

# Mapping and Growth Accommodation Guide

## *Technical Assistance Manual*

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*prepared by;*  
The New Jersey Department of the Treasury  
**Office** of State Planning  
in consultation with the  
New Jersey State Planning Commission

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# Mapping and Growth Accommodation Guide

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# *Preface*

This document is designed to assist local cross-acceptance participants during continuation of the negotiation phase. Its primary purpose is to assist in mapping the Resource Planning and Management Structure (Planning Areas and Centers) and allocating growth projections. It also is intended to help produce uniform products and documents which should improve the negotiations process statewide.

The mapping techniques and sources of information, outlined in the document, are provided as guidelines, with the understanding that there may be other techniques and, especially, sources of information which may be equally acceptable for mapping purposes.

The Guide describes a process to graphically display the criteria and policies of the Interim State Development and Redevelopment Plan. It is important, therefore, that the Interim State Development and Redevelopment Plan be used in conjunction with this document to fully understand how to apply the mapping and accommodating growth concepts. It is important as well that participants understand that the resulting map is not the Plan. The map, as stated above, is a graphic depiction of the delineation criteria and policies of the Plan.

Finally, this document takes a comprehensive approach to the process of mapping and accommodating growth. Although the State Planning Commission's Plan Development Committee (PDC) recommends that the Guide be used to help develop the Interim Plan Map, the PDC recognizes that there are varying levels of information and resources available at the local level to accomplish this purpose. In some cases, a significant effort may be required on the part of some participants to generate the information described in the Guide. The PDC recommends that, in order to accomplish as much as possible during the 150 day period of continuing negotiations, local officials use readily available, existing information (e.g., Preliminary Plan Cross-acceptance maps, natural resource inventories, county and municipal master plans). After adoption of the Plan, and as new information is developed locally and statewide, the Commission will receive and review map revisions from municipalities and counties and, if appropriate, amend the Plan accordingly.

# I. INTRODUCTION

The Interim State Development and Redevelopment Plan (Interim Plan) was approved for the continuation of Cross-acceptance by the State Planning Commission (Commission) on July 12, 1991. The Plan's general strategy is, "...TO ACHIEVE ALL STATE PLANNING GOALS by coordinating public and private actions to guide future growth into compact forms of development and redevelopment, located to make the most efficient use of infrastructure systems and to support the maintenance of capacities in infrastructure, environmental, natural resource, fiscal, economic and other systems."

The negotiation process has been extended to reconcile policy issues that have been deferred, and to map Planning Areas and Centers as defined in the Interim Plan. The State Planning Commission recognizes the diligent efforts of municipalities and counties to map Preliminary Plan "Tiers" as part of the Comparison Phase of Cross-acceptance. Many of the maps produced, however, reflected underlying "policy" issues concerning the purpose of the tier system and/or the application of tier delineation criteria. As a result, the Commission has made policy changes reflecting the comments and the results of negotiations. Because there have been fundamental changes in policy and in delineation criteria, the Commission is asking counties and municipalities to re-consider the original Cross- acceptance Maps submitted as part of the comparison phase in the context of the Interim Plan, and produce new maps with appropriate documentation. These county and municipal Interim Plan maps will be the subject of negotiations with the Commission. This guide has been prepared to assist the local participants in planning for growth projections and mapping the Resource Planning and Management system.

In counties that are unable to continue their participation in the negotiation phase of Cross-acceptance, the State Planning Rule, N.J.A.C 17:32-3.3(a) states that, "the State Planning Commission shall designate an appropriate entity to participate in cross acceptance in place of the non- participating county, after having first consulted with the entity to be designated and having secured that entity's commitment to participate in the cross-acceptance process." N.J.A.C 17:32-3.3(b) allows the county to request designation of a specific entity, if the county chooses not to participate.

The Interim Plan and the Cross-acceptance Process provides an opportunity to reach a statewide consensus on growth projections and a mechanism to accommodate growth consistent with the Interim Plan. As part of the process, the Interim Plan sets forth a range of projections for population and employment. During the remainder of the Negotiation Phase of Cross- acceptance, the State and counties should agree on a level of growth for each county, informed by the results of the

1990 Census. Each county, with the participation of its respective municipalities, should then distribute the county projection among the municipalities. The counties and municipalities should consider how the growth can be best accommodated, consistent with the Interim Plan. Projections developed in this manner are for use in long range planning and are not intended for regulatory purposes.

Planning Areas, the "regions" that provide a backdrop for Centers, are to be mapped utilizing the delineation criteria in the Interim Plan. The criteria are applied regionally for areas larger than one square mile. The delineation of Planning Areas should not be a purely mechanical exercise. Some of the delineation criteria are flexible, providing communities opportunities to exercise discretion. Documentation should be provided to support the mapping of Planning Areas.

The Interim Plan introduces Centers as an efficient way to accommodate growth. Centers should be identified for inclusion in the State Development and Redevelopment Plan by local officials through the Cross-acceptance Process. Centers that satisfy all the Planning and Policy Objectives of the Plan will be "Designated" by the Commission. Counties and municipalities are encouraged to identify Centers during the mapping process.

When the mapping is complete, the final product should be a set of Cross-acceptance Maps indicating the proposed Planning Areas, Critical Environmental Sites and Centers; a set of worksheets listing County and municipal growth projections; and supporting documentation, including: Planning Area factors; Center Worksheets; and other appropriate information.

## II. TECHNICAL MAPPING GUIDELINES FOR PLANNING AREAS

The guidelines described in this section should not be construed as map accuracy standards and do not alter the intent or criteria of the Planning Areas. The Planning Areas are regional in nature, and in this context, it is recognized that Planning Area boundaries are not located with the precision applied to mapping physical features at similar scale. This section attempts to standardize the format of the maps returned to the Office of State Planning, so that proposed changes can be compared and evaluated on an equitable and timely basis. These mapping guidelines are designed to ensure consistent mapping assumptions and methodologies and will therefore promote efficient data handling and negotiation.

### A. Specific Guidelines

Each county should submit a full set of Cross-acceptance Maps at U.S.G.S. Topoquad scale to reflect their interpretation of Planning Areas. This includes tracing boundaries that have not changed from the previous mapping effort. Each Planning Area should be labeled with its identifying Planning Area number. Supporting documentation should accompany the revised maps. Areas that require documentation should contain a "cross-reference" number. The number will serve to cross-reference the map with the supporting document. This supporting document should include the rationale and documentation for Planning Area delineations. Planning Areas should be drafted on matte drafting film in red opaque ink using a #1 technical pen or with a .5 mechanical pencil with red lead or a sharp red pencil.

*The procedure is as follows:*

- Step 1. The corners of the neat line from the photoquads supplied to the counties should be transferred to a fresh drafting film overlay using a straight edge.
- Step 2. Each map is to be labeled as to its U.S.G.S. Topoquad name in the lower right corner. The Office of State Planning quadrangle reference number is to appear under the name. The name of the county producing the map and the date of completion is to be placed in the lower left corner.
- Step 3. Label all Planning Areas with the appropriate number. Planning Area numbers should be placed in a centralized location within the area. A large or unusually shaped area may be labeled more than once.
  - 1- Metropolitan Planning Area
  - 2- Suburban Planning Area
  - 3- Fringe Planning Area
  - 4- Rural Planning Area

## 4B-Rural Environmentally Sensitive Planning Area 5- Environmentally Sensitive Planning Area

- Step 4. Label Planning Areas that are based on flexible criteria with a cross-reference number, in a circle adjacent to the Planning Area number, that number is a cross-reference to the supporting documentation.
- Step 5. All maps must edge match with adjacent maps. Lines must meet closely, and adjoining polygons must have the same area designation.
- Step 6. State reasoning for Planning Areas based on flexible criteria. Source data must be provided or referenced, as appropriate, in the supporting document.

The product will be a set of Cross-acceptance Maps at U.S.G.S. Topoquad scale that have Planning Areas identified. The document that accompanies the Cross-acceptance Maps should include sufficient information to support the mapping.

## B. DESCRIPTION

This section provides a general description for mapping Planning Areas and is intended to provide guidance for local officials. Planning Areas are not intended for application on a site by site basis, but for establishing the framework for the application of Plan Policy. This guide offers recommendations for how to map Planning Areas and where to find information to support Planning Area Delineations.

### **Planning Area 1: Metropolitan Planning Area**

The Metropolitan Planning Area, including Delineation Criteria and Planning Area Objectives, is described in detail on pages 100 -103 of the Interim Plan.

### **Recommendations for Mapping Planning Area 1**

Planning Area 1 is fully developed. This can be documented from U.S. Census information, aerial photography or building and occupancy permit information (for areas that have been developed after the aerial photographs were taken). Census information is available from many sources including County Planning Offices, State Planning Offices and many libraries across the State. Aerial Photographs are available for inspection at The Office of State Planning and county planning offices.

Planning Area 1 must also contain public water and sewer service. This information is available at the Office of State Planning or the local agency or entity that provides the service.

Areas that do not satisfy the above mentioned factors but that are totally surrounded, geographically related and meet the intent of with the Metropolitan Planning Area should also be delineated Planning Area 1.

The application of Planning Area 1 delineation criteria should generally result in the conversion of areas that were identified as Tiers 1 & 2 in the Preliminary Plan to the Interim Plan's Metropolitan Planning Area.

## Planning Area 2: Suburban Planning Area

The Suburban Planning Area, including Delineation Criteria and Planning Area Objectives, is described on pages 103 -106 in the Interim Plan.

### Recommendations for Mapping Planning Area 2

The Suburban Planning Area is the area contiguous with the Metropolitan Planning Area where it can be demonstrated that although the area currently does not contain a population density of at least 1000 persons per square mile, the area can support that density.

The Interim Plan's Suburban Planning Area reflects one major change from the Preliminary Plan. The delineation criteria has been revised to include "urban infrastructure". For the purposes of the Interim Plan, existing or planned "urban infrastructure" generally consists of, at a minimum, the following interconnected components with a demonstrated capacity to serve a density of over 1,000 persons per square mile in a defined area:

1. Regional or Community-based Water Supply and Distribution: a system of public water service;
2. Regional or Community-based Wastewater System: a system of collection, treatment and disposal facilities within a defined, approved area;
3. Storm Drainage: a predominantly structural system (e.g., storm sewers, culverts, etc.) to manage stormwater runoff;
4. Transportation (including public transportation): a circulation system that includes pedestrian, vehicular and public transportation, linking residential and commercial districts, as well as Centers; and
5. Parks: a system of municipal, county and/or State parks.

Capacities of urban infrastructure systems should be documented in approved municipal, county and/or State plans, programs, regulations or agreements; analyzed by municipal and county officials from the above information; and presented for review by the State Planning Commission's Negotiation Committee prior to delineation.



## Planning Area 3: Fringe Planning Area

The Fringe Planning Area, including Delineation Criteria and Planning Area Objectives, is presented on pages 106 -108 of the Interim Plan.

### Recommendations for Mapping Planning Area 3

The Fringe Planning Area should serve as a buffer between the developed Metropolitan and Suburban Planning Areas and the Rural and Environmentally Sensitive Planning Areas. It should be mapped based on: Census information; aerial photo-interpretation; infrastructure availability and sufficiency analysis; the LESA Analysis discussed under Planning Area 4; and natural resource data base discussed under Planning Area 5.

The Fringe Planning Area does not contain nor is it anticipated to contain all of the components of urban infrastructure during the planning period.

## Planning Area 4: Rural Planning Area

The Rural Planning Area, including Delineation Criteria and Planning Area Objectives, is presented on pages 108 - 111 of the Interim Plan.

### Recommendations for Mapping Planning Area 4

The Criteria for the Rural Planning Area are broader than the single agricultural criterion for Tier 6 in the Preliminary State Development and Redevelopment Plan. Counties and municipalities should consider using the Land Evaluation and Site Assessment (LESA) model to assist them in delineating this Planning Area. The LESA model has two components. Land Evaluation (LE) measures soil productivity, soil potential and can be used to identify important farmlands. The Site Assessment (SA) component considers location, adjacent land uses and other considerations to consider land suitability for development. The results derived from the LESA model may vary depending on the weight given to the formula variables.

The LE components (land capability, soil productivity, soil potential and important farmland classification) are very similar to the criteria used by County Agriculture Development Boards (CADB) to delineate Agricultural Development Areas (ADA). Many counties have undertaken ADA delineations and should have this information readily available. The mapping process will be an opportunity for municipalities and counties to reexamine their ADAs and make modifications. The CADBs should be given a leadership role in this process. Soil maps are a necessary component of land evaluation. The USDA Soil Conservation Service has published soil maps. County Planning Boards and Soil Conservation Districts already have these maps, and technical assistance is available from the Department of Agriculture, State Soil Conservation Committee. The Soil Conservation Districts can provide technical assistance for the LE component applicable to all land use.

The SA components consider agricultural land use and viability factors, land-

use regulations and tax concessions, options to proposed use, impacts of proposed use, compatibility with comprehensive development plans and urban infrastructure. Planning Area 4 may contain more than agricultural lands; ADAs can include only agricultural land. *The SA component can be used to identify lands of lower agricultural value that have the potential to support residential and non-residential development within the Rural Planning Area.*

Large areas of Planning Area 4 should be identified based on the Planning Area Criteria. The mapping exercise may be the beginning of a county- municipal examination of long-term agricultural viability and future rural development. The LESA model can be the start of a comprehensive process to identify the best areas for agriculture and the best areas for development that are appropriate to and support agriculture.

Planning Area 4 should not be so tightly delineated to identify only the "best" agricultural lands. Land of lower agricultural value may be included within this Planning Area. Planning Area 4 allows for development of Centers and services related to or compatible with agricultural and resource production. This non-agricultural development should be guided to lesser quality land within the Planning Area 4 to reduce the conversion of prime agricultural land to non-agricultural use. Rural Planning Areas are served by two-lane roads, but the presence of a multi-lane highway should not exclude an area from Planning Area 4 designation. When multi-lane roads are in rural areas, attention should be focused on access to local roads (limited vs. unlimited access) and the capacity of local access roads.

Areas that satisfy the Criteria for both Planning Area 4 and Planning Area 5 should be designated Planning Area 4B - Rural Environmentally Sensitive Planning Area.

*During mapping local officials may use, but not be limited to:*

1. Agricultural Development Areas;
2. U.S.D.A. Soil Conservation Service National Cooperative Soil Survey maps;
3. U.S.D.A. Soil Conservation Service Important Farmlands maps;
4. Aerial photographs and "windshield" inspection of rural areas to determine that the area is currently in agricultural or resource production (e.g. sand mines, quarries, forest areas); or
5. Local property tax records. Municipal and county tax records record those lands assessed as "Farmland".

## Planning Area 5: Environmentally Sensitive Planning Area

The Environmentally Sensitive Planning Area, including Delineation Criteria and Planning Area Objectives, is presented on pages 111 -114 of the Interim Plan.

## Recommendations for Mapping Planning Area 5

## *Trout Production and Trout Maintenance Waters and Their Watersheds.*

### *Sources of Documentation*

- a. Trout production and trout maintenance waters and their watersheds are identified in the N.J. DEPE Surface Water Quality Standards (N.J. A.C. 7:9- 4), specifically the "Surface Water Classifications for the Waters of the State of New Jersey".
- b. Trout production and trout maintenance waters and their watersheds are identified in the N.J. DEP's report entitled "Classification of New Jersey Waters as Related to their Suitability for Trout". This publication is periodically revised to contain the most current listing of trout waters; and
- c. U.S. Geological Survey Topographic Quadrangle Maps

U.S.G.S. Maps and N.J. DEPE Maps are available for inspection at the N.J. DEPE Office of Regulatory Policy and the Office of State Planning.

### *Delineation Factors*

Trout waters and their watersheds are determined by identifying the land areas draining into water bodies classified by N.J. DEPE as trout waters. The Office of State Planning's trout watershed factor maps were compiled from three data sources: (1) Trout Waters Maps (N.J. DEPE Office of Regulatory Policy); (2) U.S.G.S. Watershed Boundary Maps; and U.S.G.S. Topographic Quadrangle maps. The combined data from these three maps should be used to determine the watersheds of the trout waters.

## *Pristine, Non-Tidal Category T Waters and Their Watersheds Upstream of the Lowest Category I Stream Segment.*

### *Sources of Documentation*

- a. The N.J. DEPE Surface Water Quality Standards (NJ.A.C 7:9-4), specifically the 'Surface Water Classifications for the Waters of the State of New Jersey'<sup>7</sup>.
- b. The Surface Water Classification Maps, are available for inspection at N.J. DEPE, Science and Technical Programs.

### *Delineation Factors*

Pristine Category I Watersheds are determined by identifying the land areas draining into water bodies classified by N.J. DEPE as Category One. The Office of State Planning's pristine watershed factor maps were compiled from three data sources: (1) Surface Water Classification Maps; (2) U.S.G.S. Watershed Boundary

Maps; and (3) U.S.G.S. Topographic Quadrangle Maps. The combined data from these three maps should be used to determine the watersheds of the Category I waters.

### *Watersheds of Existing or Planned Potable Water Supply Sources*

#### *Sources of Documentation*

Watersheds of existing or planned potable water supply sources have been identified on NJ. DEP's Water Resources Map included in the Statewide Water Supply Master Plan. These maps are available for inspection at the Office of State Planning and DEP's Office of Science and Technology Programs.

#### *Delineation Factors*

Data from DEP's Drainage Basin Map and U.S.G.S. Topographic Quadrangle maps should be combined to determine the watersheds of existing or planned potable water supply sources. This information is on file at the Office of State Planning.

### *Aquifer Recharge Areas of Potable Water Supply Sources.*

#### *Sources of Documentation.*

The NJ. Geological Survey is developing a method for local mapping of ground-water recharge rates. The N.J.G.S. is currently developing a guide for use by local planners. The guide will be completed by the end of 1991. N.J.G.S. will begin mapping aquifer recharge areas in 1992. Information is available from the agency.

Information regarding mapping aquifer recharge areas is available from DEP's State Geological Survey Element.

Additionally, until such time as the N.J.G.S. Aquifer Recharge Areas Mapping guide is complete, the following documents and other resources are available to assist in making this determination:

- a. NJ. DEPE Water Technical Programs Division, State Geological Survey Element Unit.
- b. U.S. Soil Conservation Service.
- c. N J. DEPE Office of Regulatory Policy.

#### *Delineation Factors*

Until the N.J.G.S. completes the mapping guide, local and county governments may use a combination of soils surveys, aerial photographs, geologic maps, hydrogeological maps of surficial geologic deposits and soil hydrologic groups to delineate the boundaries of aquifer recharge areas. (Hydrogeologic consultants may

be hired to assist in this delineation process)

*Habitats of Populations of Endangered or Threatened Plant or Animal Species included on State and Federal Wildlife Lists.*

*Sources of Documentation*

- a. The Office of State Planning has endangered species factor maps on file for initial delineation of important habitats of threatened and endangered plant and animal species;
- b. The N.J. DEPE, Division of Fish, Game and Wildlife may be able to provide guidance to local governments for the designation and delineation of important habitats of threatened and endangered animal species; and
- c. The N.J. DEPE, Division of Parks and Forestry, Office of Natural Lands Management may be able to provide guidance to local governments for the designation and delineation of important habitats of threatened and endangered plant species.

*Delineation Factors*

Identification of habitats for populations of endangered or threatened plant or animal species, that are included on the N.J. or Federal endangered or threatened plant and animal species lists, should be based on documentation supporting the extent of the habitat.

*Coastal Wetlands*

Sources of Documentation and Delineation Factors Coastal wetlands are recorded in NJDEPE Coastal Wetlands Maps and are available in the NJDEPE Bureau of Tidelands.

*Freshwater Wetlands System*

*Sources of Documentation*

Freshwater wetlands mapping is required by the Freshwater Wetlands Act. NJDEPE is currently preparing the Freshwater Wetlands Maps. Information for completed counties is available from the NJDEPE, Bureau of Tidelands. For areas that have not been mapped by the NJDEPE, mapping should be based on the National Wetland Inventory Map. (This map can be obtained from the N.J. DEPE, Bureau of Tidelands).

Freshwater wetlands information is also available from delineations conducted, reviewed and recorded during subdivision and site plan approval processes.

### *Delineation Factors*

Wetlands are transitional lands located between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands must also have one or more of the following three attributes:

- a. the land predominantly supports hydrophytes;
- b. the substrate is predominantly undrained hydric soil; and
- c. the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

Freshwater wetlands can be delineated on the basis of three parameters, as follows:

- a. Hydrology - Soil is inundated permanently or periodically at mean water depths less than or equal to two meters, or soil is saturated to the surface at some time during the growing season of the prevalent vegetation;
- b. Vegetation - prevalent vegetation consists of plant species adapted to anaerobic soil conditions;
- c. Soil - Soils present have been classified as hydric, or they possess characteristics that are associated with anaerobic soil conditions.

### *Critical Slope Areas*

#### *Sources of Documentation*

Areas predominately characterized by either an average change in elevation greater than 15 percent of the corresponding horizontal distance through the slope (15 percent slope), or by a very high erosion hazard as indicated by an erodibility factor "K" computed from information on U.S.G.S. Topographic Quadrangles and U.S.D.A. Soil Surveys.

### *Delineation Factors*

- a. Area with a 15% or greater slope; or
- b. Area with a high erosion hazard as indicated by a soil erodibility factor "K", computed by the U.S.D.A., Soil Conservation Service, of 0.40 or greater.
- c. Prime Forested Areas, including mature stands of native species.

### *Sources of Documentation*

The N.J. DEPE, Division of Parks and Forestry and the Office of Natural Lands Management, under the Natural Heritage Program has developed a Plant Habitat Map. Prime forested areas can be delineated based on this map.

### *Delineation Factors*

Prime forested areas fall into two major categories: the hardwoods, located mainly in ridge and valley and the inner coastal plain; and the pine forest, located in the sandy soils of the outer coastal plain.

## III Critical Environmental Sites

There are numerous environmentally sensitive features of critical public importance that will not be mapped as Planning Areas in the Statewide mapping process. This is due to their size and the mapping protocols being used. The Interim Plan establishes a process for their recognition in county and municipal master plans and on Cross-acceptance Maps.

Policy 22 of the Resource Planning and Management section of the Interim Plan states that Critical Environmental Sites located in any Planning Area will be treated in accordance with (1) the planning objectives used in the Environmentally Sensitive Planning Area 5 and (2) Statewide policies pertinent to environmental resources of concern on the site.

Critical Environmental Sites are areas that are less than one square mile in size that otherwise satisfy Planning Area 5 Criteria or the environmental features listed in this section. Critical Environmental Sites should be mapped on the Cross-acceptance Maps. Each county should submit their interpretation of Critical Environmental Sites. This may include the tracing of boundaries of Environmental Sensitive Sites mapped during the Comparison Phase of Cross-acceptance. Supporting documentation should accompany the maps. This supporting document should include the rationale and documentation for Critical Environmental Site delineations. Critical Environmental Sites should be drafted on Cross-acceptance Maps with Planning Areas already delineated in green opaque ink using a #1 technical pen or with a .5 mechanical pencil with green lead or a sharp green pencil.

- Step 1. Label all Critical Environmental Sites/"CES".
- Step 2. Label Critical Environmental Sites with a cross-reference number in a circle adjacent to the "CES" designation, that number is a cross-reference to the supporting documentation.
- Step 3. All maps must edge match with adjacent maps. Lines must meet closely, and adjoining polygons must have the same area designation.
- Step 4. Provide supporting documentation for all Critical Environmental Sites. Source data must be provided or referenced, as appropriate, in the supporting document.

The product will be a set of Cross-acceptance Maps at U.S.G.S. Topographic Quadrangle scale that have Planning Areas and Critical Environmental Sites identified. The document that accompanies the Cross-acceptance Maps should include sufficient information to support the mapping.



## *Recommendations for Critical Environmental Sites*

*Critical Environmental Sites* include areas covering less than one square mile that otherwise meet the requirements for Planning Area 5 or one of the following additional criteria.

### *Cultural, Archeological and Historic Areas*

#### *Sources of Documentation*

- a. Historic areas have been identified on the N.J. Historic Districts and Scenic Areas Map available at the Office of State Planning. Information for this map was derived from a publication produced by the N.J. DEPE, Office of N.J. Heritage and the U.S.G.S. Topographic Maps.
- b. The New Jersey Register of Historic Places is the official list of New Jersey's " cultural resources.
- c. N.J. DEPE, Office of New Jersey Heritage has an inventory of data and maps containing the locations of cultural resources and historic districts and places in the State.
- d. N.J. DEPE, Office of New Jersey Heritage may be able to provide technical assistance to local governments for the identification, evaluation, review and nomination of appropriate sites for the State or/and National Register.

#### *Delineation Factors*

- a. Areas that are associated with events that have made a significant contribution to the broad pattern of our history;
- b. Areas that are associated with the lives of persons significant in our past;
- c. Areas that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of the master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;
- d. Areas that have yielded, or may be likely yield, important historical information.

Historic District Delineations may follow street block and lot lines. Sometimes this delineation may coincide with a scenic corridor boundary line. A buffer for the district to protect and enhance the sites characteristics is encouraged. The size of this buffer will be determined at the discretion of the local authorities.

## *Scenic Resources and Their Buffers*

### *Delineation Factors*

Counties and municipalities should identify and submit to the Office of State Planning any areas which qualify as scenic corridors. The boundary of a scenic corridor should define an area which satisfies the criteria below:

- a. The area is visible from a public thoroughfare; and
- b. The area exhibits one or more of the following features:
  1. over-water views;
  2. mature woodlands;
  3. mountain, hilltop, or cliff top ridges where a) the ridges are substantially undeveloped in appearance; or b) the ridge is continuous;
  4. historic or cultural resource landmarks or landscapes;
  5. unique geologic or topographic features of natural or historic significance;
  6. long views; or
  7. panoramic vistas of natural or built environments.

### *Flood Prone Areas and Their Buffers*

#### *Sources of Documentation*

Flood prone areas and their buffers are defined in New Jersey's Hood Control Master Plan and on FEMA's Flood Area Hazard Maps.

#### *Delineation Factors*

Delineation of Flood prone areas and their buffers should take into account the following elements:

- a. 100 year flood plain;
- b. Open space areas; and
- c. natural grassed swales, forested areas, and other natural areas contributing to flood control. Buffer areas may range in width due to the natural conditions and characteristics, as well as built facilities.

## *Stream Corridors and Their Buffers*

### *Sources of Documentation*

U.S.G.S. Topographic Quadrangle maps and official tax maps that contain waterways can be used to identify streams and other waters. "Evaluation and Recommendations Concerning Buffer Zones Around Public Water Supply Reservoirs" a report available from the N.J. DEPE contains recommended buffer zone applications.

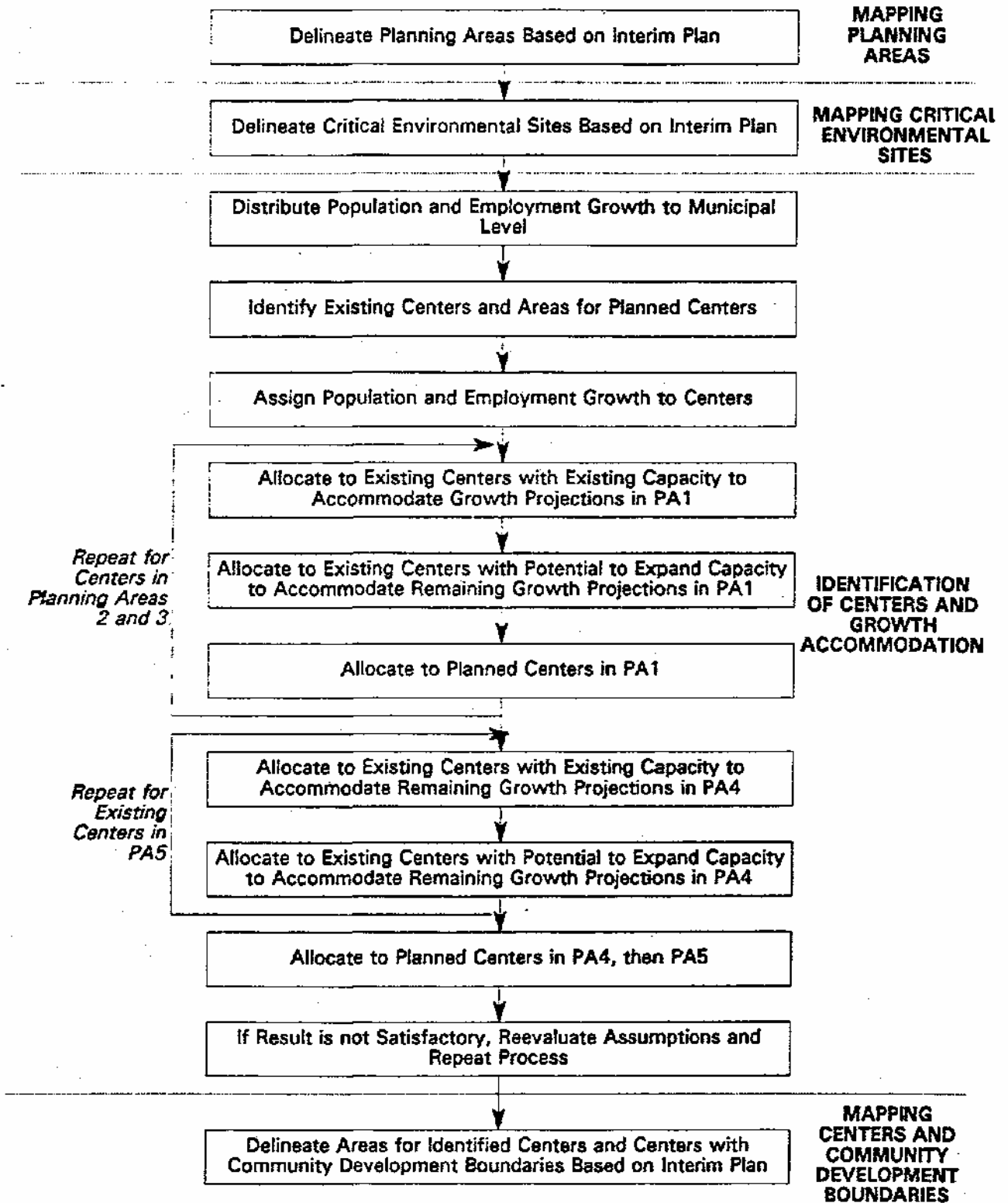
### *Delineation Factors*

Delineation of stream corridors and their buffers should take the following elements into account:

- a. 100 year flood plain;
- b. vegetation that impedes erosion, sedimentation and stabilizes slopes;
- c. detention and filtration of runoff;
- d. shelter and nesting for waterfowl;
- e. wildlife corridor and nutrient uptake by plants; and
- f. scenic area, recreation and open space.

An example of a floating buffer system currently in use in N.J. is the Buffer Delineation Model utilized by the Pinelands Commission in the New Jersey Pineland's Wetlands.

FIGURE #1 MAPPING THE INTERIM PLAN



Step 6. Allocate projected growth to expanded Existing Centers. If all growth is not accommodated/ continue.

*Stage 3.* Determine growth accommodation within Planned Centers in PA 1.

Step 1. Determine number and type of Planned Centers, consistent with State, county and municipal planning objectives.

Step 2. Conduct capacity analysis or identify limiting factor for Planned Centers.

Step 3. Identify Planned Centers.

Step 4. Allocate growth projection to Planned Centers. If all growth is not accommodated, continue.

*Stage 4.* After maximum growth projection is accommodated in Centers within PA 1 repeat this process for Centers in PA2. (Stages 1 and 2)

*Stage 5.* After maximum growth projection is accommodated in Centers within PA 1&2 repeat this process for Centers in PAS. (Stages 1 and 2)

*Stage 6.* After maximum growth projection is accommodated in Centers within PA 1,2&3 repeat Stage 1 for existing Centers in PA 4.

*Stage 7.* After maximum growth projection is accommodated in Centers within PA 1,2&3 and existing Centers in PA4, repeat Stage 1 for existing Centers in PAS.

*Stage 8.* After maximum growth projection is accommodated in Centers within PA 1,2,3 and Existing Centers in PA 4 and 5, repeat Stage 2 for Planned Centers in PA 4 and then PA 5.

*Stage 9.* If a county's or municipality's growth projection cannot be accommodated, consult with the Office of State Planning.

# V. TECHNICAL MAPPING GUIDELINES FOR CENTERS

The Interim Plan policies encourage new growth in compact development forms/ or Centers, surrounded by carefully controlled environs by way of municipal master plans, regulations and public investments. There is a range of Centers extending from small Hamlets to large Urban Centers. This gradation is a reflection of the existing and potential capacities of infrastructure and natural systems to support Centers. The future scale of a Center should affect how it is to be linked, economically and physically, with other Centers and to the environs of the Planning Area(s) in which the Center resides.

## A. Mapping Centers

Centers should be identified and planned in a manner that will achieve the Objectives of the Planning Areas in which they are located. Centers have Community Development Boundaries that indicate the extent of the Community Development Area for a Center. Community Development Boundaries may reflect the extent or edge of mature, fully developed Centers. They can also indicate the expansion of a Community Development Area for an existing Center or identify opportunities for development of planned Centers.

The process of mapping Centers is the focus of this section. The number of Centers mapped in a county or municipality must be consistent with their growth projection. *The* mapping of a Planned Center represents a community's intent to accommodate future growth consistent with the Goals and Objectives of the Interim State Development and Redevelopment Plan. In this sense, Centers are considered a master plan concept and are not a reaction to development applications. It is anticipated that communities will update their local plans to include Centers, although it is not a prerequisite to the identification of Centers.

Centers consistent with the Plan's criteria should be mapped according to the following specific guidelines:

- A. Counties and municipalities should map Centers on the Cross-acceptance Map that contains Planning Area Mapping(see Planning Area Technical Mapping Section); and
  - B. Centers should be drafted on the Cross-acceptance Map in black ink using a #1 technical pen or with a .5 mechanical pencil with "H" Series black lead or a sharp "H" Series pencil.
- Step 1. Existing Centers that are not planning to expand should be mapped. Community Development Boundaries for Existing Centers that are not projected to expand should be drawn at the edge of the existing Center. The edge can be described using natural and or man made features such as: Stream Corridors, Ridges, Wetlands, Roadways, Rail lines, changes in

housing density or types, or land use patterns. The edge should define an area with sufficient potential to accommodate projected development and redevelopment. For Urban Centers, the entire municipality is defined as the Center.

- Step 2. Existing Centers that are planning to expand should be mapped, in accordance with the information presented on either Figure 2, Identifying Areas for Centers or Figure 3, Community Development Boundaries. Expanding Centers may be represented by a point expressed at the middle of the Center and an appropriately sized circle, where sufficient planning does not exist to define a Community Development Boundary. The circle's size should be based on the information presented on Figure 3. Expanding Centers can have a Community Development Boundary that accommodates the Centers' Community Development Area. The Community Development Boundary should be based on the projected size of the Center, detailed planning and the information indicated in Figure 3, Community Development Boundaries.

Figures 2 and 3 present in tabular form the information requested in the Interim Plan. The figures offer local officials the opportunity to complete a comprehensive capacity analysis or define the limiting factor, as the Plan policy permits. Several terms used on Figures 2 and 3 are defined below.

**Capacity Analysis** - Capacity analysis is discussed in detail on pages 18 and 19 in the Resource Planning and Management section of the Interim Plan. In addition to the detailed discussion, Policy 2-Identifying Centers Using Capacity Information, presented on page 21, discusses capacity analysis, as it is used in the mapping document.

**Limiting Factor** - The term limiting factor is introduced on page 19 of the Interim Plan. The Plan states, "In many areas, the controlling factors- those that are limiting-are easily identified and understood and pre-empt the need to understand the capacity of other systems."

**Natural and Cultural Resources** - The natural and cultural resource inventory is presented to indicate the information necessary to support a nominated area. The identification of an area for a Center requires that the area be appropriate for the proposed Center. The use of the information contained in the inventory should provide the basis for selecting the area. This information should satisfy Policy 2-Identifying Centers Using Capacity Information or Policy 3-Identifying Centers Without Sufficient Capacity Information. Figure 2 requests this information in the context of identifying an area for a Center. It is important to remember that this is part of a planning exercise. It is not anticipated that the information be so detailed that the process is burdensome and impeded, due to information gathering processes, but that the proposed locations for Centers are appropriate and based on rational capacity-based planning efforts.

The identification of the Community Development Boundary and Area is the next step in the process of planning a Center. The information from the inventory stage should prove a useful base for conducting further analysis to define the Corn-

munity Development Area. The information necessary to support a Community Development Area should include an assessment of the impacts associated with the development of the particular area. The impact statement or assessment should be of sufficient detail to document, on a planning level, how the center will impact on the agricultural, environmental and cultural resource systems.

County and local officials are encouraged to submit supporting documentation with their nomination of Areas for Centers and Community Development Boundaries.

Community Design Plans - The Interim Plan (page 21) Policy 1-Applying Identification Criteria for Centers states, "The identification of Centers should be based upon capacity information and existing and desirable future development patterns..." This statement combined the criteria for Planned Centers gives rise to the provision on Figure 2 for Community Design Plans. The intent here is not to require architectural design standards for Centers, but to establish a planning process that results in "desirable future development patterns" with compact, mixed use cores that meet the Policy Objectives of the Planning Areas within which they are located.

- Step 3. Planned Centers should be mapped, in accordance with the information presented on Figure 2, Identifying Areas for Centers. They should be represented by a point expressed at a milepost on the Center's primary access arterial and an appropriately sized circle. The circle's size should be based on the information presented on Figure 2.
- Step 4. Community Development Boundaries for Planned Centers should be mapped based on the projected size of the Center, detailed planning and the information indicated in Figure 3, Community Development Boundaries.
- Step 5. Centers should be centrally labeled, as follows:  
UC-Urban Center ER - Existing Regional Center  
PR - Planned Regional Center TN-Town E V -  
Existing Village PV-Planned Village EH -  
Existing Hamlet PH-Planned Hamlet
- Step 6. Center cross-reference number should be assigned to each center. This number should be placed inside a circle adjacent to the Center's label and used in the supporting documentation to cross-reference the Center mapping with the supporting documentation.
- Step 7. Center mapping should be accompanied with appropriate supporting documentation including a completed "Center Worksheet" for each Center. (Worksheet included in appendix)



**FIGURE #2 IDENTIFYING AREAS  
FOR CENTERS**

REQUIRED FOR AREA IDENTIFICATION					RECOMMENDED FOR AREA IDENTIFICATION			
TYPE OF CENTER	PRIMARY ACCESS ARTERIAL OR RAIL STATION	RADIUS OF AREA IDENTIFIED	WATER RESOURCES	CAPACITY ANALYSIS	AREA IDENTIFICATION	NATURAL AND CULTURAL RESOURCES	CAPITAL PLANNING	COMMUNITY DESIGN PLAN
HAMLET	ROUTE NUMBER AND MILE POST	≤ 2 MILES	NEAREST NAMED WATERWAY OR WATER BODY	LIMITING FACTOR OR WATER, ROADS TRANSIT, RECREATION, FIRE, POLICE FLOOD, SOCIAL, WASTEWATER	ON CROSS-ACCEPTANCE MAP	AGRICULTURAL, ENVIRONMENTAL, & CULTURAL RESOURCE INVENTORY	INFRA-STRUCTURE NEEDS ASSESSMENT	HAMLET PLAN
VILLAGE	ROUTE NUMBER AND MILE POST	≤ 3 MILES	NEAREST NAMED WATERWAY OR WATER BODY	LIMITING FACTOR OR WATER, ROADS TRANSIT, RECREATION, FIRE, POLICE FLOOD, SOCIAL, WASTEWATER	ON CROSS-ACCEPTANCE MAP	AGRICULTURAL, ENVIRONMENTAL, & CULTURAL RESOURCE INVENTORY	INFRA-STRUCTURE NEEDS ASSESSMENT	VILLAGE PLAN
TOWN (EXISTING)	ROUTE NUMBER AND MILE POST	≤ 4 MILES	NEAREST NAMED WATERWAY OR WATER BODY	LIMITING FACTOR OR WATER, ROADS TRANSIT, RECREATION, FIRE, POLICE FLOOD, SOCIAL, WASTEWATER	ON CROSS-ACCEPTANCE MAP	AGRICULTURAL, ENVIRONMENTAL, & CULTURAL RESOURCES INVENTORY	INFRA-STRUCTURE NEEDS ASSESSMENT	TOWN PLAN
REGIONAL CENTER	ROUTE NUMBER AND MILE POST	≤ 5 MILES	NEAREST NAMED WATERWAY OR WATER BODY	LIMITING FACTOR OR WATER, ROADS TRANSIT, RECREATION, FIRE, POLICE FLOOD, SOCIAL, WASTEWATER	ON CROSS-ACCEPTANCE MAP	AGRICULTURAL, ENVIRONMENTAL, & CULTURAL RESOURCE INVENTORY	INFRA-STRUCTURE NEEDS ASSESSMENT	PROPOSED MULTI-JURISDICTIONAL PLANNING AREA

FIGURE #3 COMMUNITY  
DEVELOPMENT BOUNDARIES

REQUIRED FOR BOUNDARY IDENTIFICATION						
REQUIRED FOR BOUNDARY DESIGNATION						
TYPE OF CENTER	COMMUNITY DEVELOPMENT AREA	PRIMARY ACCESS ARTERIAL OR RAIL STATION	CAPACITY ANALYSIS	BOUNDARY DELINEATION	CAPITAL PLANNING	NATURAL & CULTURAL RESOURCES
HAMLET	< 100 ACRES	ROUTE NUMBER	LIMITING FACTOR OR WATER, ROADS TRANSIT, RECREATION, FIRE, POLICE FLOOD, SOCIAL, WASTEWATER	ON CROSS-ACCEPTANCE MAP	SHORT TERM BUDGET & LONG TERM ASSESSMENT	AGRICULTURAL, ENVIRONMENTAL & CULTURAL RESOURCE IMPACT STATEMENTS
VILLAGE	< 300 ACRES	ROUTE NUMBER	LIMITING FACTOR OR WATER, ROADS TRANSIT, RECREATION, FIRE, POLICE FLOOD, SOCIAL, WASTEWATER	ON CROSS-ACCEPTANCE MAP	SHORT TERM BUDGET & LONG TERM ASSESSMENT	AGRICULTURAL, ENVIRONMENTAL & CULTURAL RESOURCE IMPACT STATEMENTS
TOWN	< 1000 ACRES	ROUTE NUMBER	LIMITING FACTOR OR WATER, ROADS TRANSIT, RECREATION, FIRE, POLICE FLOOD, SOCIAL, WASTEWATER	ON CROSS-ACCEPTANCE MAP	SHORT TERM BUDGET & LONG TERM ASSESSMENT	AGRICULTURAL, ENVIRONMENTAL & CULTURAL RESOURCE IMPACT STATEMENTS
REGIONAL CENTERS	< 3200 ACRES	ROUTE NUMBER	LIMITING FACTOR OR WATER, ROADS TRANSIT, RECREATION, FIRE, POLICE FLOOD, SOCIAL, WASTEWATER	ON CROSS-ACCEPTANCE MAP	SHORT TERM BUDGET & LONG TERM ASSESSMENT	AGRICULTURAL, ENVIRONMENTAL & CULTURAL RESOURCE IMPACT STATEMENTS

# VI. APPENDICES

## COUNTY WORKSHEET A

County \_\_\_\_\_  
Existing Population \_\_\_\_\_  
Existing Employment \_\_\_\_\_  
Projected Population \_\_\_\_\_  
Projected Employment \_\_\_\_\_

(Each Municipality should be listed here)

Municipality \_\_\_\_\_  
Existing Population \_\_\_\_\_  
Existing Employment \_\_\_\_\_  
Projected Population \_\_\_\_\_  
Projected Employment \_\_\_\_\_

Municipality \_\_\_\_\_  
Existing Population \_\_\_\_\_  
Existing Employment \_\_\_\_\_  
Projected Population \_\_\_\_\_  
Projected Employment \_\_\_\_\_

Municipality \_\_\_\_\_  
Existing Population \_\_\_\_\_  
Existing Employment \_\_\_\_\_  
Projected Population \_\_\_\_\_  
Projected Employment \_\_\_\_\_

Municipality \_\_\_\_\_  
Existing Population \_\_\_\_\_  
Existing Employment \_\_\_\_\_  
Projected Population \_\_\_\_\_  
Projected Employment \_\_\_\_\_

Municipality \_\_\_\_\_  
Existing Population \_\_\_\_\_  
Existing Employment \_\_\_\_\_  
Projected Population \_\_\_\_\_  
Projected Employment \_\_\_\_\_

# CENTER WORKSHEET

Date	_____
Municipality	_____
Name of Center	_____
Type of Center	_____
Cross-acceptance Map Number	_____
Existing Population of Center	_____
Existing Employment of Center	_____
Projected Population of Center	_____
Projected Employment of Center	_____
Date of Municipal Master Plan (most recent update)	_____
Center Identified in Municipal Plan	_____ YES _____ NO _____
Date of County Master Plan (recent update)	_____
Center Identified in County Plan	_____ YES _____ NO _____
Planning Area Surrounding Center	_____
Limiting Factor	_____
Date of Municipality (ies)	_____
COAH Certification	_____

In addition to all of the above mentioned information, each Center should submit the information identified as required on Figure 2 or 3.