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

SECTION 5.0 NATURAL RESOURCES, SCENIC AND HISTORIC AREAS, AND OPEN SPACES GOAL

To protect and enhance through proper use and development the open spaces, scenic and historic areas, and natural resources of the area.

SECTION 5.1 NATURAL RESOURCES BACKGROUND AND DISCUSSION

5.1.100 FISH AND WILDLIFE

Fish habitats in the Umatilla area are greatly influenced by two elements: quantity and quality of water. Of these two elements, lack of adequate summer stream flow is a highly critical factor affecting the salmonoids in the Umatilla basin. Low stream flow from late spring to early fall limit the holding water for adult summer steelhead and spring Chinook. The low stream flow in turn contributes to the problem of higher stream temperatures which reduces the capacity to rear salmonoids. In turn, undesirable non-game fish species compete with game fish for living space and food. The lower stream flows and higher temperatures enhance conditions for the carp, squawfish, chiselmouth, and sucker.[13]

The McNary Wildlife Park provides the community with additional fishing opportunities for rainbow trout. Visitors to this facility were reported to be 26,472 in 1972. Historically, salmon over McNary Dam has averaged 368,178 over a period of 19 years.[14] This gives some indication of the fish population traversing the area.

Wildlife habitats in the vicinity of Lake Wallula and Umatilla can be placed into three zones based on vegetative cover: aquatic, moist subsoil, and drylands. The mammals, amphibians, and reptiles associated with these zones are as follows:[15]

AQUATIC (cattails and rushes)

Furbearing Mammals	--Muskrat
	--Beaver
Other Mammals	--None
Amphibians	--Spadefoot
	--Bullfrog
	--Western toad
	--Pacific Northwest tree frog

[13] Allen K. Smith, Fish & Wildlife Resources of Umatilla Basin, Oregon, p. 30.
[14] Corps of Engineers, McNary Second Powerhouse, Draft EIS, p. 2-22.
[15] Ibid., p. 2-34.

Reptiles --Painted turtle

MOIST SUBSOIL (trees, perennial, forbs, and grasses)
Furbearing Mammals --Raccoon
--Skunk
--Mink
--Weasel

Other Mammals --Mule deer
--House mouse
--Mountain vole
--Vagrant shrew
--Pocket gopher

Amphibians --None

Reptiles --Common garter snake

DRYLANDS (sagebrush)
Furbearing mammals --Coyote
--Badger

Other mammals --Sagebrush vole
--Great Basin pocket mouse
--Grasshopper mouse
--Harvest mouse
--Washington ground squirrel
--Blacktailed jackrabbit
--Cottontail rabbit

Amphibians --None

Reptiles --Gopher snake
--Yellow-bellied racer
--Pacific rattlesnake
--Horned lizard
--Side-blotched lizard
--Sagebrush lizard
--Striped whipsnake
--Desert night snake

Portions of the east bank of the Umatilla River are also an important wildlife habitat to the area. Areas where the western bank is narrow make it less important as a wildlife habitat. The fluctuation in stream flow and lack of summer stream flow on the Umatilla River has a deleterious effect on habitats in this area to reducing summer food supplies. Consequently, muskrat, mink, beaver, and certain waterfowl which inhabit the Columbia River are absent along

the Umatilla River. However, the mourning dove and valley quail are well suited to conditions along the Umatilla River in the summer and early fall.[16]

The McNary wildlife park is an important resting and feeding area for waterfowl. The vegetative cover in the Umatilla area provides resting and feeding areas for other birds. The following listing depicts birds associated with the Lake Wallula and Umatilla areas:[17]

Western Meadowlark
Horned Lark
Loggerhead Shrike
Mourning Dove
Chukar Partridge
Long-billed Curlew
Burrowing Owl
Sage Sparrow
Bullock's Oriole
Song Sparrow
Chinese Ring-necked Pheasant
California Quail
Barn Owl
Red-winged Blackbird
Yellow-headed Blackbird
Marsh Wren
American Coot
Pied-billed Grebe
Mallard
Canada Goose
Ruddy Duck
Marsh Hawk
Black-billed Magpie
Brewer's Blackbird
Eastern Kingbird
Bewick's Wren
Western Kingbird
Red-shafted Flicker
Yellowthroat
Common Crow
Starling Western Robin
Sparrow Hawk
American Avocet
Blue-winged Teal
Green-winged Teal
Cinnamon Teal
Hungarian Partridge
English Sparrow
Cliff Swallow
Violet-green Swallow
Feral Pigeon
Barn Swallow
Canon Wren

Protection of fish and wildlife areas is addressed in policy 5.6.101. In addition, these areas are designated as recreation/open space areas on the Comprehensive Plan Map.

The Department of Fish and Wildlife has designated sensitive fish and wildlife areas[18] of primary concern as salmon, steelhead, warm water game fish, pheasants, quail, waterfowl, and curlews. Upland game birds and curlews use the areas of concern for hiding cover, winter cover, and nesting habitat.[19]

Wetland and riparian areas provide numerous and complex functions that affect both aquatic and terrestrial systems. Many ecological functions of riparian areas are also provided by wetlands, flood plains, and vegetated upland areas. Riparian areas provide a buffer zone between upland uses and water resources, protecting or enhancing water quality, preventing erosion, and

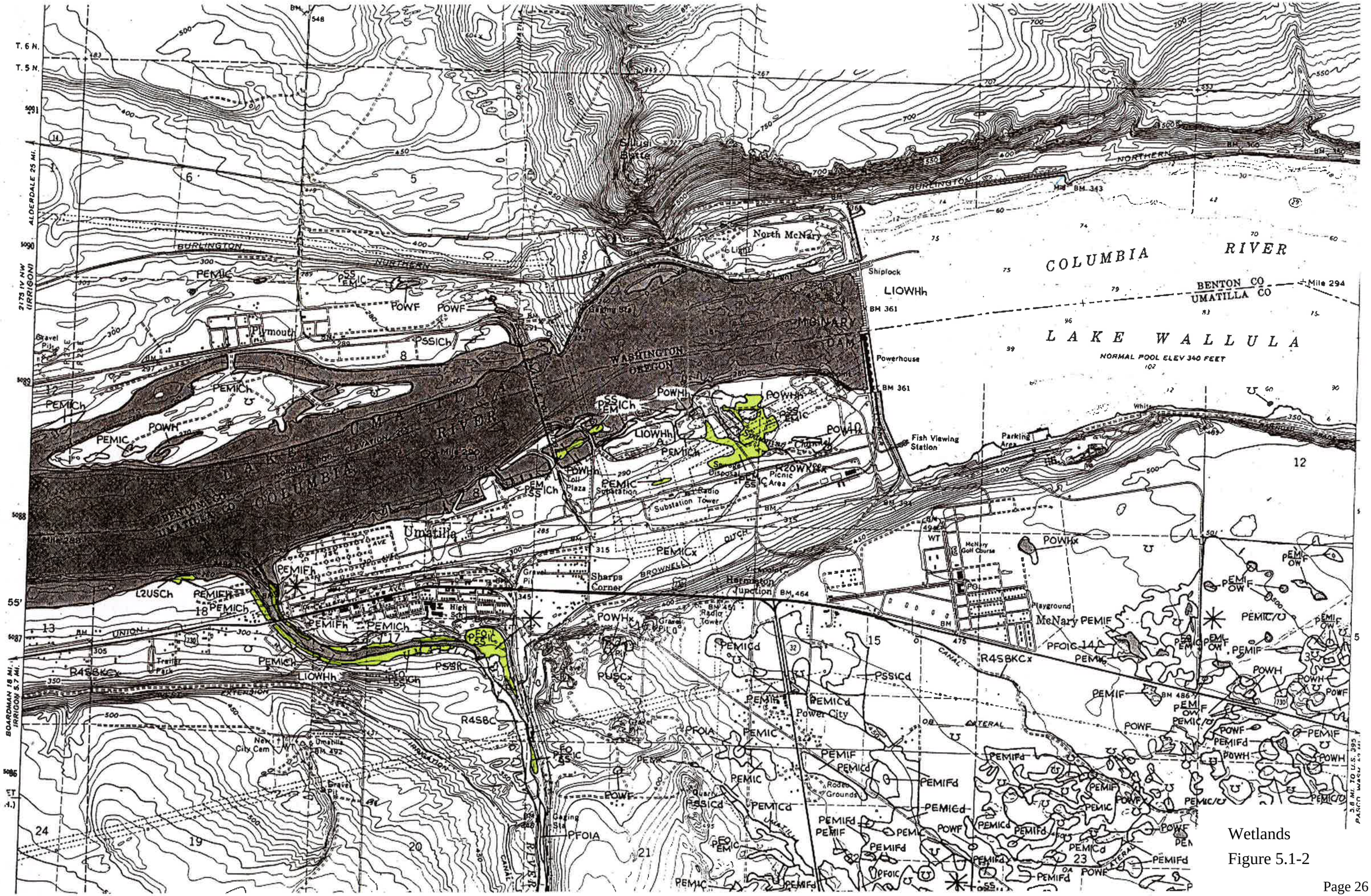
[16] USDOT, *-82/182 Final EIS, p. 4-23.
[17] Corps of Engineers, Op. Cit., p. 2-33.
[18] Map on file at Umatilla City Hall
[19] Letter of November 15, 1977, from James V. Phelps (Dist. Fish Biologist, Department of Fish & Wildlife) to Jack Palmer (City of Umatilla)

moderating flood flows. Riparian areas often provide important wildlife habitat and contribute to in-stream habitat for fish.

The Columbia River forms the City's north boundary. The Umatilla River flows through the City to join the Columbia River. The only riparian areas in the City are adjacent to these two rivers; these riparian areas are important and should be protected. Flood plains for both rivers are discussed in relation to Goal 7 "Areas Subject to Natural Disasters and Hazards," (see Section 7.1.300) and are identified on *Figure 5.1-1*.

Wetland areas in the City of Umatilla are located along the Columbia River and Umatilla River, according to National Wetlands Inventory Maps, and appear to be almost entirely within identified flood plains (*Figure 5.1-1* Flood Plain and *Figure 5.1-2* Wetlands). In addition to any measures applying to riparian areas and flood plains, wetlands are also subject to a notification process required by the State of Oregon and set forth in the zoning code. *(Ord. 680)*

FIGURE 5.1-1



Wetlands
Figure 5.1-2

5.1.200 GROUND WATER

The availability of ground water in the Umatilla area is influenced by the underlying geologic structure. The presence of certain rock formations or the structural shape of these formations can greatly enhance or limit the productiveness of the aquifer. Locally, the Columbia River basalt contains the most productive aquifer.[20] However, the ground water yield from this formation is restricted in the Butter Creek area by the barrier resulting from the Service anticline. The basalt layer has a northwesterly slope which would generally correspond with the flow of ground water if it were not for the anticline. A similar barrier is believed to exist to the west of the City, but the precise location is undefined.[21] These geologic restrictions to ground water flow coupled with limited amounts of annual precipitation produce inadequate recharging of local basalt aquifers.

The Oregon Water Resources Department has identified a Butter Creek critical ground water area which extends southward from the Columbia River at Umatilla to the Willamette baseline approximately 28 miles south of Umatilla. Within this area, the average annual recharge is not sufficient to maintain stabilized ground water levels at present rates of withdrawal. In short, a ground water mining situation exists in the Butter Creek area. Unless annual recharge is increased or ground water withdrawals reduced, the ultimate failure of some wells can be anticipated in this area. A ground water report on the Butter Creek area concludes that "the layered series of basalt rock aquifers of the Columbia River Group located within the critical area boundaries should be closed to further ground water development except for individual domestic and stock watering purposes."[22] Additionally, it will be necessary to import irrigation water from outside sources such as the Columbia and Umatilla Rivers so the ground water withdrawals can be reduced.[23]

On April 2, 1976, the Director of the Water Resources Department signed an order establishing the Butter Creek Critical Ground Water Area. As a result of this order, future appropriation of ground water would be approved on conditions as follows:

- "That no ground water shall be appropriated from the basalt aquifers and related inter-beds of the Columbia River Basalt formation. Any new appropriators will be required to develop ground water from the overlying formations."[24]

- "That the appropriation of ground water from the Butter Creek basalt aquifers is hereby restricted to existing wells which are being used for the purposes exempt from filing as set forth in ORS 537.545."

- "For stock watering purposes, for watering any lawn or non-commercial garden not exceeding one-half acre in area, for single industrial or commercial purpose in an amount not exceeding 5,000 gallons a day. . ."[25]

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[20] William Bartholomew, Ground-Water Conditions and Declining Water Levels in the Butter Creek Area, p. 12.
[21] Ibid., p. 16.
[22] Ibid., p. 27.
[23] Ibid., p. 25-27.
[24] Finding, Conclusions, and Order, Butter Creek Critical Ground Water Area, p. 27.
[25] Ibid., p. 27.

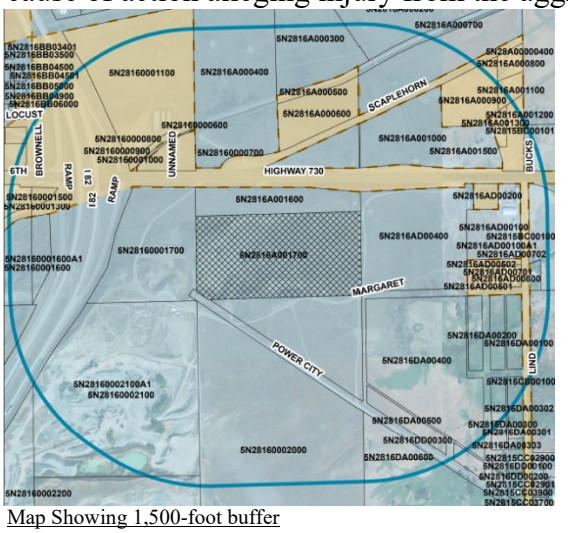
- "That additional wells for withdrawal of ground water from the basalt aquifers of the Butter Creek area shall be restricted to single-family domestic and stock water purposes. Ground water appropriated for stock watering shall be piped to watering tanks or troughs equipped with control works and operated to prevent overflow and waste of ground water. Ground water appropriated for domestic purposes shall be limited to that which can be beneficially used and shall not exceed 1-acre foot of water (328,850 gallons) per year."[14]

5.1.300 *GRAVEL*

Gravel extraction is also an important natural resource feature of the Umatilla area. Most of the areas currently being utilized are situated south of Sharp's Corner. The need for this material will no doubt increase with the advent of I-82 construction and the McNary second powerhouse. These gravel extraction areas have been retained in the Comprehensive Plan and are shown on the *Developable Areas* map, *Figure 5.1-3*.

5.1.301 *ODOT Powerline Quarry*

The City recognizes one site in the City of Umatilla Urban Growth Boundary as being a significant aggregate site. This site is referred to as Powerline Quarry and is identified as Tax Lot 1700 of Assessor's Map 5N2816A. This site is protected as a significant aggregate site as it contains high-quality aggregate and basalt. As such, conflicting uses will be limited within a 1,500-foot impact area by way of a memorandum of understanding in which the applicant acknowledges they are locating within the impact area of a protected use. Conflicting uses shall be considered homes, schools, churches, parks or certain recreation facilities, farm stands, commercial activities such as veterinarians, and other similar uses. The memorandum of understanding shall include language stating that the applicant accepts normal mining activity at this significant aggregate site and restricts a landowner's ability to pursue a claim for relief or cause of action alleging injury from the aggregate operation.



Map Showing 1,500-foot buffer

[14] Ibid., p. 27.

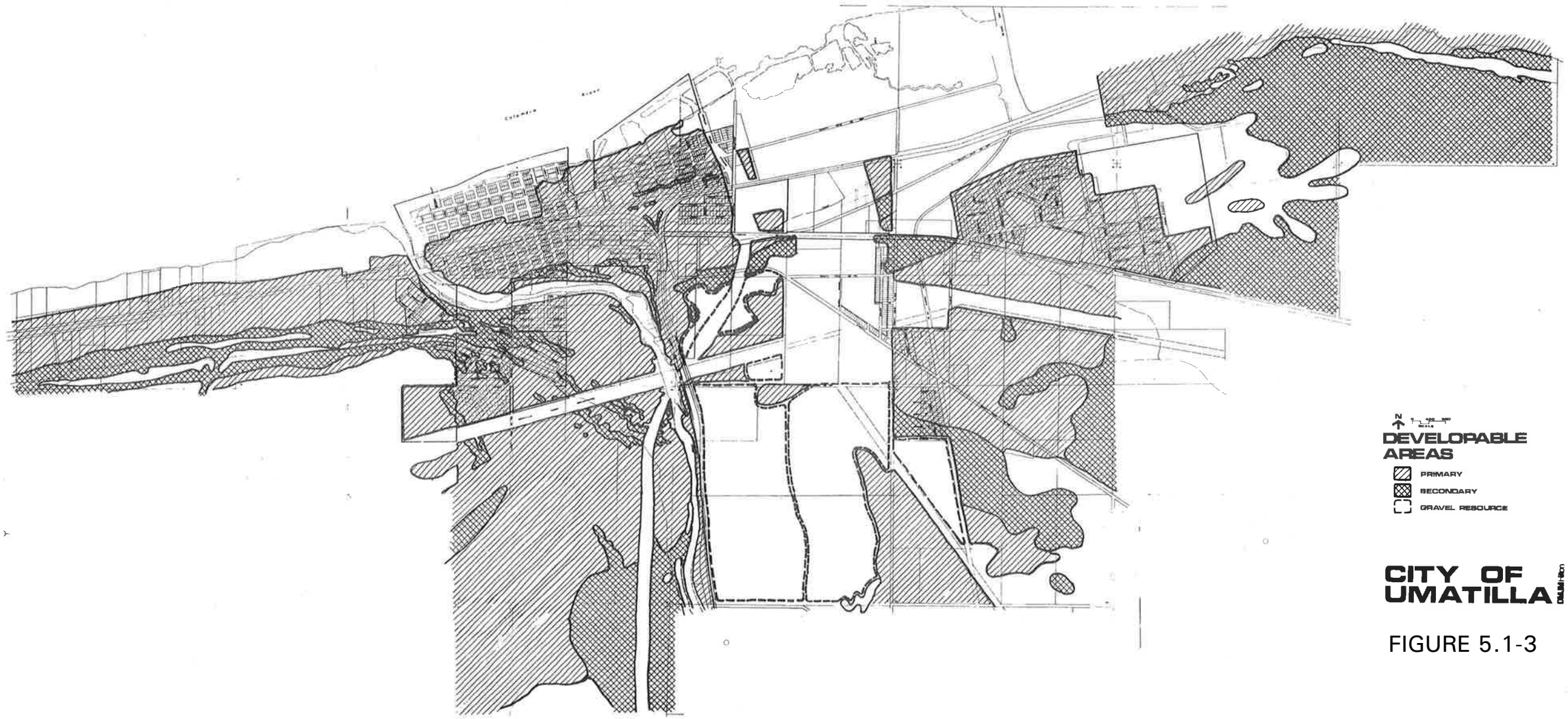

DEVELOPABLE
AREAS
PRIMARY
SECONDARY
GRAVEL RESOURCE
CITY OF
UMATILLA

FIGURE 5.1-3

SECTION 5.2 SCENIC AREAS (RESERVED FOR EXPANSION)

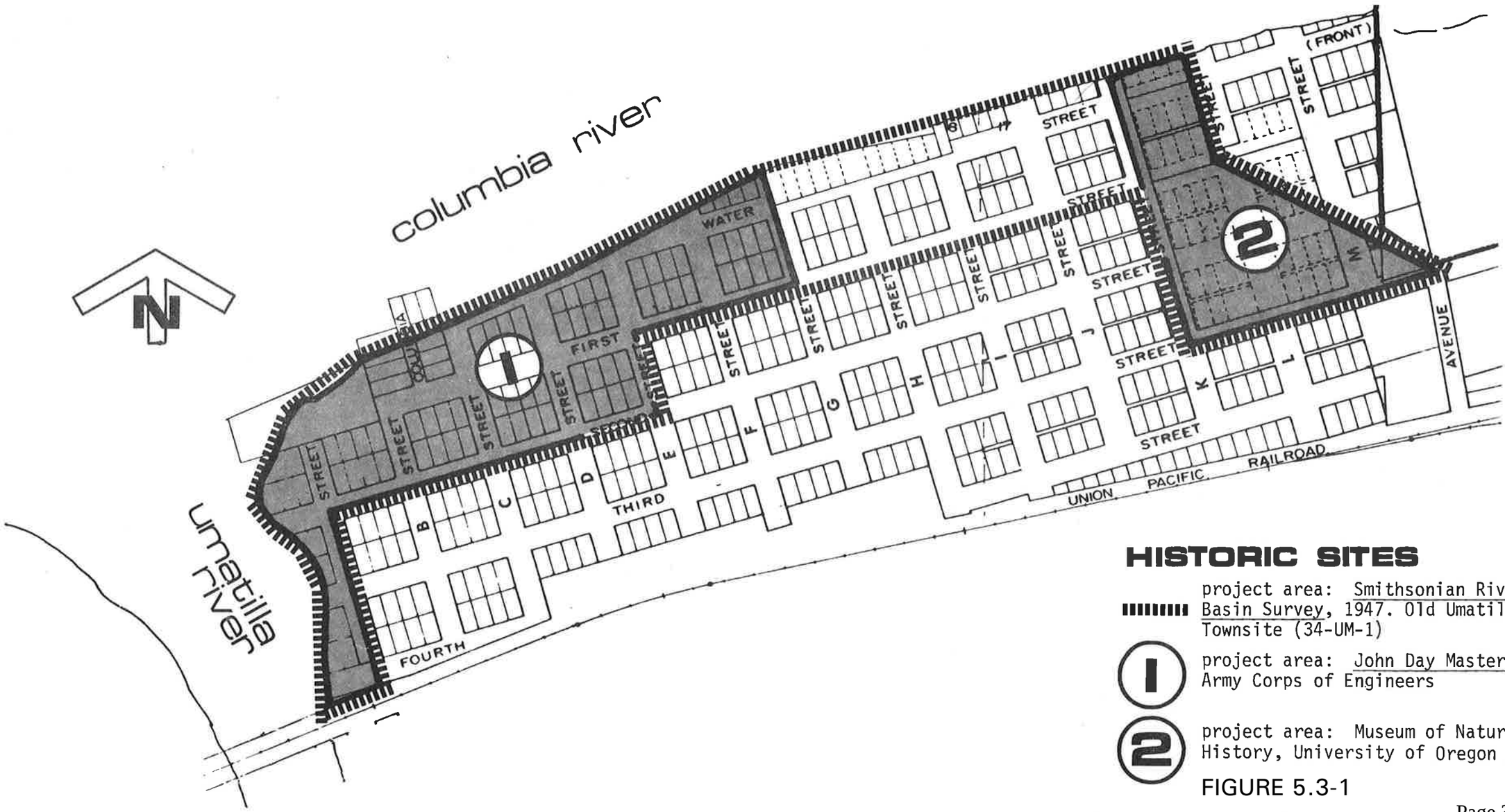
SECTION 5.3 HISTORIC AREAS

5.3.100 HISTORIC SITES

Most archaeological work of significance to the City of Umatilla has been done in the area known as the Old Umatilla town site. This area was identified as part of 35-UM-1 in the 1947 Smithsonian River Basin Survey done by George Gale. Several different surveys since have found pit houses and fire hearths indicating the area was a winter campsite for at least two different cultures. The Umatilla area was home to the Umatilla Indians, who shared subsistence areas with other groups of similar culture known as the Plateau culture (such as Walla Walla and Cayuse Indians). In the same Old Umatilla area, artifacts from the 1800's indicate an inn or hotel from the days when Umatilla was a port and transport hub for mining districts.[27] Within the Old Umatilla town site, two project areas are identified (see *Figure 5.3-1*) as having archaeological/historical significance. Project Area #1 is identified in the John Day Master Plan by the Army Corps of Engineers and is proposed for nomination to the "National Register of Historic Places." The Old Umatilla town site is also proposed for the same consideration by the State Historic Preservation Officer.[28]

Project Area #2 is to the west of the existing sewage treatment plant and has been recommended for further determination of archaeological importance due to surface evidence such as fire cracked rock, jasper projectiles, crypto crystalline flake scrapers, and basalt choppers. The most current reports indicate a need for the preservation of the Old Umatilla town site and a further need for investigation of the extent of the historic resource. The portion of Project Area #2 extending north from First Street should be excluded from development until tested for archaeological significance. The site from First Street south was found to have nothing of historical significance that would be affected by development. The property is close to an area of aboriginal occupation and if anything of archaeological importance is unearthed, the Museum of Natural History (University of Oregon) should be contacted.

[27] "Cultural Resource Survey," Cynthia R. Swanson, Western Washington State College, 1977.
[28] "Report of a Cultural Resource Survey," David L. Cole, Museum of Natural History, University of Oregon, 1977.



HISTORIC SITES

project area: Smithsonian River Basin Survey, 1947. Old Umatilla Townsite (34-UM-1)

1 project area: John Day Master Plan, Army Corps of Engineers

2 project area: Museum of Natural History, University of Oregon 1977

FIGURE 5.3-1

SECTION 5.4 OPEN SPACES (RESERVED FOR EXPANSION)

SECTION 5.5 NATURAL RESOURCES, SCENIC & HISTORIC AREAS, AND OPEN SPACES GOAL FINDINGS

5.5.101 Areas that are or could be used as wildlife sanctuaries should be identified. Existing sanctuaries should be protected and enhanced.

5.5.102 A pattern of open space utilizing drainage ways, major utility easements and park areas should be promoted.

5.5.103 Sites and structures relating to the history of the State and the City of Umatilla should be identified, protected and enhanced.

5.5.104 Conservation of the area's natural resources, including vegetation, should be promoted.

SECTION 5.6 NATURAL RESOURCES, SCENIC AND HISTORIC AREAS, AND OPEN SPACES GOAL POLICIES

5.6.101 The City will protect natural resource areas and require that the long-range availability and use of the following will not be limited or impaired by development.

- Mineral and aggregate deposits
- Energy resources
- Domestic water supplies
- Fish and wildlife habitats
- Ecologically and scientifically significant natural areas
- Agricultural land not needed for urbanization
- Historically significant sites/areas
- Wetland and riparian areas *(Ord. 680)*

5.6.102 The City recognizes two sites as having archeological/historical importance. The sites are expected to be nominated to the "National Register of Historic Places."

5.6.103 The City will take action to mitigate any land use impacts in the future on these sites. The City will pursue an enhancement program adjacent to the sites with a museum and/or community center for public use (see Section 8.1.100).

5.6.104 The City supports the Federal Government's efforts to protect the two known archaeological sites in the City of Umatilla. *(Ord. 544)*

5.6.105 The City, in cooperation with Umatilla County, will complete the Goal 5 process for the five identified aggregate resource sites by September 1, 1988. *(Ord. 544)*