Potential Blueberry Farmland Locations in Atlantic County, New Jersey

Advanced GIS Course - ENVI 3203

"Environmental Science Program" - Richard Stockton College of New Jersey

ABSTRACT

Blueberries are a popular harvested fruit that many people enjoy eating. Blueberries also have several known [illegible] C and E antioxydants. Blueberry plants unique nutrient requirements make the farmlands suitable for [illegible] Atlantic County an ideal place to [illegible] grow and [illegible] site them. The [illegible] a ranking system, areas potentially suitable for growing blueberries within Atlantic County [illegible] used to identify these areas of potential growth. Soil, zoning, transportation (roads) and [illegible] station information was collected, selected, the [illegible] ranked, grouped and combined into [illegible] estimate blueberry growing suitability. The ranking [illegible] was created is [illegible] that ranges from 1 to [illegible] possible score. The combined final rankings of the four criteria groups range from a score of approximately 2 to 9. The final combined map revealed several potentially suitable farming areas for blueberries growing within Atlantic County, [illegible] central to western [illegible] the county within close proximity to rivers.

INTRODUCTION

[illegible] (www.unidel.org/[illegible]). Blueberries are also a good source of [illegible] among the fruits that [illegible] (http://www.blueberry.org/healthfactsfruit.htm). A blueberry plant's unique nutrient requirements tend to differ greatly from [illegible] cultivated plants. Land [illegible] water table are optimal locations for growing blueberries. [illegible] ideal. In fact, Hammonton Township, located within Atlantic County, proclaims itself as the blueberry capital of the world. The [illegible] for growing blueberries [illegible] are extremely most suitable [illegible] farmland.

Objectives

[illegible]

Methods

data based upon:

[illegible] selected by extraction [illegible]

[illegible] true rankings based upon ability [illegible]

[illegible] Atlantic County [illegible] (Fig. 2). Above different locations [illegible]

[illegible] ranking system used is comprised of values ranging from 1 to 9, 1 being the least suitable score and 9 being the highest. Once ranked, all [illegible] possible ranked score, nine (9), is the highest. Once ranked, all [illegible] 500 feet in distance away from [illegible]

[illegible] rankings were then combined and calculated so that only areas that [illegible] and roads. The results [illegible] soil had zoning candidate that [illegible] average of both soil and zoning ranks (Fig. 3). All other [illegible] removed.

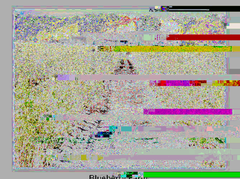
Atlantic County, NJ [illegible]

[illegible] 500 feet in distance away from [illegible]

The ranking system used is comprised of five ranking values [illegible]

Fig. 1. Select Soil Rankings

Fig. 2. Soil & Zoning Combined Rankings



Blueberry Farm

Based on the final combined results, there are several potentially suitable farmland areas for blueberry farming within Atlantic County. The map shows a general scattering of potentially suitable blueberry farmland throughout most of the county. The [illegible] suitable western and south the [illegible] lies that lie within close proximity to the Great Egg Harbor River and Hammonton Creek. The results make sense because there is a higher concentration of farmland zoning in the southwestern part of the Atlantic County. You would also expect potential blueberry farmland areas to be close to [illegible] Bec[illegible] eastern to mo[illegible] Western areas of the county are [illegible] by Route 9, the 2002 orthophotograph shows much of [illegible] the intersection of the Atlantic City [illegible]kway and Route 54 in Hammonton to be ranked #1 for blueberry growing potential. Follow-Up takes a look at a different [illegible] lots, totaling not less than 65 acres, [illegible] of water shores of Atlantic City [illegible] City Parkway and [illegible] environmentally. Land that is farmland, preserved has a greater potential to be purchased at a reasonable price because the land can only be used for farming. [illegible] are also [illegible] farmland preservation.

Fig. 8. Final Combined Rankings

Fig. 9. The Intersection of Route 54 and the [illegible] City Parkway

Fig. 10. An Orthophotograph of the Intersection Displayed on Soil Series Map

Fig. 11. Four Lots That Have Excellent Blueberry Farmland Potential