

golf course facilities; and in Riverhead and Riverside in the form of trailer parks.

The Central Suffolk areas undergoing the most intensive residential development are Selden-Terryville, Ridge and Manorville.

Commercial land use is found primarily in the Riverhead area along Route 58 and Route 25, and in Selden-Terryville along Route 25A, Route 347, Route 112 and Route 25. Some strip commercial development is beginning to occur on C.R. 111 just south of the L.I.E.

The areas with the greatest concentration of industrial uses include Riverhead, between Route 58 and Route 25 west of Pulaski Road; Suffolk County Airport and new development along Old Riverhead Road; Speonk/Riverhead Road, between Old Country Road and Sunrise Highway; Calverton (Grumman); the industrial park east of William Floyd Parkway between the L.I.E. and LIRR; and Route 112. There are two small pockets of industrially used land in Port Jefferson Station and in Coram in the northwestern section of the SGPA. There are approximately a half a dozen sandmining operations and several cement and asphalt plants located in the SGPA. The Riverhead Town landfill and the Brookhaven Town Brush Disposal Facility, along with several town DPW storage yards, are also located in the SGPA. The more than 5000 acre Brookhaven National Laboratory, located in the western section adjacent to the William Floyd Parkway, constitutes the largest institutional land use. In order to facilitate comparison of the differences in the total acreage and distribution of land uses, Tables 3-25, 3-26, 3-27 and 3-28 present a breakdown of acreage by land use category for the SGPA as a whole and for each of the three sectors. (See Figures 3-17, 3-18 and 3-19 for Existing Land Use).

**ZONING** - Most of Central Suffolk is zoned for low density residential use at lot sizes ranging from one acre to five acres per dwelling unit. Most of the Town of Brookhaven is zoned one acre, with two and five acres required on some of the environmentally sensitive land. The Town of Southampton is generally zoned for development at one and one-half, three or five acres per unit. Riverhead has four-acre zoning near Calverton and one acre for much of the farmland. Southold zoning is at two acres.

There are scattered industrial and commercially zoned areas in the west central portion of Brookhaven. In Riverhead, the commercial and industrial zoning extends from the Calverton Airport to the edge of the Riverhead hamlet. Southold has a commercial area at the edge of the SGPA. In Southampton there is commercially zoned land near the County Center in Riverside, in part of Flanders and in Hampton Bays. There is industrial zoning near Suffolk County Airport in Westhampton.

**TABLE 3-25**  
Existing Land Use (acres) in the Central Suffolk SGPA, 1989.

<i>Land Use Category</i>	<i>1989 Existing Land Use</i>	<i>% of Total*</i>
Residential	17,974	14.4
Vacant	42,337	34.0
Underwater Land	932	0.8
Commercial	1,564	1.3
Industrial	1,667	1.3
Institutional	7,075	5.7
Utilities	8,215	6.6
Open Space	25,635	20.6
Agricultural	19,262	15.5
<b>Total</b>	<b>124,661</b>	

\* Column may not total 100.0 due to rounding.  
Source: Long Island Regional Planning Board.

**TABLE 3-26**  
Existing Land Use (acres) in the West Portion of the Central Suffolk SGPA, 1989.

<i>Land Use Category</i>	<i>1989 Existing Land Use</i>	<i>% of Total*</i>
Residential	12,234	25.3
Vacant	12,732	26.4
Underwater Land	199	0.4
Commercial	1,084	2.2
Industrial	788	1.6
Institutional	6,220	12.9
Utilities	1,373	2.8
Open Space	10,484	21.7
Agricultural	3,189	6.6
<b>Total</b>	<b>48,303</b>	

\* Column may not total 100.0 due to rounding.  
Source: Long Island Regional Planning Board.

**PROBLEMS AND CONCERNS** - The potential for groundwater contamination that is inevitably associated with human presence and land use activities, however well intentioned, emphasizes the need for action to preserve the open space and watershed protection value of already dedicated conservation and recreation lands and to limit or mitigate the adverse impacts of essential development. The quality of groundwater, particularly shallow groundwater, within the SGPA has been impacted by various point and non-point sources of contamination. Sewage treatment plants (STPs) are a major category of point sources within the SGPA. There are 28 existing and 10 proposed STPs. Not all existing plants have tertiary treatment (nitrogen removal), but operators of all those with flows over

**TABLE 3-27**  
**Existing Land Use (acres) in the Southeast Portion**  
**of the Central Suffolk SGPA, 1989.**

<i>Land Use Category</i>	<i>1989 Existing Land Use</i>	<i>% of Total*</i>
Residential	3,884	7.6
Vacant	26,277	51.4
Underwater Land	630	1.2
Commercial	298	0.6
Industrial	592	1.2
Institutional	660	1.3
Utilities	3,377	6.6
Open Space	12,742	24.9
Agricultural	2,630	5.1
<b>Total</b>	<b>51,090</b>	

\* Column may not total 100.0 due to rounding.  
 Source: Long Island Regional Planning Board.

**TABLE 3-28**  
**Existing Land Use (acres) in the Northeast Portion**  
**of the Central Suffolk SGPA, 1989.**

<i>Land Use Category</i>	<i>1989 Existing Land Use</i>	<i>% of Total*</i>
Residential	1,856	7.3
Vacant	3,328	13.2
Underwater Land	103	0.4
Commercial	182	0.7
Industrial	287	1.1
Institutional	195	0.8
Utilities	3,465	13.7
Open Space	2,409	9.5
Agricultural	13,443	53.2
<b>Total</b>	<b>25,268</b>	

\* Column may not total 100.0 due to rounding.  
 Source: Long Island Regional Planning Board.

30,000 gpd are now required to upgrade to include denitrification. Table 3-29 indicates the name, location and type of treatment provided for each Central Suffolk STP.

The ability of existing tertiary plants to produce effluent meeting the 10 ppm drinking water standard for nitrate has been inconsistent at best, due primarily to inconsistent operation and maintenance. Shallow groundwater quality downgradient of these plants often reflects their suboptimal performance, and the potential for impacting water supplies, both public and private, clearly exists. Known or suspected cases where an inadequate or poorly operated STP has impacted water supplies

include that of the Homestead Village STP (Coram), which caused ammonia-nitrogen contamination of a few private wells located immediately downgradient. The Brookhaven Laboratory's STP discharges to the headwaters of the Pec River, but during dry periods the entire flow recharge groundwater before reaching the BNL's eastern boundary. Its on effluent concentrations of tritium, a radioactive form of hydrogen, were voluntarily lowered by the BNL after contamination below the drinking water standard was discovered about one-half dozen private wells downstream.

Landfills and other potential hazardous waste disposal sites are another major category of point sources within the SGPA. Among the municipal landfills are three active and five former sites. All except the Old Westhampton landfill are included on the NYSDEC's April 1989 State Superfund list of possible inactive hazardous waste disposal sites (IHWDSs). The SCI has identified a leachate (inorganics) plume downgradient of the Riverhead landfill, and studies conducted for the Town of Brookhaven have confirmed groundwater contamination including ammonia and organic solvents that may be related to the scavenger waste lagoons on the site at the Manos landfill. All the landfills on the list will be the subject of Phase I State Superfund studies, including groundwater monitoring in the near future. Table 3-30 indicates the name, general location and status of landfills and hazardous waste sites.

Also on New York State's list of inactive hazardous waste disposal sites are seven other facilities, including landfills at private or quasi-public facilities. Disposal of hazardous materials has been confirmed at all these sites but solvent contamination has been detected only at Brookhaven Aggregates at three locations at the BNL. The laboratory sites consist of two landfills — one active and one closed — and a hazardous waste management facility (HWMF), which is used as a transfer station. The two landfills have been sources of low level tritium and organic solvents, while accidental spills at HWMF have produced a significant solvent plume, which is being remediated using recovery wells and spray irrigation.

Spills and leaks of petroleum products constitute another source of contamination within the SGPA. Many of the incidents have occurred at local service stations, including those along Middle County Road (Route 25) from Middle Island to Ridge. Brookhaven Lab has reported at least 8 incidents, though none appears to have resulted in free product reaching the water table, and only one (a 20-25 thousand gallon leakage of No. 6 fuel oil in 1977 at the Central Steam Facility) was found to have contaminated groundwater with traces of benzene, toluene, and xylene (BTX). Four spill sites are being monitored at Grumman's Calverton facility — at the Fire Training Area, Fuel Depot, Fuel Calibration Area, and Steam Plant. Suffolk County Airport is the site of two recovery operations:

or held in storage for removal, since traces of solvent can be discharged to sanitary pools during normal cleanup procedures, and spills can be washed into floor drains that discharge to dry wells, a practice that is now prohibited. At the Brookhaven National Laboratory, four of the shallow water supply wells in proximity to the research buildings have been contaminated with solvents. Grumman Calverton is another potential problem area, as indicated by the intermittent organic contamination in a SCDHS monitoring well (S-51591) located downgradient of the facility on Swan Pond Road. At the Suffolk County Airport, there is a known source of groundwater contamination on the south side of the facility that resulted from the illegal discharge of a paint stripping solvent to floor drains.

The Cornell University analysis of air photos from 1947, 1962, and 1972 identified almost 200 potential hazardous dump sites within the boundaries of the SGPA. Inventoried sites range from mined areas and locations with disturbed vegetation, to open dumps with barrels and drums. Dumping activities were identified at 67 sites, which included informal landfills, old sand mines, and farm dumps. Ten of these sites, however, also had evidence of the storage/disposal of barrels and/or drums — in Terryville, east of Port Jefferson-Patchogue Road, in Coram, north of Route 25; at BNL (2 sites); at Grumman Calverton (2 sites), south of Route 25 (Calverton); in Manorville, south of Nugent Drive; in Centerville, south of Reeves Avenue; and in East Quogue, north of Old Country Road.

The existence of old filed map subdivisions containing substandard but nonetheless legal building lots and the constant pressure to rezone residential properties to allow the construction of higher density, presumably more affordable housing, pose the threat of increased nonpoint pollution. Single lot development of old filed maps adds to the number of persons residing in unsewered areas.

Similarly, the continued availability of vacant commercial and industrial land on the periphery of existing development increases the probability that new sources of contamination might be introduced and the groundwater adversely impacted. Applications for continued commercial development both on Routes 25A and 112 are submitted on a regular basis.

**OPPORTUNITIES** - In view of the size of the SGPA and differences in land use and development pressure, a separate discussion of opportunities is presented for the west, the southeast and the northeast portions of the Central Suffolk Area.

## Western Sector

There is a great need to upgrade and expand sewage treatment, especially in the northwestern portion of the area. As indicated in the County sponsored North Central Brookhaven Waste Management Study, both expansion and consolidation are technically feasible. If sewerage could be extended to serve existing higher density and new developments and effluent quality could be assured, groundwater quality would be improved.

There are a few opportunities for replatting old filed map subdivisions to reduce potential density and preserve some of the land through clustering. Suffolk County owns portions of an old filed map subdivision located between three apartment complexes in Coram. Since this site is accessible to transportation and commercial activities, replatting and clustering to create affordable housing in a development that would be connected to a sewer system would protect the underground water supply, while allowing some needed housing. Nearby there are other old filed maps that should be replatted either to protect an existing well site or to create the opportunity for some future water protection area. Replatting and clustering could also add to the parcel that the County has set aside for a preserve, provide additional open space, some connections between existing open space parcels, or the continuation of an open space corridor such as that along County Route 83.

The most significant open space in the relatively urbanized northwestern portion of the western sector has been protected through cluster developments that have been built in different parts of the area. The Town of Brookhaven has acquired a few other tracts for local recreation purposes and the Nature Conservancy has a preserve in Coram. A current cluster proposal encompasses most of the remaining farmland in this part of the SGPA. The proposal provides some open space for recreation and some land, on Route 25A, that will remain in an agricultural preserve. A combination of clustering or transfer of development rights on the farmland that adjoins Route 25A in Miller Place could set aside almost 100 acres for future agricultural use. Orchards or sod farms are the current uses, and with best management practices, they could help to protect the well site that is immediately to the north of the agricultural land.

In the western sector as a whole, there are more than 10,000 acres of open space consisting of pine barrens, river corridors, golf courses and cemeteries. The State of New York is the largest land holder with over 5,000 acres in the Rocky Point preserve. County and town holdings, two large golf courses, a camp, plus homeowner association lands make up the balance.

A series of acquisitions, extending from Route 25A on the north to the Long Island Expressway on the south, could protect the resources of the area. The largest proposed acquisition is the Warbler Woods area in Yaphank. This property is an

extensive forest that extends from the Carmans River almost to the headwaters of the Peconic River. The core of the area is an old filed map in which more than 3/4 of the parcels are currently owned by the County of Suffolk. Other proposed large acquisitions include the Coram Woods wetlands, which are located between County and town holdings in Coram, and a large tract of land adjacent to Granny Road. Another is the former Camp Olympia, which is located at the southern edge of the deep recharge zone, provides access to the Carmans River and could add a significant parcel to the public lands along the river corridor. Acquisition of another parcel could protect the headwaters of the Peconic River just west of the Brookhaven National Laboratories on William Floyd Parkway. Smaller acquisitions are proposed to link various state and county holdings. These include the outparcels adjacent to the RCA property in Rocky Point and at Ridge, plus the parcels that connect the town holdings to the state holdings near Whiskey Road in Miller Place. There is also a key parcel between the two segments of the Cathedral Pines County Park in Middle Island.

The acquisition of some of these properties would not only aid in protecting the watershed, but would form the basis for a series of greenbelts throughout the SGPA. When combined with a coordinated clustering of new development, it would be possible to create a series of north-south and east-west interconnected public and private properties that could be used as walkways, hiking trails or for similar types of linear park uses. There are Town holdings as far west as County Route 83 that could, with a few key acquisitions and coordinated clusters, be continued across Route 112 and north to the Coram business district, east into Gordon Heights or south into Medford. The Warbler Woods acquisition would allow such a greenbelt to extend even farther in an easterly direction to William Floyd Parkway. There are also north-south connections extending from the Long Island Expressway almost to Middle Country Road in the Yaphank-Ridge area or from the Expressway all the way through the New York State preserve in Rocky Point, if County Route 8 is ever carried forward. The Brookhaven area east of William Floyd Parkway contains large amounts of land that are already in public ownership. The most significant are the Brookhaven National Laboratory, the State and Town parks that are north of Route 25, the County properties, along the Peconic River and in Manorville, and the Federal clear zone area that is also in Manorville. With the acquisition of land around the headwaters of the Peconic River and in the area

east of Route 111 in Manorville public lands could form a tinuous corridor of open space extending from ce Brookhaven through the edge of Riverhead and into the of Southampton.

### Recommendations

- Suffolk County should continue its efforts to upgrade consolidate and expand sewage collection and treatment within the northwestern portion of this sec
- The County, alone or in conjunction with New York State and the Town of Brookhaven, should acquire & preserve the watershed lands described under *Opportunities*. The proposed acquisitions include bu are not limited to the Warbler Woods tract in Yaphar the Coram wetlands, Camp Olympia, a parcel at the headwaters of the Peconic River and various smallle properties adjacent to or linking existing public lands
- The Town of Brookhaven should concentrate commercial and industrial activities to the maximum extent permitted by existing land uses. The Town should consider further rezonings as necessary to lir the expansion of strip commercial and other non-residential development beyond the periphery of already committed areas. The Town has already rezoned a portion of the land abutting Route 25; sorn of the commercial properties along Routes 25A and 112. It has already rezoned a major commercial site Canal Road, which could be used for some type of multi-family units that would be tied into the sewer systems that exist in the general area.
- Brookhaven should utilize its zoning powers to conta the two pockets of industrial activity in Port Jefferson Station and Coram and to change the classification c the large land locked parcel northwest of the clear zo of Brookhaven Airport. Rezoning of the property for residential use would permit clustered development c this pine barrens tract, with housing next to existing homes and open space between the housing and the clear zone.
- The Brookhaven National Laboratory should continue its ongoing efforts to remediate the groundwater contamination caused by some past waste disposal practices and accidental spills.

See Tables 3-32 and 3-33 for Plan Land Use acreage by Le Use category and a comparison of Existing and Propos Land Use. See Figure 3-20 for Plan Land Use.