CHAPTER 3
GOAL 3: AGRICULTURAL LANDS

SECTION 3.0 AGRICULTURAL LANDS GOAL

To maintain agricultural lands consistent with the need for agricultural products.

SECTION 3.1 AGRICULTURAL LANDS BACKGROUND AND DISCUSSION

3.1.010 Soils

There are basically four soils association groups in the Umatilla area: Ephrata, Rupert, Onyx, and Winchester. In addition, there are areas of non-arable soils that consist of scablands, river wash and rough broken areas. These soils association groups have been identified and mapped by the U.S. Department of Agriculture in a report titled, "Soil Survey, The Umatilla Area, Oregon."

From Table 3.1-1, it can be seen that the Onyx soil is the most restrictive to development. This is primarily due to its location along the edges of the Umatilla River.

The Onyx silt loam is the best agricultural soil in the area and also the least plentiful. The productivity of each soils type can be improved with irrigation. *Figure 3.1-1* portrays the area's soils and the agricultural [sic].

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.

Within the Urban Growth Boundary, there are some areas with rough, stony, or broken soil condition. These areas will present difficulties to development and site preparation. For this reason, these areas have been designated as secondary developable areas. In the land use plan, some of these areas have been designated as open space where terrain combined with soil condition creates development problems.

The Soils Conservation Service is in the process of updating its soils mapping for Umatilla County. This work will not be completed in the Umatilla area until the spring of 1978. Preliminary indications are that irrigation practices have changed some soil designations in parts of the County. It is strongly recommended that the soils mapping and agricultural suitability be re-evaluated when the new information becomes available.[9]

Since the updating is not completed, the current soil interpretations cannot be used (OR-Soils-1) and subsequent agricultural capability classifications, water table depth, and development ratings, are not available.

[9] Telephone conversation with Joe Calhoun, Soils Conservation Service, Pendleton, November 3, 1977.

Table 3.1-1
Soils Suitability

SOIL TYPE	GENERAL PRODUCTIVITY	WORKABILITY	EROSION HAZARD
Ephrata Sand	low to med	easy	med to high
Ephrata Sand – shallow phase	low to med	easy	med to high
Ephrata Loamy Sand – poorly drained	low	difficult	none
Winchester Sand	low	difficult	high
Onyx Fine Sandy Loam	med to high	easy	slight
Rupert Sand	low to med	easy	med to high
Rupert Coarse Sand	low to med	easy	slight
Scabland	low	very difficult	slight to high
Rough, Broken and Stony Land	low	very difficult	high
River wash	low	very difficult	high

Source: Soil Conservation Service, Soil Survey, the Umatilla Area, Oregon, 1948, pg. 98.

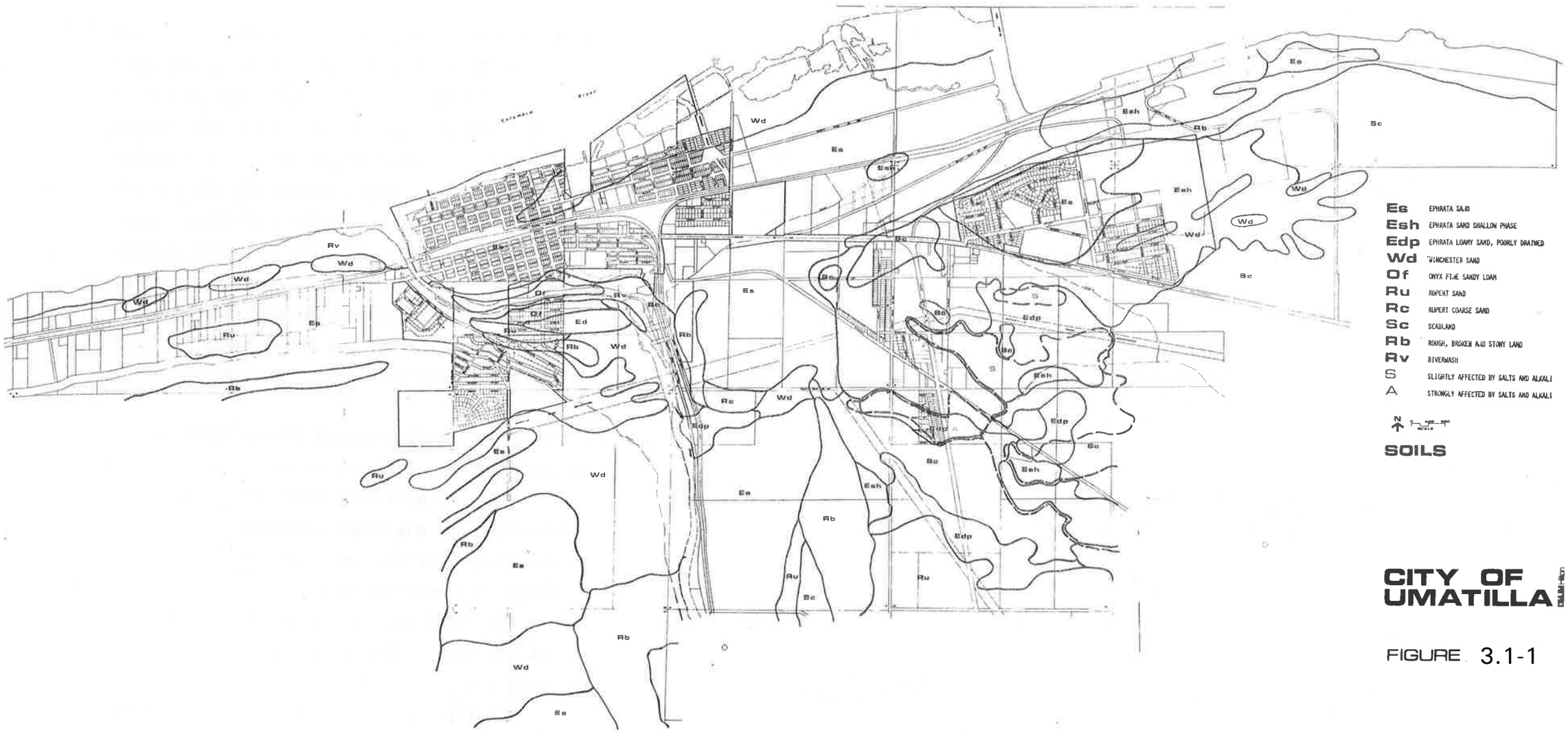
Land Capacity classification cannot be determined until the Soil Conservation Service completes its soil survey in mid-1978.[10] Pending this information being made available, agricultural suitability will be determined as "medium to high" (agriculturally suited) and "medium to low" (not-suited) as indicated in Table 3.1-1 "Soils Suitability".[11]

Onyx silt loam is the only agriculturally suited soil and also is the least plentiful. Principle crops (with irrigation) are alfalfa (3 to 6 tons per acre), potatoes (170 bushels per acre) and fruit (270 packed boxes of apples per acre). It is primarily bottom land and low terrace that will support minimal grazing of 20 to 40 acres per animal unit.

Some agriculturally non-suited soils having limited productivity are light-colored sandy soils of the Columbia River Terraces such as Ephrata Sand, Ephrata Sand Shallow Phase, Rupert Sand and Rupert Sand Shallow Phase. Principal crops (with irrigation) are alfalfa (1-1/2 to 6 tons), corn (20-27 bushels per acre) and grazing (45-50 acres per one animal unit). These soils have comparatively low yields obtained that do not justify the expense of any further irrigation development.[12]

The existing data on agricultural suitability is questionable at best. Soil conditions are believed to have physically changed in the Umatilla City area because of rising water tables from increasing irrigation. The soil names used may not even be applicable after the current survey is completed. The Ephrata series, as an example, which makes up a great deal of the land area, will no longer be used in the soil classification. A recommendation is made to completely review agricultural lands pending the current soil surveys completion in the policy section.

[10] Telephone conversation with Joe Calhoun, SCS, Pendleton, November 2, 1977
[11] Soil Survey, The Umatilla Area, Oregon 1948
[12] Ibid.



CITY OF UMATILLA

FIGURE 3.1-1

SECTION 3.2 (RESERVED FOR EXPANSION)

SECTION 3.3 AGRICULTURAL LANDS FINDINGS

3.3.101 Land with an SCS soils classification of I through VI should generally be regarded as being suitable for agriculture by virtue of soil condition, if it is not built upon, and exists in a large enough parcel as to be productively and economically farmed.

3.3.102 Urbanization should take place on land suitable for agriculture only after all other available, adequate and usable sites are utilized.

SECTION 3.4 AGRICULTURAL LANDS POLICIES

3.4.101 The City will designate developed areas as "suburban residential" that are adjacent to agriculturally productive areas.

3.4.102 The City will update and revise the soils map and agricultural suitability designations as new Soils Conservation Service data becomes available in mid-1978.