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CUMBERLAND COUNTY LAND USE ISSUES

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CUMBERLAND COUNTY LAND USE ISSUES

Issue -

The economy of Cumberland County has not been tourist oriented, as it has been in most of New Jersey's CAFRA counties; but, rather, it has been based on manufacturing. Tourism has not developed due to the severely limited recreational potential of the bay shore, which consists of extensive wetlands, marsh areas and off-shore mud flats. Most of the residential development in the County has been oriented to the manufacturing industries of the Tri-City region, which includes the cities of Bridgeton, Millville and Vineland.

The most important of the growth inducing industries have been the glass industry, textile manufacture and food processing. At present, each of these industries is either experiencing decline, or is faced with problems which make their decline seem probable. At the same time, Cumberland County lacks other growth inducing factors, and as a result, the expectations for continuing growth of the County may be restricted.

Discussion and Analysis -

Cumberland County lies outside the major New Jersey transportation corridors and is too far removed from Philadelphia in terms of travel time to be a suburb of that metropolitan area. Transportation arteries in the County are rather limited in comparison with other CAFRA counties, and it is the only coastal county which is not traversed by at least one of southern New Jersey's major toll roads. In addition, only three state highways cross the County: Route 49, Route 55 (the County's only divided highway) and Route 77. As a result, growth and development in the County have been almost entirely dependent upon the establishment and expansion of manufacturing industries which are based on local

resources such as food production and processing, the high quality glass sand deposits and the availability of a relatively inexpensive labor supply for the textile industry. The County can be characterized as an independent social and economic region. For example, 87.7 percent (the highest percentage of all CAFRA counties,¹) of all employed persons residing in Cumberland County work in the County.

In spite of the fact that manufacturing is the most important economic activity, the County is predominantly rural. Over 88 percent of its 321,024 acres are either in agricultural use, public open space or undeveloped land.²

Between 1960 and 1970, Cumberland County's population increased by 14,524, from 106,850 to 121,374 persons.³ Most of the population growth occurred in Vineland which accounted for almost 10,000 of the total population increase.

The cities of Bridgeton, Vineland and Millville form an urban extension which is regional in nature and is referred to as the Tri-City Area. Although the three cities are often viewed as an entity, each has unique development characteristics and problems. Bridgeton is the oldest, smallest and most densely populated of the three cities and is faced with an economic decline and physical deterioration of its central business district. Vineland, the largest and most rapidly growing, is characterized by sprawl development which is encroaching upon the existing agricultural lands. Millville is experiencing a combination of both problems which affect the other two cities, as it has areas of urban deterioration and instances of sprawl and strip development.

Most of the residential growth within the Tri-City Area has been a result of the growth of the manufacturing industries. Originally, such industries concentrated within these municipalities to take advantage of the available rail facilities. Residential development initially located in proximity to industrial

uses, but with the growing reliance and use of the automobile, residential growth began to occur along the main highway arteries and away from the established urban centers. Such sprawl development is especially evident in Millville and Vineland.

Between 1960 and 1970, Millville increased its population from 19,096 persons to 21,366.⁴ Within this municipality, residential growth initially occurred near the intersection of Routes 47 and 49 and has spread outward along the major arteries that converge in this area. For the most part, development has occurred in a northerly direction toward the City of Vineland. In fact, the two cities appear to be geographically merging. To control this form of sprawl development and the associated problems, Millville has adopted land use regulations which should encourage growth closer to the existing urban center. The new zoning regulations encourage multi-family and higher density development to occur in a concentric pattern around the urban center, while restricting the outlying areas to low density residential and agricultural uses. Such controls are essential for the proper development of the City, as over 20,000 of its 27,417 acres are woodlands, farmland or otherwise vacant land.⁵

In terms of land area and population, the City of Vineland is the largest of all the municipalities in the County. Between 1960 and 1970, Vineland increased its population by almost 10,000 residents, from 37,685 to 47,399 persons.⁶ In fact, two-thirds of the County's population growth has occurred in this area. Of Vineland's total area of 44,487 acres, 32,000 acres are in woodland, agricultural use or vacant.⁷ However, recent residential development has not located in proximity to the existing center. Originating in the vicinity of Route 47, Main Road and Landis Avenue, residential growth has spread in all directions,

along the major and minor traffic arteries. Much of the development has bypassed land in a leapfrog fashion, rather than filling in existing undeveloped areas. This has resulted in a pattern of development which is disorganized, does not conform to comprehensive land use planning and makes the provision of facilities and services exceptionally costly.

Vineland's pattern of land use can be partially explained as a result of its zoning ordinance which has failed to encourage growth in the undeveloped areas close to the urban center.⁸ In the past, the zoning ordinance did little to restrict residential growth in outlying areas and promoted strip commercial and industrial development along major transportation routes. In recent years, municipal officials have realized the wasteful land use practices that were encouraged through past zoning regulations. To correct these inadequacies, a new zoning ordinance was adopted late in 1975. This ordinance attempts to encourage development near the existing urbanized areas while restricting development in the outlying areas to a very low density potential.⁹

Between 1960 and 1970, the population of Bridgeton, the smallest of the three, exhibited a slight decline from 20,966 to 20,435 people.¹⁰ With a land area of slightly over 6 square miles, the density of Bridgeton is 3,143 persons per square mile, as compared with 492 and 685 for Millville and Vineland respectively.¹¹

The major problem facing Bridgeton is the deterioration of its central business district and parts of the residential areas. The cause stems from a number of contributory sources which include incompatible land uses, lack of recreational facilities and the presence of physical barriers such as railroad lines and other rights-of-way. However, steps have been taken to overcome some

of the problems in the form of an urban renewal project which is nearing completion. The project covers primarily the Central Business District and some of the residential uses on the periphery.

The type of residential growth which is occurring in the County can be illustrated by an analysis of the types of building permits issued. Between 1965 and 1974, the total number of building permits issued in the County was 10,264. Of this total, 5,477 were for single-family dwellings, 243 for two, three and four family units, and 3,909 were for multi-family (five or more) dwelling units. An additional 635 permits were also issued for public housing units.¹² The table below illustrates the construction permit breakdown:

Residential Permits Cumberland County 1965 - 1974				
<u>Single-Family</u>	<u>Two-Four Units</u>	<u>Multi-Family</u>	<u>Public</u>	<u>Total</u>
5,477	243	3,909	635	10,264

Of the 3,909 multi-family permits, all were issued for the Tri-City municipalities. In addition, the Tri-City Area contains all of the 635 public housing units.

Within the Tri-City Area, multi-family unit construction exceeded single-family by a slight degree. As an example, between 1965 and 1974, the number of building permits issued for multi-family was 3,909, as compared to 3,699 single-family permits. The breakdown by the Tri-City Area is illustrated as follows:

Tri-City Area
Single-Family and Multi-Family
Building Permits 1965 - 1974

<u>Municipality</u>	<u>Single-Family Units</u>	<u>Multi-Family Units</u>	<u>Municipal Total</u>
Bridgeton	98	686	784
Millville	856	1,136	1,992
Vineland	<u>2,745</u>	<u>2,087</u>	<u>4,832</u>
TRI-CITY TOTALS	3,699	3,909	7,608

As the above figures indicate, the trend in Bridgeton is towards multi-family construction. This may be due to the fact the Bridgeton is almost fully developed and may not contain the suburban "image" that makes single-family homes marketable or feasible. The fact that only 98 single-family permits were issued for a ten year period, coupled with a slight decline in population during the 1960 - 70 period, would seem to indicate that the prospects for growth are limited.

The figures for the number of building permits issued in Millville, although substantially higher than Bridgeton's, do not indicate that growth is occurring at a rapid pace. According to the 1970 U.S. Census and the 1974 Population Estimates of the New Jersey Department of Labor, the population of Millville increased by approximately 3,500 persons during the 1960 - 1974 period, from 19,096 to 22,560 persons.

In comparison, Vineland is the only municipality within the Tri-City Area which experienced substantial growth, not only in relation to other municipalities, but to the County as well. Of the total of 5,477 single-family permits that were issued during the 1965 - 1974 period, 2,745, or 50 percent, were approved for Vineland, and of the 3,909 multi-family permits, 2,087, or 53 percent, were

also issued in that municipality. In addition, it may also be of significance that Vineland was the only municipality of the Tri-City Area where single-family unit construction exceeded multi-family construction. Such figures may indicate that Vineland is an area of expanding, rather than consolidating, growth.

Of particular importance to the orderly growth and development of the Tri-City Area is the existence and operation of wastewater treatment facilities. At present, the County has 13 wastewater treatment systems, employing a variety of effluent disposal techniques which are operating at various levels of efficiency.¹³ If Cumberland County is to expand its residential and industrial activities, upgrading and expansion of facilities will become major factors for growth and development. Of particular concern, is the existence of a large number of individual septic disposal systems which has caused the pollution of subsurface and underground water supplies. Such pollution has occurred within Vineland, Millville and Fairfield and Hopewell Townships.

Certain existing systems, particularly Bridgeton's and Vineland's, are experiencing overloading and will be subjected to expansion and upgrading. Of particular importance will be the upgrading of the Bridgeton facility and its operation by the Cumberland County Sewerage Authority, because it will serve as a regional plant for Hopewell and Fairfield Townships. The construction of a collection system for the two Townships are dependent on the expansion of the Bridgeton facility.

In addition to eliminating subsurface pollution caused by individual septic tanks, the expansions within Millville, Bridgeton and Vineland will hopefully attract more industries and thereby create additional jobs. In fact, the Cumberland County Economic Development Commission has chosen as its main priority the expansion, construction and upgrading of sewerage system facilities, for the purpose of promoting industrial growth.

The future growth and stability of Cumberland County will depend primarily on the growth and expansion of the manufacturing sector of the economy. However, such expansion is questionable, as the manufacturing sector is in decline, not only in Cumberland County, but throughout the State.

The County has been primarily dependent on three major manufacturing groups - glass production, food processing and textiles and apparel production, which constitute its economic base. These industries have developed within the County because it contains the basic resources necessary for the particular manufacturing process, such as high quality glass sand, agricultural produce and an inexpensive labor force.

Since 1965, the number of manufacturing jobs has not exhibited any significant changes. In terms of the proportion to the total number of covered jobs, however, manufacturing jobs have decreased, as illustrated in the table below:

Covered Employment Trends¹⁴
For the Months of September
1965 - 1974

Year	Total Covered Employment	Manufacturing Jobs	Percent of Manufacturing Job to Total Covered Employment
1965	34,103	22,524	66.1
1966	35,611	22,784	64.0
1967	35,935	22,610	63.0
1968	38,081	23,862	62.7
1969	39,852	23,535	59.1
1970	39,484	22,671	57.4
1971	40,301	22,250	55.2
1972	42,207	21,535	51.0
1973	44,526	22,745	51.1
1974	43,478	21,542	49.6

As the above figures indicate, the manufacturing employment has fluctuated by approximately 1,000 jobs over the ten year period, while total covered employment increased by over 9,000 jobs. The increase in covered employment has been mainly within the categories of Wholesale and Retail Trade, Small Services and Amusement, and Finance, Insurance and Real Estate, with the other industrial groups also partially contributing. The growth of the non-manufacturing employment is illustrated in the table below:

Non-Manufacturing Jobs
For the Months of September
1965 and 1974¹⁵

<u>Category</u>	<u>1965</u>	<u>1974</u>	<u>Increase</u>
Wholesale and Retail Trade	5,015	8,193	3,178
Transportation	1,788	2,687	899
Communication and Utilities	608	687	79
Small Services and Amusements	1,130	5,240	4,110
Finance, Insurance, and Real Estate	1,007	2,500	1,493
Construction Contract	1,323	1,826	503
Mining, Agriculture and Other	708	803	95
TOTALS	11,579	21,936	10,357

The three major manufacturing groups - food processing, textiles and apparel production and glass processing - form the economic base of Cumberland County. Both in 1965 and 1974, these three industries provided 84% of all manufacturing jobs in the County.¹⁶ However, during the ten year period, the apparel industry has undergone a substantial reduction in the number of employer units and jobs, as illustrated in the table below:

Apparel and Needle Production
For the Months of September
1965 - 1974¹⁷

<u>Year</u>	<u>Units</u>	<u>Jobs</u>
1965	41	4,459
1966	41	4,267
1967	36	3,828
1968	38	4,534
1969	36	4,365
1970	37	3,317
1971	33	3,279
1972	32	2,816
1973	31	3,176
1974	27	2,432

The continuing decline within the apparel industry was partially offset by an increase of jobs in glass manufacture and a relative stability in food processing. However, since 1973, the glass production and food processing industries have been in a precarious position. The glass industry maintains that it can no longer compete effectively because production costs in New Jersey exceed costs found in other parts of the country. Cost items, according to industry spokesmen, include the more expensive low sulfur fuel oil required to meet the State's environmental regulations, substitutes for natural gas, such as propane, local property taxes which are higher than in many other states, and the high cost of pollution abatement equipment required by New Jersey's environmental regulations for air quality standards. As a result, employment in the glass industry is decreasing. For example, Wheaton Glass has reduced its work force by 1,500 within the last two years, and Kerr Glass and Owens-Illinois have cut employment by 700 workers. In addition, many of the companies have indicated that although they were expanding operations, such expansion would not occur in New Jersey.¹⁸

The curtailment of activities within the apparel and the glass industry has been combined with a strong possibility of reduction in employment within the food processing industries. With the recent announcement by Seabrook Farms to curtail operations, the economic base of Cumberland County could be seriously undermined. The effects of the curtailment of operation in the three major industry groups are evident, as Cumberland County has had the highest rate of unemployment (17%) within New Jersey's labor market areas.¹⁹

The sand and gravel mining industry of Cumberland County provides the basic raw material of the County's glass industry and is an important source of supply for the general construction industry of the County and the Philadelphia-Camden metropolitan region. It can be expected that the demand for sand and gravel products will increase in the future. Because of the local and regional economic impact of the industry, it will be increasingly important to protect the basic resource and to provide for the regulated expansion of mining operations in a manner consistent with environmental concerns and with land use planning objectives for future development.

Sand and gravel mining is a highly destructive form of land use which has often resulted in large areas of scarred, denuded landscape unsuitable for most normal land uses. Excavation operations may create surface or groundwater supply or water quality problems, they may create problems in the future use of the sites themselves or in the future use of adjacent areas, they may pose noise and traffic control problems, and they may present the potential for serious environmental damage, such as erosion and the subsequent siltation of surface streams and the destruction of large areas of vegetation and wildlife habitat.

At the present time, there are about 4,000 acres of sand and gravel extraction operations in Cumberland County.²⁰ In addition, there may be a substantial amount of land in the County which is being held by mining operators or industrial sand users as sites for the future expansion of their mining operations. Present large-scale mining pits are primarily located in the eastern half of the County in Vineland, Millville, Maurice River Township, Commercial Township and Downe Township. A significant amount of this acreage lies within the CAFRA zone, but future excavations may be developed either within or outside of the CAFRA boundary. Controls over extractive operations include local zoning controls, the recently adopted Soil Erosion and Sediment Control Act, which will be administered through the Soil Conservation Districts, and State environmental controls including CAFRA, the Wetlands Act and the Riparian Lands Act. Careful coordination of all of these controls will be necessary in order to avoid undue restrictions on the industry, while protecting the environment and other land users.

Agriculture has been an important base for economic activity in Cumberland County. In total, the County has over 68,800 acres (21 percent of its land area) devoted to agricultural use.²¹ In 1974, the County ranked first in the State in the acreage devoted to lettuce, onion and strawberry production and was second in the acreage devoted to cabbage and nursery stock. In addition, poultry farming is an important agricultural industry.²²

The importance of agricultural activity within the County lies in its link to the manufacturing sector of the economy, specifically, the food processing industry. The existence of this industry is predicated, among other conditions, on the availability of farm produce, of which Cumberland County is a leading supplier. As a direct result of agricultural activities, the food processing

industry is the second largest within the manufacturing sector, employing well over 4,000 workers at peak periods of the year. Of particular importance has been Seabrook Farms, Inc., which encompasses 19,000 acres and leases, or through cooperatives, utilizes an additional 40,000 acres, making it the largest single farming enterprise in New Jersey.²³

At present, however, the agricultural industry is facing severe problems as a result of the decisions by a number of food processing plants to relocate or curtail their activities within the County. For example, the P.J. Ritter Company has shifted its processing operations to another state, and Seabrook Farms has announced it will eliminate both growing and processing within the near future. Citing increased prices, labor and energy costs, coupled with rigid environmental standards as major problems, industry spokesmen have stated that food processing is no longer profitable in New Jersey. As a result, Seabrook's decision will affect at least 150 growers and could result in a loss of 1,200 jobs.²⁴

The preservation of the agricultural industry is important not only in terms of the number of jobs that are generated, but also in terms of land-use planning. If the farmers no longer find a market for their produce, their lands could be subject for residential or commercial development in areas where such development is not warranted, as for example in outlying areas where public facilities and services are lacking. Because agricultural land most often possesses the qualities which attract development, such as good drainage, large tracts and flat topography, and because the use of such lands for agricultural production would no longer be economically viable, speculation and development pressure could be an undesirable reality.

Implications -

Due to the geographic distribution of development in Cumberland County, it is difficult to identify any major impacts on the CAFRA zone which might occur as a result of land use changes or development pressures in the future. Instead, it appears that suburban development will continue to occur outside of the CAFRA boundary (within the Tri-City region in particular). Large scale residential development within the County's CAFRA zone is not expected for several reasons. The area consists of large wetland areas and numerous large public conservation lands. It has no recreational attractions such as the beaches and tourist centers, similar to those on the Atlantic Coast. Due to the nature of its soils, it does not have land commonly thought of as desirable for development. Finally, any new growth which may occur in the County will be oriented towards the Philadelphia Metropolitan area, and thus will locate in the northern areas of the County which are closer to Philadelphia.

The planned series of improvements to the County's transportation system to the Philadelphia area will be potential stimulants for growth in the northern area of the County. The northern portion of the Route 55 Freeway is scheduled to be completed by 1978, from its present terminus at the Cumberland-Gloucester County border to the City of Glassboro, and the Delaware River Port Authority is planning a new high speed rail passenger line from Glassboro to Philadelphia. The high speed line, in combination with the completed Route 55, is expected to reduce travel time from Millville to Center City Philadelphia to approximately one hour. This could be a stimulus for growth in the Tri-City Area; however, rapid development is not anticipated in the near future, because Camden, Gloucester and Salem Counties have substantial amounts of vacant, developable land which will absorb the expansion from the Philadelphia Metropolitan Area before extending into Cumberland County.

There are two potential major residential growth areas which may be advantageously affected by the travel improvements outlined above. The first is the planned recreational community which is already under construction along the eastern shore of Union Lake in Millville. This development, a 20 year project of the Maurice River Company, is to contain 7,180 residential units and will house approximately 20,000 persons when completed. The second potential growth area is the planned new community in Upper Deerfield Township, known as Seabrook Farmingtown. As originally planned, this "agri-city" would have consisted of an overall tract of 6,000 acres, broken down into 1,500 acres of agriculture, 2,285 acres of residential development (15,000 units with 500 acres of open space), 285 acres of commercial and specially restricted business use, 570 acres for industrial use and 1,360 acres of open space.²⁶ The future of this proposed agri-city is questionable due to a series of economic factors which have forced the sponsor into bankruptcy. However, a major upturn in the national economy could result in a revival of the project. Other possibilities are that the project could be revamped along less ambitious lines or it may revert entirely to standard subdivisions, developed individually without the environmental or economic benefits of the original plan.

Several implications for the future of the Tri-City area can be deduced from the discussion of the cities of Bridgeton, Millville and Vineland. All three cities show the effects of past inadequate land use planning and ineffective development controls. Bridgeton is working to overcome problems of deterioration through an urban renewal project, and Millville is investigating the possibility of a downtown mall. In Bridgeton, which is largely developed, each improvement made should affect the overall condition of the City favorably and improve its

outlook for the future. Vineland, as a result of the rapid pace of its growth over the past twenty years, has not yet begun to experience the large-scale problems of deterioration which have affected Bridgeton and Millville. However, the sprawling, inefficient land use pattern that now exists may lead to problems of higher municipal expenditures for the provision and maintenance of such services as water, sewer, garbage collection, and police and fire protection.

In terms of the entire Tri-City Area, continued sprawl development can be expected to have undesirable impacts. There is the obvious continued loss of farmland as new development scatters itself through the area. Strip development virtually links Vineland and Millville already, and similar development is currently spreading out to link Millville with Bridgeton,

Cumberland Mall, which is located near the Route 55 interchange on the Vineland-Millville boundary, is a major stimulant that has served to intensify the growth pressures which had already been working to link the two cities with strip development along Route 47. The spread development which is occurring near the Cumberland Mall and elsewhere in the Tri-City Area is having an adverse impact on agricultural land. As previously mentioned, existing spread development has encroached on agriculture to the extent that in the Tri-City Area and particularly in Vineland, many parcels of agricultural acreage are completely enclosed by strip residential and commercial land uses. As development continues in the Tri-City region and spills over from the three cities into the townships, the loss of agricultural land would continue. The remaining agricultural land in Vineland, although it is substantial in terms of acreage, is so fragmented by strip residential and commercial development that its ultimate conversion seems inevitable.

Although spread development is of substantial concern, there are indications that growth in the Tri-City Area (and in the County) may not continue at the rate established over the last two decades. As discussed previously, it appears that future growth in Cumberland County must be based on expansion within the manufacturing sector of the County's economy. Indications, however, for expansion in the manufacturing sector of the economy are lacking. In fact, one of the largest employers in the County, the textile industry, exhibited a decline in employment between 1965 and 1970, and there seems to be little hope that this trend will reverse itself. The largest employer in the County, the glass industry, although it maintained its level of employment between 1965 and 1970, is not projected to show significant expansion in the future. In fact, the national energy crisis has had an adverse impact on the glass industry. The industry is heavily dependent upon adequate supplies of natural gas which it uses as a heat source for its manufacturing processes. The shortage of natural gas in the winter of 1974-75 resulted in production slowdowns. Should the natural gas supply problem continue to remain unsolved, the glass industry may be forced to choose between conversion of its plants to another fuel or the relocation of the industry to an area where gas supplies are adequate. In addition to this problem, the industry is faced with the higher costs incurred in doing business in New Jersey as compared to costs in other states. New Jersey's strict environmental protection laws and regulations and the high tax rate are two reasons cited by industry spokesmen as working against the industry in New Jersey. Relocation of the industry would be a severe blow to the economy of Cumberland County, as it provides 27 percent of the employment in the County. In addition, the prospects for continued growth of the County's population and economy would be drastically reduced.

Data Gaps -

1. Additional information concerning the sand and gravel mining industry is needed. In particular, information is needed concerning acreage currently being mined, acreage in abandoned and unreclaimed pits, the details and status of existing or proposed local County or State regulations concerning pit reclamation, an inventory of land which is held by mining concerns and individual industries who may maintain their own sand and gravel mining operations which may be opened for mining purposes in the future.

2. A comprehensive review of proposed regionalization of existing sewerage systems and expansions is needed in order to evaluate potential impacts the new systems may have on the location and density of future development.

3. Small scale development within the CAFRA zone, i.e., under 25 residential units, may be occurring in environmentally sensitive areas. The cumulative impact of such small scale development should be further investigated.

FOOTNOTES

¹Office of Business Economics, New Jersey Department of Labor and Industry, "Selected Places of Work by Municipalities & Residences," 1973.

²Cumberland County Sewerage Authority, "Social, Environmental and Wastewater Inventory Report," March, 1975, p. 5-3.

³1970 U.S. Census.

⁴Ibid.

⁵Cumberland County Sewerage Authority, op.cit., p. 5-6.

⁶1970 U.S. Census.

⁷Cumberland County Sewerage Authority, op.cit., p. 5-5.

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⁹City of Vineland Revised Zoning Ordinance, November, 1975.

¹⁰1970 Census of Population.

¹¹Planning, Educational and Economic Consultants, "A Report to the Bridgeton Planning Board: First Year Program," September, 1971, p.15.

¹²New Jersey Department of Labor and Industry, "New Jersey Residential Building Permits," 1965-1974.

¹³Cumberland County Sewerage Authority, op.cit., p. 2-1/1.

¹⁴New Jersey Department of Labor and Industry, "Covered Employment Trends in New Jersey," 1967-1974.

¹⁵Ibid.

¹⁶Ibid.

¹⁷Ibid.

¹⁸Donald Janson, "Glass Industry's Leaders See Peril in Costs of Fuel and State Air Rules," New York Times, December 8, 1975.

¹⁹New Jersey Department of Labor and Industry, "Covered Employment Trends in New Jersey," 1967-1974.

²⁰Cumberland County Sewerage Authority, op.cit., pp. 5-9 and 11-2.

²¹Cumberland County Sewerage Authority, op.cit., p. 5-4.

²²New Jersey Department of Agriculture, Crop Reporting Service.

²³Cumberland County Sewerage Authority, op.cit., p.2-4.

²⁴Donald Jansen, "Seabrook Farm's Plan to End Processing of Vegetables is Termed Disaster," New York Times, January 6, 1976.

²⁵Cumberland County Sewerage Authority, op.cit., p. 6-5.

²⁶Seabrook-Farmington Inc., "Seabrook Farmington: A Planned Community," June, 1973.

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