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DEC 14 1980

LONG ISLAND GROUNDWATER MANAGEMENT PROGRAM

OCTOBER 1980 STATUS REPORT

Key to status codes (number of recommendations):

- N - Not yet started (22)
- I - Started, but not complete (63)
- C - Complete (32)
- Q - Status not determined (3)

5. Prepare annual Long Island Groundwater Problem Inventory Report for management staff of participating agencies. 1 NYSDEC C DEC has developed contaminated aquifer segment inventory, including nearly 1,000 entries.

6. Assess, and if feasible, develop a system of annual LIGMP performance assessment in terms of water quality and quantity of indicators. 1 NYSDEC N

7. Arrange semi-annual meetings of the Long Island Groundwater Coordinating Committee as a forum for coordination and information exchange for non-regulatory program elements. 2 NYSDEC N

8. Establish/maintain an interagency committee to provide better NYC interagency focus on groundwater. 1 NYCDEP, NYCDOH I Mayor's Intergovernmental Task Force on New York Water Supply Needs established in 1985; Groundwater Committee work is ongoing.

9. Prepare formal update of LIGMP every three years. 2 NYSDEC N Three year schedule has not been met.

IV.A.2. Resource Management Framework

1. Use the hydrogeologic zone-based recommendations of the Long Island Comprehensive Waste Treatment Management Plan and the newly identified deep-flow recharge zones on the South Fork and in Queens in administering management programs. 1 All C All levels of government are utilizing the zones in their groundwater management programs.

2. Produce larger scale maps of the hydrogeologic zones incorporating modifications, additions and landmarks to facilitate their use. 1 NYSDEC I Only one set available, for DEC internal use. Work continuing via DEC/USGS Co-operative Agreement to digitize boundaries and eventually produce maps for distribution.

IV.A.2. Resource Management Framework (Cont'd.)

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| 3. Consider revisions of the hydrogeologic zone boundaries in conjunction with future LIGMP updates. | 3 | NYSDEC | N | Three year schedule for LIGMP update has not been met. DEC to be assisted by other key agencies. |
| 4. Assign responsibility for granting of waivers (for specific projects) to regulatory agencies having applicable statutory jurisdiction. | 3 | None | C | Jurisdiction is appropriately assigned. |
| 5. Use the Groundwater Flow Regimes as a primary technical basis for development of withdrawal policies and guidelines for groundwater resource management. | 1 | NYSDEC | I | DEC applies concept in its well permit regulatory review function. NCDPW developing groundwater model. |
| 6. Utilize the Special Management Concept as a means of geographically targeting groundwater programs. | 1 | NYSDEC | I | 205(j) studies, SPDES compliance, targeting, pumpage limitations. Local government also utilizing this concept (eg. overlay areas) |
| 7. Annually add, delete, or create categories of Special Management Areas. | 3 | NYSDEC | I | LIRPB 205(j) reports on SGPAS. |

IV.A.3. Standards and Classifications

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|----|--|---|-------------------|---|--|
| 1. | Incorporate Part 703, "Groundwater Classifications, Quality Standards and Effluent Standards" as part of the LIGMP. | 1 | NYSDEC | C | Incorporated in original LIGMP(1986) |
| 2. | Continue the policy that all fresh groundwaters will be preserved for potable water as part of the LIGMP. | 1 | NYSDEC | C | Incorporated in original LIGMP(1986) |
| 3. | Establish numerical guidelines and/or standards for industrial chemicals commonly in use and posing a threat to groundwater quality. | 1 | NYSDEC, NYSDOH | I | Discharge standards are needed for various chemical compounds; a list should be developed and standards established. Organic standards were promulgated on Nov.28, 198 and became effective as Maximum Contaminant Levels (MCL's) on January 19, 1989. |

IV.A.4 Monitoring

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| 1. | Develop a groundwater monitoring manual. | 2 | NYSDEC, NYSDOH | N | Input from agencies involved in monitoring should be considered (USGS, NCDPW SCDHS) |
| 2. | Conduct an annual review of agency monitoring activities during Regulatory Management Oversight meetings. | 2 | NYSDEC | I | Initial meeting held in fall of 1985. Subsequent meetings Oct. 1988 and Nov. 1989. Adequate review of monitoring activities not feasible in meeting format. |
| 3. | Incorporate in all Long Island well permits a condition that requires 90 days prior notification before sealing any well or the extraction or any well casing. | 2 | NYSDEC | I | Long Island Well permits are being reviewed and modified where necessary. |

IV.A.5. Groundwater Information System

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| 1 | - | I | Recommendation is outdated. Agencies moving away from System 2000. Several agencies (DEC, USGS, SCDHS, SCWA) coordinating efforts on use of ARC-INFO; users group established and ongoing. NCDPW proceeding on their own to develop broad capabilities. |
| 2 | NYSDEC | I | Much data has been computerized. Current efforts to develop an interagency GIS network. |
| 2 | - | I | Effectiveness of individual data quality assurance efforts is suspect. |
| 1 | NYSDEC | C | Project complete. Recommendations outdated. |

IV.A.6 Environmental Review Process

(See Section IV.B.7.)

IV.A.7. Areawide Planning

(See Sections IV.A., IV.B., and IV.C.)

IV.B. GROUNDWATER QUALITY PROTECTION

IV.B.1. Hazardous Material Storage & Handling

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| 1 | SCDHS | C | Recent updating to strengthen and expand responsibilities. Nassau County Article XI is comparable |
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| 2. Conduct a pilot project to evaluate the "site-as-system" management concept. | 2 | NYSDEC | N | Need for a pilot project should be re-evaluated. |
| 3. Obtain authority and implement strong local bulk storage programs in Nassau County and NYC. | 1 | NCPH | C | Nassau has implemented a strong bulk storage program. |
| 4. Implement State Petroleum Bulk Storage Law | 2 | NYSDEC | C | Delegated to NYC, Nassau and Suffolk Counties. |
| 5. Continue to provide guidance reports on bulk storage. | 2 | NYSDEC | C | Adequacy of guidance reports should be reviewed and reports updated. |
| 6. Seek funding for implementation of Incompatible Use Law. | | NYSDEC | N | |

IV.B.2. Industrial/Commercial Wastes & Hazardous Wastes

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| 1. Evaluate data from Hazardous Waste Manifest, annual generator reports, and Part 360 permit data and propose program modifications to correct identified deficiencies. | 1 | NYSDEC | N | |
| 2. Conduct detailed hazardous waste generation surveys on selected, representative industrial/commercial areas including waste generators and prepare a report. | 2 | SCDHS, NCPH, NYCDOH | I | SCDHS has completed hold and haul on Doctors and Dentists countywide and is initiating program to upgrade laundromats. |
| 3. Evaluate need for additional hazardous waste treatment, storage and disposal facilities in the State. | 2 | NYSDEC, NYSDOH, EFC | I | Report prepared; not yet implemented. |

Several Federally funded projects completed or underway to provide public water to areas with contaminated wells.

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| 1 | 4. Seek remediation funds from Federal Superfund. | NYSDEC | I |
| 1 | 5. Pursue aggressive enforcement with DEC Division of Hazardous Waste Enforcement to recover private funds for remediation of inactive sites and reduce violations. | NYSDEC | I |
| 1 | 6. Staff and train Regions 1 & 2 Offices to implement existing industrial waste and hazardous waste regulations. | NYSDEC | I |
| 2 | 7. Acquire telecommunications terminals and evaluate regionalizing Part 364 permits. | NYSDEC | C |
| 3 | 8. Implement procedures for local health department review and comment on Part 364 permits, if program is regionalized. | NYSDEC | C |
| 3 | 9. Complete the Long Island portion of the State Hazardous Waste Management Plan. | NYSDEC | N |

Additional staff and training has been provided. Efforts are ongoing.

IV.B.3. Municipal Solid Waste Management

Report not prepared but implementation mostly accomplished through the Long Island Landfill Law.

1. Conduct an environmental and operational evaluation of landfills on Long Island, and establish a priority list and schedule for closure, including all sites in the Deep Recharge Areas.
2. Complete the Long Island Regional Solid Waste Management Plan.
3. Improve Long Island administration and enforcement of Part 360 and provide technical assistance to local governments in developing resource recovery projects.
4. Implement a system of priorities to determine deployment of existing personnel for Solid Waste regulatory programs.

1 NYSDEC I
2 NYSDEC, LIRPB N
1 NYSDEC I
1 NYSDEC I
1 NYSDEC I

Additional staffing has been provided and efforts are ongoing.

Additional staffing has been provided, and priorities established. Efforts are ongoing.

IV.B.4. Municipal, Industrial & Commercial Wastewater Discharge

1. Establish geographic and categorical priorities for administering the SPDES program.

Initial priorities have been established. Future efforts will consider CASI and GIS outputs.

2. Improve implementation and enforcement of the SPDES Permit Program.

- a. Prepare a written enforcement policy
- b. Hire more attorneys.
- c. Conduct more enforcement training.
- d. Establish a quality assurance program.
- e. Support laboratory certification programs.
- f. Hire more inspectors.
- g. Expand electronic data processing for enforcement.
- h. Compile technical manual for permit-issuing staff.

Need for pilot project should be re-evaluated.

NYSDEC

2

N

1

C

3. Manage SPDES permits within the pilot study of Site-as-System Management (IV.B.1.).

Draft regulations will be out in early 1990.

NYSDEC, NYSDOH

1

I

1

C

4. Establish groundwater effluent standards for toxic and organic chemicals (same as IV.A.3.3.).

SCDHS conducting enforcement of SPDES violations using County Article 12.

NYSDEC

3

I

1

C

5. Investigate ways to delegate elements of SPDES program to County and NYC Health Departments.

IV.B.5. On-Site Sanitary Wastewater Disposal

- 1. Administer Suffolk County Sanitary Code, Article 6, to limit the density of new on-lot disposal systems.

Implementation continuing. Nassau County has similar Article X. Both programs relate to SCGA effort.

SCDHS

1

C

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C

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| 1 | 2. Develop model local zoning provisions and site development guidelines and advise local governments on their use. | LIRPB | C | Non-Point Source Handbook completed by LIRPB and distributed to local government. Effectiveness should be evaluated |
| 2 | 3. Complete Consumer Products project and implement control program consistent with project findings. | NYSDEC | I | Project complete; no further action. |
| 2 | 4. Develop regulations to fully implement ECL Article 39 on septic system additives. | NYSDEC | N | Need and priority of recommendation should be evaluated. |
| 2 | 5. Investigate on-site system design modifications and complete pilot study of maintenance districts. | SCPMS | I | "Super Cesspool" developed and required in new commercial development. No personnel to complete study. Recent legal set back on standards now prohibits denit-systems |
| <u>IV.B.6. Pesticides and Fertilizers</u> | | | | |
| 2 | 1. Research methods to reduce use of agricultural chemicals in eastern Suffolk County. | Cornell University Cooperative Extension | I | Integrated Pest Management (IPM) studies continuing; findings and recommendations presented to agricultural community. |
| 1 | 2. Implement recently revised FIFRA | USEPA | Q | Status of Federal and State programs should be evaluated. The need for and priority of recommendations (revised, new) should then be evaluation. |
| 1 | 3. Monitor implementation of revised FIFRA | NYSDEC | Q | " |
| 1 | 4. Consult on state registration of new pesticides, impose necessary monitoring requirements, and withdraw registration on evidence of unacceptable leaching. | NYSDEC | Q | " |

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|---|---|---------------------|---|--|
| 5. Continue pesticide monitoring program and identification of appropriate water supply options. | 1 | SCDHS | I | SCDHS completed studies of North and South Forks and a Comprehensive Water Supply Study. New Pesticides Monitoring Report issued. Monitoring Continues. |
| 6. Develop model local zoning provisions and site development guidelines to reduce fertilizer use and advise local governments concerning implementation. | 2 | LIRPB | C | Non-Point Source Handbook completed by LIRPB and distributed to local government. Also, Cooperative Extension provides public with recommendations and guidelines. |
| 7. Develop brochures and pamphlets on the use of alternate ground covers. | 2 | LIRPB Coop. Ext. | C | Non-Point Source Handbook (LIRPB) Various documents available (Coop. Ext.) |
| <u>IV.B.7. Special Groundwater Protection Areas</u> | | | | |
| 1. Promote local agency designation of special groundwater protection areas as "critical environmental areas" under SEQRA. | 1 | NYSDEC, LIRPB | I | Suffolk law designates Pine Barrens SGPA as critical area. Local agencies should be "Lead Agency," since local agency designations recommended. |
| 2. Review status of special groundwater protection areas designation and, if justified, propose legislation to allow state designation under SEQRA. | 3 | NYSDEC | N | Evaluate need for state designation; local authority may be ample. |

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|---|-------------------------------------|--|-------------------------------------|--|
| <p>3. Conduct special interdisciplinary permit reviews, emphasizing groundwater protection, within special groundwater protection areas.</p> <p>4. Develop a model local zoning ordinance and technical guidance manual and advise local governments on their use.</p> <p>5. Prepare watershed management strategies for the identified special groundwater protection areas.</p> <p>6. Develop proposed federal and state companion legislation to provide funding for planning and selective local acquisition in special groundwater protection areas.</p> | <p>1</p> <p>1</p> <p>2</p> <p>2</p> | <p>NYSDEC, SCDHS, NCDH, NYCDOH</p> <p>LIRPB</p> <p>LIRPB</p> <p>NYSDEC, Legislative Commission</p> | <p>I</p> <p>C</p> <p>I</p> <p>C</p> | <p>Emphasis due to local laws. Complete integration reviews not yet accomplished. SGPA studies by LIRPB are proceeding.</p> <p>Non-Point Source Handbook and SGPA studies.</p> <p>Two of nine areas completed. Project underway on remainder. Need for Watershed Rules and Regulations should be evaluated.</p> <p>1986 EQBA Funds available. Suffolk County has aggressive acquisition program. SCWA recently initiated an acquisition program.</p> |
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IV.C. GROUNDWATER QUANTITY MANAGEMENT

IV.C.1. The Long Island Well Permit Program

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|--|----------|---------------|----------|---|
| <p>1. Refine and augment the Long Island Well Permit Program to achieve regional quantity management.</p> <p>-Develop written policies and permit guidelines.</p> <p>-Apply policies and guidelines to Long Island well permits and to water supply permit programs.</p> <p>-Augment staffing to achieve program refinements.</p> <p>-Develop Cooperative Agreement to provide technical assistance.</p> | <p>1</p> | <p>NYSDEC</p> | <p>I</p> | <p>1986 Legislation re: Stressed Areas, Lloyd Aquifer, agricultural wells. Pertinent regulations currently being revised.</p> <p>1988 Legislation requiring water conservation plans for all public water suppliers.</p> <p>TOGS developed outlining requirements for WATER Supply and Well Permit Applications.</p> <p>Staff added to Region I</p> <p>DEC/USGS cooperative agreement continuing Pumpage limits on virtually all water supply permits in Queens and Nassau Counties.</p> <p>Water Conservation Programs required.</p> <p>Long Island Well Permits under review/modification to limit withdrawals.</p> |
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2. Maintain Islandwide technical, hydrogeological data base and resource assessment function.

1

USGS

I

The following USGS reports have either been approved by the Director or have been published and released;

1. Thickness and Hydrogeology of Aquifers and Confining Units below the Upper Glacial Aquifer on Long Island, New York. Water Resources Investigation 86-4175. Published.
2. Hydrologic Correlations for Selected Wells on Long Island, New York--A Data Base with Retrieval Program. Water Resources Investigation 86-4318. In preparation for printing.
3. Hydrogeologic Framework of Long Island, New York. Hydrologic Atlas 709. Sent to printer.

Status indicates that these efforts are incomplete but these reports reflect the most current data and interpretations to date. These efforts should be considered cyclic in nature building on existing information as new data becomes available. The 1989/1990 NYSDEC/USGS joint funding agreement for water resources investigations involves some of the following tasks; 1) water table and potentiometric surface mapping, 2) monitoring salt-water interface, 3) start-of-flow determinations, 4) Supply hydrologic data to the well permit program

3. Seek legislative authority for DEC to require monitoring and reporting of agricultural irrigation pumpage.

2

Legislative Commission

I

New law requires permit for new agricultural wells, as of 1986. Previously existing wells remain exempt. Recommendation has not been addressed.

4. ~~Quantitative~~-specific ~~water~~ ~~management~~ ~~plans~~ for areas identified as quantity stressed and impending quantity stressed.

NYSDEC,
NYSDOH

C

Long Island Region Water Supply Strategy completed January 1989.

IV.C.2. Regional Quantity Issues

1. Prepare a groundwater quantity/water supply plan for Long Island.

NYSDEC,
NYSDOH

2

See IV.C.1.4

2. Verify and confirm the preliminary findings of the Brooklyn/Queens Aquifer Management Feasibility study.

NYSDEC,
USGS

2

The Brooklyn Queens aquifer management feasibility study confirmation has been completed as indicated and the following related report has been published: Reconnaissance of the groundwater resource of Kings and Queens Counties, New York. U.S.G.S. Open-file Report, 81-1186.

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|--|---|---|---|--|
| <p>3. Plan for the interconnection and complimentary utilization of the Jamaica Water supply system and the NYC surface supply system.</p> | 2 | <p>NYCDEP, Jamaica Water Supply Co.</p> | I | <p>New York City is currently supplying the Jamaica Water Supply Company with approximately 30 MGD, more than 50% of their daily usage, averaged over the year. That amount is the maximum effective limit of transfer from the City to the JWSC because of the distribution limitations of the two systems. In 1988 the City awarded 3 Consultant Design Contracts for trunk water main installations, estimated to cost \$106 million, which will enable the City to deliver water at a rate of approximately 90 MGD from upstate surface supply to the Jamaica Water Supply Franchise Area. These trunk mains are scheduled to commence construction in 1990-1993. The increased delivery capability will require improvements in the Jamaica system to allow it to effectively utilize the additional water. When this is done NYC will be able to supply about 90% of the water used in the JWSC over the course of a year. The City will not be able to supply 100% City water until the Brooklyn/Queens leg of Stage 2 of City Tunnel No. 3 goes into service in approximately the year 2000.</p> |
| <p>4. Review and modify Jamaica Water Supply Well Permits to reduce existing stresses on the aquifers.</p> | 1 | <p>NYSDEC</p> | C | <p>Pumpage cap based on past usage, reduced by amount received from NYC. Water conservation required. Metering program nearing completion.</p> |
| <p>5. Implement priority short-term recommendations of the proposed Nassau County Water Supply Plan.</p> | 1 | <p>NCDPW, NCDH</p> | I | <p>NCDPW indicates that nearly all of the recommendations have already been implemented. Update should be provided.</p> |

6. Perform studies to define Lloyd and Magothy aquifers.

NCDH, USGS I

The following USGS reports have either been approved by the Director or have been published and released:

1. Thickness and Hydrogeology of Aquifers and Confining Units Below the Upper Glacial Aquifer on Long Island, New York. Water Resources Investigation 86-4175. Published.
2. Hydrologic Correlations for Selected Wells on Long Island, New York -- A Data Base with Retrieval Program. Water Resources Investigation 86-4318. In preparation for printing.
3. Hydrogeologic Framework of Long Island, New York. Hydrologic Atlas 709. Sent to printer.

Status indicates that these efforts are incomplete but these reports reflect the most current data and interpretations to date. These efforts should be considered cyclic in nature building on existing information as new data becomes available. The 1989/1990 NYSDEC/USGS joint funding agreement for water resources investigations involve some of the following tasks: 1) water table and potentiometric surface mapping, 2) monitoring salt-water interface, 3) start-of-flow determinations, 4) Supplying hydrologic data to the well permit program.

IV.C.3. Groundwater Flooding

1. Study options to solve groundwater flooding in Brooklyn and Queens:
 - a. Define type and scope of problems.
 - b. Address technical aspects including disposal of pumped water and establish optimal water table elevations.
 - c. Evaluate range of solutions.

2. Establish map of maximum projected groundwater table evaluations.

3. Incorporate maps of maximum water table elevations in planning.

IV.C.4. Water Conservation

1. Actively promote water conservation.

NYCDEP

I

Some work on these issues has already been completed and is presented in the aforementioned O'Brien & Gere report (see Regional Quality Issues, IV.C.2.2, above). In addition, this Bureau is currently preparing a Request for Proposals for a consultant contract that will, among other things, further address the items listed in this section. When completed, the RFP will be submitted to the members of the Task Force's Groundwater Committee for review and comment.

UYGS

N

The creation of a map projecting maximum water table elevations has not been started and involvement in that effort may not be appropriate or particularly useful due to data density. However, a generalized small scale regional map of depth to water has been approved for publication which is entitled: "Depth to Water Table on Long Island, New York." Water Resources Investigation 88-4151. This map report is currently being drafted.

LIRPB,
NYCPD

N

With or without an appropriate map, planning and development decisions must consider groundwater levels.

All

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All agencies and water purveyors are actively promoting water conservation. Requirement of DEC Water Supply Permit Program. Guidance document for development of local program available.

2

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| 2. Implement water conservation recommendations of Nassau County Master Water Supply Plan. | 2 | N.C.D.H. and N.C.D.P.W. | Nassau County has a water conservation ordinance in place and is implementing a public education program. Effectiveness of efforts needs to be evaluated. |
| 3. Continue implementation of ECL Section 15-0314 requiring water saving plumbing fixtures including enforcement. | 2 | NYSDEC | I More enforcement needed. Water purveyors and local planning and building departments are promoting compliance. DEC enforcement effort is still lacking. |
| 4. Require water conservation measures as a condition of Long Island Well Permits and Water Supply Permits, as needed in areas of impending and existing quantity stress. | 2 | NYSDEC | I Water conservation now a requirement for issuance of Water Supply Permit (applicable statewide). |
| 5. Study to evaluate application of water conservation measures on Long Island. | 3 | NYSDEC, NYSDOH | I Public Service Dept. working with DEC and private suppliers. DEC developed water conservation manual. DEC and SCWA conducting pilot residential plumbing retrofit program. |

IV.C.5. Water Recharge

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| 1. Require the subsequent recharge of suitable quality water, where appropriate. | 2 | NYSDEC | I Well permits currently under review to require recharge where appropriate; groundwater discharge standards must be achieved. |
| 2. Prepare and periodically update a map showing general areas of high and low water table elevations (see IV.C.1.1.). | 2 | NYSDEC | I USGS, NCDPW and SCDHS monitor water table elevations and periodically produce regional groundwater contour maps. |
| 3. Develop model local zoning ordinance and guidance covering on-site recharge of stormwater. | 2 | LIRPB | C Non-point source handbook complete and distributed to local government. |

4. Continue demonstration project on AWT/aquifer recharge in Nassau County and evaluate future application elsewhere.

2

NCIDPW/USGS

C

The Nassau County recharge demonstration project has been completed. The following related reports have been published by USGS:

1. Geohydrology of the Meadowbrook Artificial Recharge Site at East Meadow, Nassau County, New York. Water Resources Investigation 82-4084. Published.
2. The Meadowbrook Artificial Recharge Project in Nassau County, Long Island, New York. L.I. Water Resources Bulletin 14. Published.
3. Design, Operation and Monitoring Capability of an Experimental Artificial-Recharge Facility at East Meadow, Long Island, New York. Water Resources Investigations 84-4321. Published.
4. Hydrologic Effects of Artificial Recharge Experiments with Reclaimed Water at East Meadow, Long Island, New York. Water Resources Investigation 85-4323. Published.

Additional work has been done on the distribution of recharge derived from storm runoff routed to storm recharge basins. A report describing results and findings entitled "Efficiency of Recharge Basins in Nassau County, New York and their influence on the Hydrologic System" is currently in the Survey review system.

5. Consider recharge with surface water during periods when surface water is plentiful.

NYSDOH,
NYCDEP

I

This issue will be further addressed in the RFP referred to under Groundwater Flooding. See item IV.C.3.1 above.

The consideration of using excess storm-runoff routed to streams as a source of recharge is also being addressed in a current cooperative project with the Nassau County Dept. of Public Works and USGS. Although the recommended action listed treats this issue at a larger scale, identifies different agencies for involvement, and shows status complete, it should be noted that the same issue is being examined within the Long Island setting. This cooperative project will run three years and has been identified by Nassau County as the Stream and Wetlands Augmentation Management Program. The main thrust of this effort is to replenish flow in dried reaches of Nassau County streams and preserve existing wetlands through the development of increased baseflow. A related report prepared in cooperation with Nassau and Suffolk Counties, entitled: Effects of Urbanization on Base Flow and Flow Duration of Ten south Shore Streams on Long Island, New York 1976-85, is in the initial stages of USGS review.

IV.D. ZONING AND LAND DEVELOPMENT
CONTROLS

(See Sections IV.B.5., IV.B.6.,
IV.B.7., IV.C.1., and IV.C.5.)

IV.E. RESPONSE AND REMEDIATION PROGRAMS

IV.E.1. Spill Response

1. Prepare and disseminate a guidance document addressing petroleum and hazardous material spills and cleanup.

2 NYSDEC N

Develop an ongoing training program for spill response personnel.

2 NYSDEC C

Training currently available for spill response personnel.

3. Provide guidance on disposal of hazardous material resulting from spill cleanup.

2 NYSDEC I

Guidance available; not in conjunction with overall study.

4. Develop end-point criteria for petroleum and hazardous materials spill cleanup.

2 NYSDEC State Comptroller I

TOGS published in remediation; further detailing required.

5. Evaluate non-petroleum hazardous material spill response needs on Long Island and report on findings.

1 SCDHS, NCDH, NYCDOH I

Funds now available from Superfund for emergency cleanups. Local funds available to SCDHS to implement cleanups.

6. Maintain a credible responsive level of enforcement activity to recover the cost of cleanup activities from the spiller.

2 NYSDEC I

Current level of enforcement not a significant deterrent.

IV.E.2. Management of Contaminated Aquifer Segments

1. Maintain capacity to perform trackdown on sources of significant contamination incidents.

2 NYSDEC, SCDHS, NCDH, NYCDOH, NCDPW I

Ongoing programs in Nassau and Suffolk; limited funding. DEC performing as part of Spill Response and Enforcement Programs.

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|----|---|---|---------------------------|---|---|
| 2. | Develop and maintain a priority system for contamination source trackdown. | 1 | NYSDEC, NYSDOH | I | Priority water problem list will be used for this in future. CASI list exists. Priority system needs to be developed. |
| 3. | Develop and periodically update (3-year cycle) a document which identifies, describes, and maps all known contaminated aquifer segments. Incorporate results of source trackdown activities in annual problem inventory summaries and oversight meetings. | 2 | NYSDEC | I | DEC has prepared CASI and maps in draft form. Joint USGS/DEC effort to develop associated GIS is ongoing. |
| 4. | Develop response strategies for contaminated aquifer segments to protect water supply wells. | 2 | SCDHS, NCDH, NYCDOH | I | Response strategies being developed by NCDH/USGS in Bethpage-Hicksville area. Efforts in wellhead protection, emergency plans for all public water suppliers, and existing sanitary codes and drinking water regulation provide protection. Groundwater monitoring programs assist. |
| 5. | Execute a demonstration project to evaluate the effectiveness of unproven management technologies for contaminated aquifer segments. | 3 | NYSDEC | N | |
- IV.E.3. Wellhead Treatment
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|----|--|---|--------|---|--|
| 1. | Maintain an ongoing technology assessment function on wellhead treatment methods. | 2 | NYSDOH | I | NYSDOH has ongoing program commitment including plan review of new processes. Local health agencies have relevant expertise. |
| 2. | Prepare and maintain guidance for water purveyors on availability and costs of wellhead treatment. | 2 | NYSDOH | I | NYSDOH maintains the standards in Bulletin 42 relative to wellhead treatment. No financial assistance is available. |

IV.E.5. Sewering

Three studies involving new sewer districts or sewer extensions are underway in Suffolk. NCDH has conducted evaluations in Manhasset area; further assessment is needed in Sea Cliff, Roslyn Harbor, Old Brookville 201 area.

NCDH, SCDHS I

2

1. Perform an inventory of areas likely to require detailed evaluations for sewerage to prevent or reduce contamination and estimate study costs.

See comment under IV.E.5.2 above.

NYSDEC I

2

2. Review above report and recommend feasible options for accomplishing the needed evaluations.

NCDH,
SCDHS,
NYCDEP, NCDPW

3. Evaluate extent and impact of storm and sanitary sewers on groundwater.

NURPS; if needed to look at organics, funding must be provided.

IV.F. REGULATORY ENFORCEMENT

1

1. Implement the DEC commitments for SPDES enhancement. (These commitments made in relation to the enforcement of all regulatory programs.)

NYSDEC C

See IV.B.4.2

1

2. Enhance analytical capability and surveillance to support enforcement for all major contaminant source control programs.

NYSDEC,
NYSDOH,
NCDH,
SCDHS,
NYCDOH C

NYSDEC, SCDHS, NCDH combined programs now produce at least three inspections and two sample analyses annually for industrial facilities; and four inspections and four analyses annually for municipal facilities.

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3. Annually review effectiveness of enforcement activities, functional and geographic priorities, and levels of resource deployment.

NYSDEC,
NYSDOH I

Meeting held in fall of 1985. Subsequent meetings October, 1988 and November, 1989.

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| <p>3. Perform pilot water supply treatment project for pesticides and nitrates.</p> <p><u>IV.E.4 Water Main Extension/Water Importation and Water Quality Treatment Districts</u></p> | 2 | SCDHS | C | Pilot complete; full scale project under construction. |
| <p>1. Identify areas needing public water, establish priorities, estimate costs, and investigate alternatives. Review with appropriate representatives.</p> | 2 | SCDHS | C | Suffolk County Comprehensive Water Resources Management Plan completed January 1987. |
| <p>2. Identify areas appropriate for establishment of Water Quality Treatment Districts, and propose the establishment of county districts.</p> | | SCDHS | N | Future consideration |
| <p>3. Evaluate treatment technology for private residential water supplies and monitor effectiveness of systems installed.</p> | | SCDHS | C | Completed study indicates that technology is sound but sales, installation, operation and maintenance require regulation. |
| <p>4. Examine the need for government subsidy of water supply extensions and develop needed legislation.</p> | 2 | Legislative Commission on Water Resource Needs of Long Island | N | |

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| 4. Place higher enforcement priority in the area of industrial establishments discharging without a proper permit. | 1 | NYSDEC | I | Both Nassau and Suffolk Health Depts. are planning to develop countywide Watershed Rules and Regulations. |
| 5. Evaluate the use of DOH watershed rules and regulations to strengthen quality enforcement on Long Island. | 1 | NYSDOH, NYSDEC | I | |

IV.G. PUBLIC EDUCATION AND PARTICIPATION

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| 1. Implement "long-term" educational approach through curriculum development. | 2 | SUNY @ Stony Brook | I | Long Island Water Resources Curriculum has been developed and is available. SUNY conducting DEC funded project to disseminate curriculum to various school districts. |
| 2. Develop and implement an information and education program on Long Island Groundwater. | 2 | NYSDEC, NYSDOH, NCDH, SCDHS, NYCDOH, NCDPW | I | Cooperative Extension and County Health Agencies (also NCDPW) active in this area. NYSDOH has public information campaign for organic chemicals. |
| 3. Include discussion of proposed new educational activities and materials at annual Regulatory Management Oversight meetings. | 3 | NYSDEC, NYSDOH | N | Not included in 1985 or 1988 meetings. |
| 4. Act as forum for discussion of education needs and approaches and for effective involvement. | 2 | LIGCC | N | |
| 5. Conduct a public participation program for this Long Island Groundwater Management Program. | 1 | NYSDEC | C | Completed in conjunction with issuance of final report in 1986. |