development. There is also a fish viewing window where the journey of fish up the fish ladder can be seen. The facility also has a theatre in which a variety of short, educational films are shown.

The fish hatchery, run by Oregon Department of Fish and Wildlife, is also open to the public. Each step in the hatchery process can be seen and there is also a pond where the public can feed the fish.

Guided group tours of both the Vistors Center and the Fish Hatchery are available by appointment.

o Multnomah Falls

Associated with the lodge and trail system at the Falls is a small-scale interpretive function. Along the trail system, some plants are identified by small markers. In addition, there is a small interpretive area near the base of the falls which describes the geologic history of the Gorge.

o Wyeth Bench

The U.S. Forest Service has commissioned a multi-disciplinary team to develop a site plan for approximately 60 acres to accommodate an Environmental Education/Rustic Retreat (EE/RR) facility. The design is to accommodate three principal user groups.

- Outdoor School Program to function during the spring and fall for public education programs by contracting school districts.

- Adult groups or organizations in overnight conference type settings.

- Family or extended family recreational use.

The intent of the Forest Service is to develop a site and conceptual plan for the area, but to leave the actual physical development and management of the facility to a private party or parties. The Forest Service has not identified any specific steps or timeline to be followed subsequent to the development of the plans. Therefore, development of this site and its final character are unknown. However, the intent (whether actually realized) is to invest over $3’ million in a large-scale recreational development with group environmental education
opportunities. There is no clear concept at this stage regarding type, location and scale of interpretive facilities.

Conference Facilities in the Gorge

- **Hood River Inn**

  The Hood River Inn has conference facilities available to serve a variety of group sizes. The ballroom can accommodate up to 225 people at a cost of $100 per day. A medium sized room with partitions can accommodate between 40-125 people depending on partitioning arrangements. The Inn also has two small meeting rooms with a capacity of 25 persons each. All food service associated with use of the conference facility is catered by the Inn. The Inn is located near the confluence of the Columbia and Hood Rivers. The freeway constitutes a physical barrier between this area and the downtown center of Hood River.

- **Columbia Gorge Hotel**

  The Columbia Gorge Hotel has a large ballroom which can be used to accommodate a conference of up to 250 persons. All food service is catered by the Hotel. The Hotel is located along the Columbia River, west of the Hood River city limits and is, therefore, isolated from Hood River's downtown center.

- **Menucha Retreat and Conference Center**

  Menucha is a large, multi-purpose facility located east of Corbett and north of the Columbia Gorge Scenic Highway. It has been owned and operated by the First Presbyterian Church of Portland since 1950.

  The facility has several buildings which serve a variety of functions including overnight dormitory-type uses, meeting rooms and recreational facilities. The largest meeting area can accommodate approximately 100 persons. The one kitchen and dining area available for group use (as opposed to staff-prepared meals) will serve approximately 30-40 persons. Recreational facilities are fairly extensive and include a swimming pool, courts for tennis, volleyball and basketball, a softball diamond and jogging trails. Although Menucha is in a rustic setting, it does not have any interpretive or museum facilities.

This itemization of interpretive centers in the Gorge shows that these facilities are lacking in several areas.

First, the Gorge is deficient in true natural interpretive centers. Crown Point is primarily a viewpoint with a small retail area and small photo display of highway construction. Since the present facility is operated by volunteers on a seasonal basis, it is not likely that it will be expanded to include a natural interpretive display of any type. Indeed, the State Parks Division has no plans to alter or expand the uses at Crown Point.
Likewise, there are displays of interest at Bonneville, but nothing emphasizing the interrelationship of natural features of the Gorge environment. Although the fish ladder and hatchery are interesting, they provide only limited information regarding the Gorge. There is a small interpretive area at Multnomah Falls, but it only speaks to the geologic history of the Gorge. Wyeth Bench is an unknown quantity at this point, since no money has been allocated past the planning phase, no timeline has been established by the Forest Service, and no clear and specific uses have been identified.

What is clearly lacking in the region is:

- A plant and wildlife interpretive facility focusing on characteristics prominent or unique in the Gorge.
- River-side trails which provide public visual and physical access to unique features in the Gorge.
- Guided exposure to both these features.

The itemization of conference facilities in the vicinity shows that the existing supply is extremely limited both in terms of numbers and services.

In Hood River both the Hood River Inn and Columbia Gorge Hotel have conference facilities. Neither, however, has independent kitchen facilities nor are the conference facilities in any way separate from the primary commercial hotel/restaurant service provided at each. Menucha is in a rustic setting separate from more intense commercial development and does have limited ability to serve groups with independent kitchen facilities. It, however, is not centrally located in the Gorge region. It caters to overnight groups and is limited in its day-use only facilities.

What is clearly lacking in the region is:

- A meeting mini-conference facility separate from more intense commercial uses.
- A meeting, mini-conference facility which is centrally located in the Mid-Columbia region to serve both local residents and tourists to the area.

What is Needed

It is appropriate that this portion of Wells Island be included in the UGB in order to meet a demonstrated need to accommodate long-range urban population growth had the need for employment opportunities and livability. These needs are discussed more specifically below.
Interpretive Center

The existing sites in the Columbia Gorge with any, though modest interpretive facilities have been listed and discussed. It is obvious from this information that there is no facility in the Gorge which provides interpretive information regarding the plant and wildlife richness in the Gorge. The Gorge contains the second largest variety of plant life in the United States. Wildlife is also diverse and abundant (See Section B). Yet there is no facility in the area which attempts to provide this information to the thousands of visitors annually to the Gorge, or to area residents. Fish and geologic history are interesting and pertinent, but do not begin to explain the vast characteristics which make the Columbia Gorge.

In addition to this lack of information, there is also a lack of facilities which provide guided interpretive walks to heighten the learning experience.

Finally, while the Gorge area has several hiking trails, especially in the vicinity of waterfalls, there are no areas in which these trails actually provide access to the Columbia River. I-84 and the railroad tracks result in a physical barrier between these trails and the River. In addition, topography, extensive rip-rapping and abundant private property severely limit public access to the River which is the major visitor attraction.

Nearly 2 million people visit the Columbia Gorge every year. Of those responding to the 1983 Travel Agency Study prepared by the Tourism Division of the Oregon Economic Development Department, 57.6% seek historic places and museums while 31.9% are interested in natural and scientific interpretation and history.

Wells Island is included within the Urban Growth Boundary so that it will be available to meet a very important regional need. Section 9 of this document explains the need to diversify the local economy. Along with maintaining the local resource based economy, it is judged that the enhancement of the tourist industry is vital to the long-term health of the economy. Limited, managed public use of Wells Island would contribute to that goal.

The Port of Hood River commissioned LeBlanc & Company to undertake an analysis of development appropriate to Wells Island. That report noted that the Columbia Gorge region:

“...has not nearly reached its potential as a major tourism area of Oregon and Washington”.

The LeBlanc Report concludes that an Interpretive/Convention Center on Wells Island is
“...highly appropriate for the site. Improvement of Wells Island with such an attraction would clearly add to the overall Gorge tourism assets and enhance Hood River's position in that framework.”

Needed employment opportunities in the local economy will definitely result. Original construction of facilities will provide immediate jobs. Operation and maintenance of the facility could provide approximately three (3) full time jobs and perhaps 10-15 part time jobs. This, however, is not significant when compared to the greater impact it will have on the local economy. Each tourist dollar spent will approximately double in terms of its impact on the local economy. The ability to attract 100-150 thousand visitors to Hood River will have an important positive impact, over the long-term, on the creation of local employment opportunities.

Livability will also be enhanced by the intended use of Wells Island. The values on the island are not now available to the public. The interpretive facility and associated nature trails will provide residents with information and experiences not now available to them anywhere in the Gorge. This information, once obtained by residents helps to foster a sense of community pride and respect for the resource. Community pride will also be enhanced when residents realize that many people from many miles away will come to Hood River to visit a facility and have an experience which is unique. The increased respect for the resource contributes to the overall livability of our environment.

Conference Facility

The existing conference facilities in the area have been listed and discussed. The variety and location of such facilities in the Gorge is extremely limited. There are two commercial hotel/conference facilities in Hood River and the Menucha facility at the western edge of the Gorge.

The Hood River Chamber of Commerce receives numerous inquiries regarding meeting rooms and “mini-convention” or workshop facilities in Hood River. Based on these inquiries, several needs can be identified.

- Many groups are looking for a meeting place which is separate from intense commercial activity. This situation is particularly conducive to one-day professional workshops in which the concept of “retreat” is important.

- Many groups want meeting space which includes access to kitchen facilities which will be under their control. These groups, particularly non-profit organizations, do not desire and cannot afford catered food service which is inherent in most conference facilities.

- Many groups want one-day only workshop type facilities.
Many local organizations are in need of meeting and workshop space. This includes the Community Education Service (a part of local school districts), Mid-Columbia Marketing Association, small business groups, recreation and craft organizations and local professional groups.

Very simply, there is not an existing facility which can accommodate these needs. Hood River is centrally located in the Mid-Columbia Region. The Hood River/White Salmon Toll Bridge and I-84 make it easily and quickly accessible from both Oregon and Washington. Menucha is not centrally located and the two Hood River facilities are not geared for smaller, informal gatherings. According to the Chamber and other local organizations, present demand for such facilities is for up to three (3) conferences per week.

Urban Use - Alternative Locations

Since the public use of Wells Island speaks to a regional as well as a local need, it is important to determine whether these needs can be accommodated outside an Urban Growth Boundary (UGB) or within an existing UGB.

Site Needs

In order to respond to the needs already listed herein, a suitable site must exhibit the following characteristics:

- Access to the Columbia River where mammals and waterfowl make their homes.
- Habitat conditions which are conducive to accommodate a variety of plant and animal species.
- An environment which does not threaten those habitat conditions. That is, a site which is separate from intense urban development.
- Land in public ownership.

Access to the Columbia River is extremely limited in the Gorge. The shoreline is inaccessible for much of its length. I-84 and the railroad tracks serve as a significant physical barrier to the river. In addition, much of the shoreline consists of steep banks with rip rap. This, too, results in a significant physical barrier as well as altering the shoreline such that it is not a suitable habitat for many plant and animal species. Finally, very little of the shoreline is in public ownership. Rooster Rock and Benson State Parks both provide public access to the River; however, neither contains habitats particularly conducive to a variety of plant and animal species. In addition, the established use at these parks is of a higher intensity than is appropriate in conjunction with a natural interpretive facility.
Some access to the river does exist in Cascade Locks and Hood River. However, these locations are within established urban areas, are in higher intensity uses and contain no particularly valuable or unique habitats.

Likewise, islands similar to Wells Island are extremely limited. Section 5B of this Plan reviews other islands in the Gorge, noting that none has habitat characteristics comparable to those found on Wells Island. In addition, access to these islands would be much more difficult to accomplish since boat, ferry or bridge routes would greatly exceed the 900 feet required to access Wells Island and since departure points such as West Cove are not available.

Facility Needs

Uses such as those planned for Wells Island not only require certain site characteristics, but also require support facilities. These include:

- Potable water sufficient for drinking, cooking, dishwashing and fire protection.
- System for the treatment/disposal of waste.
- Public access to the site.

Again, sites in the Gorge which can meet these needs are non-existent. The only other urban area in the Gorge is Cascade Locks. Support facilities are available there but no sites with equal habitat value exist which are feasible for natural interpretive/conference use. Likewise, in Hood River, properties which are served with public facilities have none of the other characteristics necessary for the planned use (habitat area, river access, lack of disturbance from intense urban uses).

There are no sites other than Wells Island in the Columbia Gorge suitable to meet the regional needs discussed earlier. Furthermore, this site must be inside the UGB since it requires support facilities which are most efficiently provided by the City of Hood River.

ORDERLY ECONOMIC PROVISION OF PUBLIC FACILITIES

The primary public facilities necessary on Wells Island are:

- Water for consumption and fire protection.
- Sewage treatment.
- Public access.
Water

Potable water is needed for drinking, cooking and dishwashing on the Island. In addition, water is needed for fire protection purposes.

Presently, there is a 2" waterline extending from the mainland directly north to Wells Island. In order to serve the interpretive/conference facilities, the existing line will be replaced by a 6" looped line. The City has sufficient capacity in its existing water intake and treatment system to supply the island.

This looped system also accommodates the fire protection needs as set forth by the Hood River Fire District. The looped system will assure adequate volumes of water with sufficient pressure for fire fighting purposes. In addition, the Fire District recommends that public buildings on the Island contain emergency sprinkler systems, a precaution which necessitates a municipal water supply.

The 6" looped waterline can be installed to replace the existing 2" line for approximately $25,000. The only option would be to pump water from the Columbia River, treat it on-site and install a pressurized system sufficient to meet fire flow and sprinkling requirements. This option would require a permit to pump from the Columbia as well as a sophisticated on-site system. This option is less efficient than simply replacing an existing line and relying on an existing public system.

Sewage Treatment

This service can best be provided by extending a 4" force main from Wells Island to the city's sewage treatment plant on West Cove. The cost of this service extension would be approximately $125,000. The City's sewage treatment plant has adequate capacity to serve Wells Island.

A traditional septic tank/drainfield system is not feasible on Wells Island. The ground water table over the entire island is extremely high. In addition, DEQ requires that drainfields be setback 100 feet from the river. Since the Corps of Engineers hold a flood easement which affects the majority of the island, there is not sufficient land remaining to accommodate a drainfield of the size needed to support the interpretive and conference facilities.

A holding tank was also considered. However, regulations place a 200 gallon per day maximum on such a facility. This could easily be exceeded with only moderate use of the interpretive/conference facilities. In addition, a system for regular pumping of the holding tank and transport to the sewage treatment plant would be cumbersome and expensive.

Finally, a package treatment plant for the island was considered. However, with an existing sewage treatment plant in close proximity with capacity to treat over twice its current demand, it is not orderly or economic to create an entirely new system.
Access

Access to Wells Island can be accommodated in two fashions:

- Bridge
- Ferry

A bridge from West Cove to Wells Island for pedestrians and service vehicles only would cost approximately $1.05 million. By contrast, a ferry system can be established for approximately $300,000. In addition, the ferry will provide a pleasant experience for visitors, will be more aesthetically pleasing than a bridge and its users are not as subject to weather extremes.

No city streets will be needed on Wells Island. A small service road will be the only road on the island and it will not be available for general public use.

Other Public Facilities

Storm water runoff will not be measurably increased from this use and will naturally flow into the Columbia River. Utilities such as electricity and telephone can be provided either by underwater cable or overhead in conjunction with the ferry cable. In addition, a small generator may be used on the island to eliminate the need for any cable extensions.

MAXIMUM EFFICIENCY OF LAND USE

As has been discussed earlier, the unique nature of the uses on Wells Island requires special land use considerations. The facility must be within a UGB in order to receive city services, provide a needed service to local residents and be easily accessible by the public. At the same time, it must be removed from intense urban uses in order to preserve the natural setting which makes the facility unique and responds to an identified need. Wells Island can be serviced in an orderly and economic fashion. At the same time, the managed, limited public use of the island will assure that the natural values of the island will be preserved and enhanced. This combination of characteristics does not exist elsewhere in the Gorge.

In addition, there is no possibility that this need can be met through “in-filling” elsewhere in Hood River. During the planning process consideration was given to locating the facility on West Cove or in the former Diamond Fruit cannery. However neither location has the natural resource values found on Wells Island, nor can those values be feasibly viewed from either location. In addition, the City has already determined that West Cove is most appropriate for industrial rather than commercial/recreational uses.

Finally, it should be remembered that Wells Island is already within the city limits, has been served with city water in the past and is only some 900 feet from the mainland. Since the Background Report to the Comprehensive Plan identifies the need for approximately 75 additional acres of land for Open Space/Public Facilities, the inclusion of Wells Island in the UGB constitutes maximum efficiency of land use.
ENVIRONMENTAL, ENERGY, ECONOMIC AND SOCIAL CONSEQUENCES

Section 5B of this Background Report contains a detailed analysis of these consequences as prescribed by Chapter 660, Division 16 of the Oregon Administrative Rules. That analysis, conducted by a wildlife habitat expert, concludes that possible negative impacts will be eliminated or mitigated by Port management of the Island.

RETENTION OF AGRICULTURAL LAND

Given the fluctuation in water level in the Bonneville Pool and the remoteness of the island from the mainland, cattle grazing has been the only historic agricultural use of the island. There is no shortage of grazing land in the region and those lands that do exist can be much more efficiently managed than Wells Island. Finally, Wells Island is needed for the proposed urban use.

COMPATIBILITY OF LAND USES

There are no agricultural uses near Wells Island which would be affected by an interpretive/conference facility and associated low-intensity recreational uses.

CONCLUSION

It can be seen from the previous discussion that it is appropriate to include 25 acres of Wells Island in the UGB.

- There is an identified need for approximately 75 acres of Open Space/Public Facilities land to satisfy long-range population growth requirements.
- There is a need for a diversified local economy and increasing tourism has been identified as a method of meeting that need.
- There is a need in the Gorge for a natural interpretive facility, small conference/workshop facility and public trail access to the Columbia River in order to increase tourism.
- Needed public facilities can be provided in an orderly and economic fashion.
- Inclusion of the island in the UGB represents maximum efficiency in land use.
- ESEE consequences have been identified and Port management of the island assures these will be eliminated or mitigated, resulting in a resource which will be increased in value.
- No agricultural land will be lost or negatively impacted.
- There is no other location appropriate for the facilities which will meet an identified local and regional need.
2. Proposed Policies and Implementation Strategies

Add Policy No. 8

The portion of Wells Island inside the City limits shall be included in the UGB as justified in Section 14A of the Background Report.

Add Implementation Strategy No. 7

The portion of Wells Island within the UGB will be given the Plan designation Open Space/Public Land. A special City zone, Tourist/Cultural, will be applied to the island. Uses and conditions stipulated in the TC zone will be consistent with the policies in Goal 5 of the Comprehensive Plan and with the information in the Background Report.

3. Proposed Amendment to Leg 9 of the UGB

Leg 9 of the UGB (revised to read as follows):

At the south shore of the Columbia River, the UGB turns due east and extends approximately 8,200 feet more or less along the low-water line of the Columbia River to the city limits line. Thence, north, approximately 3,300 feet more or less to the Oregon-Washington state line.

C. Comprehensive Plan Map Amendment

We propose that the City's Comprehensive Plan Map be amended, as illustrated on the following page, to designate that portion of Wells Island within the city limits and UGB as Open Space/Public Lands.
Legend:

- City Limits Boundary
- Open Space / Public Lands
- U.G.B.

Washington
Oregon

City Limits Line Following Southern Row of I-84

Legend:

- City Limits Boundary
- Open Space / Public Lands
- U.G.B.

Well's Isl.
Proposed Comp. P Design Name
Exhibit 4
II. ZONING CODE AMENDMENT

A. Proposed Tourist/Cultural Zone (TC) Section 17.03.100

The purpose of the Tourist/Cultural Zone is to establish specific provisions for uses appropriate to Wells Island. This zone will implement the program adopted by the Port of Hood River for the management of Wells Island.

1. Permitted Uses
   
   
   b. Recreational uses such as canoeing, kayaking, sailing, hiking, photography, drawing, painting and nature study. These uses will be permitted as consistent with policies in the Comprehensive Plan and the Wells Island Master Plan in Section 14A of the Background Report.
   
   c. Conference Facility with Kitchen, not to exceed 150 person capacity or 10,000 square feet.
   
   d. Interpretive Display Building, not to exceed 1,800 square feet.
   
   e. One caretaker's residence for the management and maintenance of Wells Island only.
   
   f. Ferry docking and storage facility to provide direct pedestrian service and emergency and service vehicle access, only to and from the mainland.
   
   g. Non-illuminated signs, fencing and trails necessary and appropriate for limiting or directing access or use.
   
   h. Botanical Garden and outdoor instruction area not to exceed 11,000 square feet.
   
   i. Small boat dock and storage shelter, not to exceed 400 square feet.

2. Site Development Requirements

   a. No permanent structures designed for human occupation shall be permitted below the Bonneville Pool Easement.
   
   b. The island will be managed pursuant to the policies of the Comprehensive Plan.
c. All structures and other improvements shall be designed to be aesthetically compatible with the natural character of the Island, respecting the scenic value of the island.

d. No private motorized vehicles will be allowed on the Island except those necessary for construction and maintenance and emergency vehicles.

e. A long-term monitoring program shall be established, commencing at least one year prior to development on the island.

f. No public access to the island will be allowed during the egg laying and early incubation periods of the herons and geese (approximately early March through second week of May).

g. Access to the interpretive trails system will be limited to guided groups not to exceed 15 persons between the end of the early nesting season and the end of the incubation and early rearing period of herons and geese (approximately second week of May through the end of June).

h. To the extent possible, construction will be limited to August through January in order to minimize disturbance to geese and herons.

i. Lost nesting habitat will be mitigated through the creation of a nesting island.

j. The meadow areas of the island will be maintained in short grasses suitable for goose brooding.

3. Setback Requirements

None

4. Maximum Building Height

No structure shall be constructed in excess of 30 feet.

5. Parking Regulations

Parking shall be provided for any utility or maintenance vehicles stored on the Island. No other vehicles shall be permitted on the Island, except in conjunction with specifically permitted building projects and for emergency purposes.

6. Special Considerations

a. All uses shall comply with the Comprehensive Plan.
b. No use will be permitted which threatens the wildlife habitat value of Wells Island, unless mitigation occurs.

c. No use shall be permitted which exceeds an identified seasonal and locational carrying capacity for the Island.

B. Proposed Zoning of Wells Island

We propose that the City's Zoning Map be amended as illustrated on the following page to zone that portion of Wells Island within the City limits Tourist/Cultural (TC). See Exhibit 5.

III. RECOMMENDED ACTIONS

We therefore request the Planning Commission to take the following actions:

- Adopt Section 5B and 14A and include in the Background Report.
- Amend the description of Leg 9 of the UGB.
- Adopt policies and implementation strategies for Goal 5 of the City's Comprehensive Plan.
- Amend the Comprehensive Plan Map to show the portion of the island inside the UGB, designate it “Open Space/Public Land.”
- Adopt a new Tourist/Cultural Zone.
- Amend the Zoning Map and apply the Tourist/Cultural Zone to the portion of Wells Island inside the City limits.
APPENDIX “B”

WELLS ISLAND WILDLIFE MONITORING PROGRAM

A program to be funded and administered by the Port of Hood River to monitor the wildlife populations on Wells Island will be initiated one year prior to the start of construction. The program will be designed to monitor the nesting populations and breeding resources of the heron rookery and Canada geese. The program will be coordinated with the Oregon Department of Fish and Wildlife. The monitoring program will be designed by a qualified Wildlife specialist and will be conducted in accordance with established practices for programs of this nature.

(Underlined words indicate addition to original proposal)
APPENDIX “C”

FINDINGS OF FACT

Growth of Board Sailing in Hood River

During the last three years, Board Sailing has emerged as a rapidly growing sport in the eastern part of the Columbia Gorge. The sport is attracted to this section of the Columbia River because of a unique river current and wind condition. The Columbia River is flowing west at this location, and the wind is generally quite strong and blowing in an easterly direction. These conditions enable a board sailor to begin at Point A (south shore, for example), sail to Point B (north shore), and return to Point A. This type of sailing pattern is particularly convenient to participants because it enables a person to locate their gear and transportation at one location, and yet sail long distances.

The growth of the sport at Hood River is a good indicator of the desirability of these conditions to Board Sailing enthusiasts. During June, July and August, 1985, 287,000 people (over ¼ million) entered the Port of Hood River's Marine Park to swim, board sail, or observe the board sailing activity. On any given sunny, windy day, 500-750 board sailors can be observed on the river from the Hood River Bridge downstream to the Spring Creek Fish Hatchery.

The attractiveness of this area for board sailing is evidenced by the numbers of people involved in the sport, and the corresponding positive impacts on the economy of the community. For example, nine board sailing shops have opened in the last nine years and surveys by local merchants indicate that approximately 3 million dollars were expended in Hood River alone during the Summer 1985 season. Board sail manufacturers such as Dakine of Hawaii are considering opening manufacturing facilities and others are opening regional sales offices. In summary, the Hood River area has unique geographic and climatic conditions for a rapidly growing and obviously popular sport.
DEFINITIONS

Agricultural Land: Land of predominantly Class I, II, III, and IV soils as identified in the Soil Capability Classification System of the United States Soil Conservation Service (i.e., Soil Survey of Hood River County prepared by the U.S.D.A. Soil Conservation Service in cooperation with the Oregon Agricultural Experiment Station, January, 1981) and other lands which are suitable for farm use taking into consideration soil fertility, suitability for grazing, climatic conditions, existing and future availability of water for farm irrigation purposes, existing land use patterns, technological and energy inputs required, or accepted farming practices. Lands in other classes which are necessary to permit farm practices to be undertaken on adjacent or nearby lands, shall be included as agricultural land in any event.

Arterial: A State road or major street or road that is designed for high-traffic volume and high speeds and that connects regions or distributes traffic from one land-use or traffic generating area to another.

Bonus Density Options: The dwelling unit density of a project where allowed by the Zoning Ordinance, may be increased above the minimum base designation (zone) when certain conditions or features are provided. Examples of features include preservation of drainage swales by easements, separation of pedestrian and vehicular traffic and provision of a mix of housing types (single-family, common wall single-family, duplex, multi-family, etc.).

Buffer Requirements: Apply to all proposed dwellings and subdivisions within or directly adjacent to EFU and FR Zones except dwellings located on and directly associated with farm uses. Requirements include: (1) site plan evaluating conflicts between new and existing uses; (2) filing deed notification statement; and (3) meeting setback requirements of at least 50' from affected lands and as detailed in the Zoning Ordinance.

The owner of the land upon which development occurs will be responsible for providing both the land for the buffer and meeting the buffer requirements.

Buffer Zone: A setback, berm, fence, elevation rise, planting, and/or other technique(s) used to reduce any potential conflict between neighboring land uses and zone; or any area of land that is free of residential structures and that serves to separate incompatible land uses. Buffers may be established along roads, trails, streams and rivers; around wetlands and between farm and residential housing development and are the responsibility of the landowner developing the new incompatible use.

Capital Improvement Plan: A plan outlining proposed expansion of key facilities that are primarily planned for by local government to support more intensive development. Key facilities include public schools, transportation, water supply, and sewage and solid waste disposal.

Collector: Streets leading onto arterials, and those main streets used for traffic movement within residential, commercial and industrial areas. Collectors are primarily used for collecting traffic from access streets and channeling it onto arterials. A secondary purpose is to provide access to abutting properties.
Conditional Use: A use of land allowed by Hood River County if it meets conditions stipulated in the Zoning ordinance as interpreted by the County Planning Commission.

Develop: To bring about growth or availability; to construct or alter a structure, to conduct a mining operation, to make a physical change in the use or appearance of land, to divide land into parcels, or to create or terminate rights of access.

Exclusive Farm Use: That area of land zoned exclusively for farm uses as defined in ORS 215.203 and other uses provided for in ORS 215.213.

Extractive: Taking a substance from the land.

Feedlot: An area designed or used for the purpose of the concentrated feeding or fattening of ten or more beef cattle, swine, poultry or fur-bearing animals other than rabbits for marketing. The term feed-lot shall mean the confined feeding of ten or more beef cattle, swine, poultry, or fur-bearing animals other than rabbits for commercial food or fur purposes in lots, structures, pens, or corrals which are not normally used for raising crops, and in which no vegetation, intended for animal food, is growing. The definition does not include a wintering operation for beef cattle in barns or on farming ground.

Floodplain (100 Year): That area adjacent to a river and extending beyond the river that is subject to being flooded at least once every 100 years. In other words there is a 1% probability that the entire 100 year floodplain will be flooded in any given year.

Forest Lands: (a) Lands composed of existing and potential forest lands which are suitable for commercial forest uses; (b) Other forested lands needed for watershed protection, wildlife and fisheries habitat and recreation; (c) Lands where extreme conditions of climate, soil and topography require the maintenance of vegetative cover, irrespective of use; (d) Other forested lands in urban and agricultural areas which provide urban buffers, wind breaks, wildlife and fisheries habitat, livestock habitat, scenic corridors and recreational use.

Local Road: (Also known as access street or road.) A road or street that provides access to abutting properties. Travel distances are relatively short, and speeds are generally slow.

Lot of Record: A lot or parcel in the unincorporated area outside of areas designated in a county comprehensive plan as being in a floodplain or geological hazard area or designated for urban, industrial or commercial development and which was lawfully created by or transferred to the present owner by a deed or sales contract executed after December 31, 1964, and before January 1, 1975. (Sections 9 to 13, Chapter 884, Oregon Law, 1981.)

Minimum Stream Flow: An amount of water flow in a stream, established by the State, to mitigate pollution and/or protect aquatic life. Minimum stream flows work like a water right. Any prior rights take precedence and must be satisfied before the minimum flow applies.

Old Dalles-Sandy Wagon Road (Also known as Wyeth Road or Old Military Road): The gravel road that connects Wyeth with the Cascade Locks area.
**One-Way Couplet:** A divided road or street (two streets running in opposite directions) generally located in a high-volume congested area.

**Overlay Combining Zone:** A zone that is laid over a base zone, meaning that land uses must meet the requirements of both the base zone and the overlay combining zone.

**Partition:** The act of dividing an area or tract of land into two or three parcels within a calendar year when such area or tract of land exists as a unit or contiguous units of land under single ownership at the beginning of such year.

**Performance Standards:** Zoning regulations providing specific criteria limiting the operation of certain industries, land uses and building to acceptable levels of noise, air pollution, emissions, odor, vibrations, etc.

**Planned Unit Development (PUD):** A created large-scale development of land intended to best utilize the land for the collective benefit of the area's residents. A PUD is characterized further as making use of varying lot sizes and a variety of building structures (such as townhouses, multi-family, or single-family homes) that are generally clustered in such a way as to maintain the same overall density that would have been achieved if the developer had laid out the project in the conventional-grid zoning pattern.

**Primary Residence:** The residence occupied by the owner or lot manager.

**Riparian:** A term to denote plants and animals which live along or frequent the banks of lakes, ponds, streams and rivers.

**Rural Center:** A rural community center that provides housing, business, commercial, cultural and/or governmental uses primarily for the benefit of the local surrounding area. The rural centers in the County are designated as the following: Oak Grove, Rockford, Van Horn, and Windmaster Corner.

**Rural Land:** Land which is outside the Urban Growth Boundary that is: (1) agricultural, forest, or open-space land, or (2) land that is sparsely settled, has scattered small farms or acreage home sites, and has a few public services and which is not suitable, necessary or intended for urban use.

**Selective Cutting:** No clear cutting. More specifically, a forest management technique which maintains an average 40% forest canopy on each acre of any mixture of species. Forest canopy remaining after harvesting may be measured directly from aerial photographs (supplied by the applicant) or by meeting the following basal requirements: (information to be provided by the applicant)

1. The basal area criterion will apply only to stands of trees 7 inches* d.b.h. and larger.

2. Trees must be well distributed over each acre.

* Definition of d.b.h.: Diameter at Breast Height.
3. At least 40% of the normal** basal area per acre must remain on the site at all times.

Other techniques may be used in areas affected by natural disasters such as insect damage, windfall, landslides or other geological, biological or fire damage.

** Sewer Line, Connector or Lateral: The service lines that bring sewage from individual structures to the main or trunk sewer line.

** Sewer Line, Main or Trunk: Sewer line that collects sewage from connector or lateral lines and feeds it into the sewage treatment plant.

** Subdivide: The act of dividing an area or tract of land into four or more lots within a calendar year when such area or tract or land exists as a unit or contiguous units of land under a single ownership at the beginning of such year.

** Urbanizable Land: Lands within the Urban Growth Boundary that are not presently built upon to urban density and are: (1) determined to be necessary and suitable for urban uses; (2) can be served by urban services and facilities; and (3) are needed for the expansion of an urban area.

** Urban Land: Land which is in an incorporated city or adjacent to an incorporated city and possessing: (1) concentrations of persons who generally reside and work in the area; and (2) supporting public facilities and services.

** Visual Quality Objective: Goals for management of the visual resource which describe various degrees of natural landscape character modification. These standards are determined by Combining Sensitivity Level (visitor interest) and the natural landscape variety class.

** Normal basal areas for fully stocked Douglas-fir stands may be found in Table 3, Technical Bulletin No. 201, United States Department of Agriculture, and for red alder in Table 1, Washington Department of Natural Resources Report No. 31, 1961.
GLOSSARY

Uses Permitted by ORS 215.203: As used in this section, "farm use" means the current employment of land for the primary purpose of obtaining a profit in money by raising, harvesting and selling crops or by the feeding, breeding, management and sale of, or the produce of, livestock, poultry, fur-bearing animals or honeybees or for dairying and the sale of dairy products or any other agricultural or horticultural use or animal husbandry or any combination thereof. "Farm use" includes the preparation and storage of the products raised on such land for human use and animal use and disposal by marketing or otherwise. It does not include the use of land subject to the provisions of ORS chapter 321, except land used exclusively for growing cultured Christmas trees as defined in subsection (3) of this section (ORS 215.203 (2) (a)).

Uses Allowed in the Exclusive Farm Use Zone (EFU) per Hood River County Zoning Ordinance:

A. Farm uses and accessory uses.

B. Accepted timber practice.

C. The dwellings and other buildings customarily provided in conjunction with farm use, subject to provisions in Section 7.50.

D. A secondary dwelling used for farm use if the dwelling is:
   1. Located on the same lot or parcel as the dwelling of the farm operator;
   2. Occupied by a relative, which means grandparent, grandchild, parent, child, brother or sister of the farm operator or the farm spouse, whose assistance in the management of the farm use is or will be required by the farm operator; and
   3. Is subject to compliance with ORS 215.263 (5).

E. Utility facilities necessary for public service except commercial facilities generating power for public use by sale.

F. Public or private conservation areas or structures for the retention of water, soil, open space, forest or wildlife resources.

G. A mobile home for agricultural purposes, and as a temporary use while constructing a dwelling for a period not exceeding two years. Site development standards of Section 42.60 shall apply.

H. Public or private schools.

I. Churches.
The Following Uses are Subject to Conditional Use Permits:

A. Commercial activities that are in conjunction with on-premise farm use.

B. Operations conducted for the exploration, mining, and operation of geothermal resources.

C. Commercial utility facilities for the purpose of generating power for public use by sale.

D. Single family residential dwellings, not provided in conjunction with farm use, upon a finding that such proposed dwelling:
   1. Is compatible with farm uses described in Subsection 2 of ORS 215.203 and Section 7.10 of the Zoning Ordinance, and is consistent with the intent and purposes set forth in ORS 215.243; and
   2. Does not interfere seriously with accepted farming practices, as defined in paragraph C of Subsection 2 of ORS 215.203, on adjacent lands devoted to farm use; and
   3. Does not materially alter the stability of the overall land use pattern of the area; and
   4. Is situated upon generally unsuitable land for the production of farm crops and livestock, considering the terrain, adverse soil or land conditions, drainage and flooding, vegetation, location and size of the tract; and
   5. The site is suitable for a residential use; and
   6. Complies with such other conditions as the governing body or its designate considers necessary.

E. Private parks, playgrounds, hunting and fishing preserves.

F. Parks, playgrounds, or community centers owned and operated by a governmental agency or a non-profit community organization.

G. Feedlots.

H. Cattle and livestock auctions of a permanent nature.

I. Animal clinics and livestock animal hospitals.
J. Mobile homes for a dependent relative (temporary use) subject to affirmative findings through documentation being presented to the Planning Director that the following criteria are met:

1. Justification that the relative is dependent upon care by either a relative or a person medically certified to care for such person on a full time basis;

2. Dependent relative, relative providing care, or medically certified person to be the primary full time resident;

3. The use will be considered temporary and when no longer needed will be removed;

4. Medical doctor confirmation that full time care is necessary;

5. The dependent relative is not employed full time off the site; and

6. Subject to Section 7.40 D., (1) through (6).

K. Home occupation, carried on by the resident as an accessory use within dwellings or other buildings referred to in ORS 215.203 (2) (b) (F) or (G). Other applicable provisions in the definition of Home Occupation (Article 3) shall also apply.

L. The boarding of horses for profit.

M. Golf courses.