

STATUS REPORT ON

LONG ISLAND GROUNDWATER MANAGEMENT PROGRAM

- N - Not yet started
- I - Started, but not complete
- C - Complete
- Q - Status not determined

Status Report - Long Island Groundwater Management Program

RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>I.V.A. GROUNDWATER RESOURCE MANAGEMENT</u>				
<u>I.V.A.1. Regulatory Program Direction</u>				
1. Conduct annual, management level meetings of 5 key regulatory agencies to review IIGMP implementation, problems, priorities, and program resource deployment.	1	NYSDEC, NYSDOH, NODH, SOHS, NYODOH	I	One meeting, fall of 1985.
2. Establish a coordinated system for regulatory program audits.	1	NYSDEC, NYSDOH, NODH, SOHS, NYODOH	N	
3. Establish and maintain a list of priority contaminants for program targeting.	2	NYSDEC, NYSDOH	N	
4. Assemble and evaluate available information to identify additional geographic areas for priority attention of potential contaminant sources.	2	NYSDEC	N	Many agencies share interest in ARC-INFO. Should be implemented in 1-2 years.
5. Prepare annual Long Island Groundwater Problem Inventory Report for management staff of participating agencies.	1	NYSDEC	N	First one prepared in 1985. One in progress at present.
6. Assess, and if feasible, develop a system of annual IIGMP performance assessment in terms of water quality and quantity of indicators.	1	NYSDEC	N	

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I.V.A.1. Regulatory Program Direction (Cont'd.)

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| 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 | N | |
| 9. Prepare formal update of IIGMP every three years. | 2 | NYSDEC | N | |

IV.A.2. Resource Management Framework

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| 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 | |
| 2. Produce larger scale maps of the hydrogeologic zones incorporating modifications, additions and landmarks to facilitate their use. | 1 | NYSDEC | C | Only one set available. |

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

3. Consider revisions of the hydrogeologic zone boundaries in conjunction with future LIQMP updates.	3	NYSDEC	N	
4. Assign responsibility for granting of waivers (for specific projects) to regulatory agencies having applicable statutory jurisdiction.	3	None	C	
5. Use the Groundwater Flow Regimes as a primary technical basis for development of withdrawal policies and guidelines for groundwater resource management.	1	NYSDEC	N	
6. Utilize the Special Management Concept as a means of geographically targeting groundwater programs.	1	NYSDEC	I	205 (j) studies, SPPRS compliance, targeting, purpage limitations.
7. Annually add, delete, or create categories of Special Management Areas.	3	NYSDEC	I	LIRPB 205 (j) reports on SPPRS.

IV.A.3. Standards and Classifications

1. Incorporate Part 703, "Groundwater Classifications, Quality Standards and Effluent Standards" as part of the LIQMP.	1	NYSDEC	C	
2. Continue the policy that all fresh groundwaters will be preserved for potable water as part of the LIQMP.	1	NYSDEC	C	

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RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>IV.A.3. Standards and Classifications (Cont'd.)</u>				
3. Establish numerical guidelines and/or standards for industrial chemicals commonly in use and posing a threat to groundwater quality.	1	NYSDEC, NYSDOH	I	Ongoing program procedures established.

IV.A.4. Monitoring

1. Develop a groundwater monitoring manual.	2	NYSDEC, NYSDOH	N	
2. Conduct an annual review of agency monitoring activities during Regulatory Management Oversight meetings.	2	NYSDEC	I	One meeting held in fall of 1985.
3. Incorporate in all Long Island well permits a condition that requires 90 days prior notification before sealing any well or the extraction of any well casing.	2	NYSDEC	I	

IV.A.5. Groundwater Information System

1. Continue data entry and verifications for priority groundwater information files already established on the System 2000 at SUNY at Stony Brook Computing Center.	---	1	N	Agencies moving away from System 2000.
2. Computerize files justifiable for direct program support, including the Well Permit Program Data and Islandwide Spill Notification and Response Data.	2	NYSDEC	I	

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RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>IV.A.5. Groundwater Information System (Cont'd.)</u>				
3. Institute individual agency data quality assurance programs for data files.	2	---	I	
4. Complete FY '81 Management Information System Project.	1	NYSDEC	C	
<u>IV.A.6. Environmental Review Process</u>				
(See Section IV.B.7.)				
<u>IV.A.7. Areawide Planning</u>				
(See Sections IV.A., IV.B., and IV.C.)				
<u>IV.B. GROUNDWATER QUALITY PROTECTION PROGRAMS</u>				
<u>IV.B.1. Hazardous Material Storage & Handling</u>				
1. Continue to aggressively implement Suffolk County Article 12.	1	SODHS	C	
2. Conduct a pilot project to evaluate the "site-as-system" management concept.	2	NYSDEC	N	
3. Obtain authority and implement strong local bulk storage programs in Nassau County and NYC.	1	NYCHD, NYCOOH	C	

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RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>IV.B.1. Hazardous Material Storage & Handling (Cont'd.)</u>				
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	
6. Seek funding for implementation of Incompatible Use Law.		NYSDEC	N	
<u>IV.B.2. Industrial/Commercial Wastes & Hazardous Wastes</u>				
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	SODHS, NOH, NYDOH	N	
3. Evaluate need for additional hazardous waste treatment, storage and disposal facilities in the State.	2	NYSDEC, NYSDOH, ERC	I	Report prepared; not yet implemented.
4. Seek remediation funds from Federal Superfund.	1	NYSDEC	I	

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<u>IV.B.2. Industrial/Commercial Wastes & Hazardous Wastes (Cont'd.)</u>					
5.	Pursue aggressive enforcement with DEC Division of Hazardous Waste Enforcement to recover private funds for remediation of inactive sites and reduce violations.	1	NYSDEC	I	
6.	Staff and train Regions 1 & 2 Offices to implement existing industrial waste and hazardous waste regulations.	1	NYSDEC	I	
7.	Acquire telecommunications terminals and evaluate regionalizing Part 364 permits.	2	NYSDEC	C	
8.	Implement procedures for local health department review and comment on Part 364 permits, if program is regionalized.	3	NYSDEC	C	
9.	Complete the Long Island portion of the State Hazardous Waste Management Plan.	3	NYSDEC	N	
<u>IV.B.3. Municipal Solid Waste Management</u>					
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.	1	NYSDEC	I	Report not prepared but implementation mostly accomplished through the Long Island Landfill Law.
2.	Complete the Long Island Regional Solid Waste Management Plan.	2	NYSDEC, LIRPB	N	

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RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>IV.B.3. Municipal Solid Waste Management (Cont'd.)</u>				
3. Improve Long Island administration and enforcement of Part 360 and provide technical assistance to local governments in developing resource recovery projects.	1	NYSDEC	I	
4. Implement a system of priorities to determine deployment of existing personnel for Solid Waste regulatory programs.	1	NYSDEC	C	

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

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

1	NYSDEC	I
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2. As part of a Statewide effort, implement specific DEC comments to improve the administration and enforcement of the SPDES Permit Program.

1	NYSDEC	I
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 - 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.

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RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>IV.B.4. Municipal, Industrial & Commercial Wastewater Discharge (Cont'd.)</u>				
3. Manage SPDES permits within the pilot study of Site-as-System Management (IV.B.1.).	2	NYSDEC	N	
4. Establish groundwater effluent standards for toxic and organic chemicals (same as IV.A.3.3.).	1	NYSDEC, NYSDOH	I	
5. Investigate ways to delegate elements of SPDES program to County and NYC Health Departments.	3	NYSDEC	N	
<u>IV.B.5. On-Site Sanitary Wastewater Disposal</u>				
1. Administer Suffolk County Sanitary Code, Article 6, to limit the density of new on-lot disposal systems.	1	SODHS	C	
2. Develop model local zoning provisions and site development guidelines and advise local governments on their use.	1	LITREB	C	
3. Complete Consumer Products Project and implement control program consistent with project findings.	2	NYSDEC	I	Project complete; no further action.
4. Develop regulations to fully implement ECL Article 39 on septic system additives.	2	NYSDEC	N	

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<u>IV.B.5. On-Site Sanitary Wastewater Disposal (Cont'd.)</u>				
5. Investigate on-site system design modifications and complete pilot study of maintenance districts.	2	SOHS	I	"Super Cesspool" developed and required in new commercial development.
<u>IV.B.6. Pesticides and Fertilizers</u>				
1. Research methods to reduce use of agricultural chemicals in eastern Suffolk County.	2	Cornell University Cooperative Extension	Q	
2. Implement recently revised FIFRA pesticide screening procedures.	1	USEPA	Q	
3. Monitor implementation of revised FIFRA procedures and assess need for additional state actions.	1	NYSDEC	Q	
4. Consult on state registration of new pesticides, impose necessary monitoring requirements, and withdraw registration on evidence of unacceptable leaching.	1	NYSDEC	Q	
5. Continue pesticide monitoring program and identification of appropriate water supply options.	1	SOHS	I	SOHS completed studies of North and South Forks and a Comprehensive Water Supply Study.
6. Develop model local zoning provisions and site development guidelines to reduce fertilizer use and advise local governments concerning implementation.	2	LIRPB	C	

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RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>IV.B.6. Pesticides and Fertilizers (Cont'd.)</u>				
7. Develop brochures and pamphlets on the use of alternate ground covers.	2	LIRPB	C	
<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 SPCA as critical area.
2. Review status of special groundwater protection areas designation and, if justified, propose legislation to allow state designation under SEQRA.	3	NYSDEC	N	
3. Conduct special interdisciplinary permit reviews, emphasizing groundwater protection, within special groundwater protection areas.	1	NYSDEC, SOHS, NODH, NYDOH	I	Emphasis due to local laws. Complete integration of reviews not yet accomplished.
4. Develop a model local zoning ordinance and technical guidance manual and advise local governments on their use.	1	LIRPB	C	
5. Prepare watershed management strategies for the identified special groundwater protection areas.	2	LIRPB	I	Two of nine areas completed. Project just begun on remainder.

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RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>IV.B.7. Special Groundwater Protection Areas (Cont'd.)</u>				
6. Develop proposed federal and state companion legislation to provide funding for planning and selective local acquisition in special groundwater protection areas.	2	NYSDEC, Legislative Commission	C	

IV.C. GROUNDWATER QUANTITY MANAGEMENT

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

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| 1. | Refine and augment the Long Island Well Permit Program to achieve regional quantity management. | 1 | NYSDEC | C |
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- Develop written policies and permit guidelines.
 - Apply policies and guidelines to Long Island well permits and to water supply permit programs.
 - Augment staffing to achieve program refinements.
 - Develop Cooperative Agreement to provide technical assistance.
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| 2. | Maintain Islandwide technical, hydro-geological data base and resource assessment function. | 1 | USGS | I |
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RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>IV.C.1. The Long Island Well Permit Program (Cont'd.)</u>				
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.
4. Prepare area-specific management strategies for areas identified as Quantity Stressed and Impending Quantity Stressed.	1	NYSDEC, NYSDOH	I	Hearing held 3/88.
<u>IV.C.2. Regional Quantity Issues</u>				
1. Prepare a groundwater quantity/water supply plan for Long Island.	2	NYSDEC, NYSDOH	I	See IV.C.1.4.
2. Verify and confirm the preliminary findings of the Brooklyn/Queens Aquifer Management Feasibility study.	2	NYSDEP, USGS	C	
3. Plan for the interconnection and complementary utilization of the Jamaica Water Supply system and the NYC surface supply system.	2	NYODDP, Jamaica Water Supply Co.	I	Currently 30 mgd being supplied to system by NYC.
4. Review and modify Jamaica Water Supply Well Permits to reduce existing stresses on the aquifers.	1	NYSDEC	C	
5. Implement priority short-term recommendations of the proposed Nassau County Water Supply Plan.	1	NODPW, NODH	I	

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RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>IV.C.2. Regional Quantity Issues (Cont'd.)</u>				
6. Perform studies to define Lloyd and Magothy aquifers.		NOAH, USGS	I	
<u>IV.C.3. Groundwater Flooding</u>				
1. Study options to solve groundwater flooding in Brooklyn and Queens:		NWCD/EP	N	
a. Define type and scope of problems.				
b. Address technical aspects including disposal of pumped water and establish optimal water table evaluations.				
c. Evaluate range of solutions.				
2. Establish map of maximum projected groundwater table evaluations.		USGS	N	
3. Incorporate maps of maximum table elevations in planning.		LIRPB, NWCPD	N	
<u>IV.C.4. Water Conservation</u>				
1. Actively promote water conservation,	2	All	I	
2. Implement water conservation recommendations of Nassau County Master Water Supply Plan.	2	NYS/DEC	I	Report on Water Conservation proposed. Projects underway.

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RECOMMENDED ACTION	PRIORITY	LEAD AGENCY	STATUS	COMMENTS
<u>IV.C.4. Water Conservation (Cont'd.)</u>				
3. Continue implementation of ECL Section 15-0314 requiring water saving plumbing fixtures including enforcement.	2	NYSDEC	I	More enforcement needed.
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	Complete for Queens and Nassau.
5. Study to evaluate application of water conservation measures on Long Island.	3	NYSDEC, NYSDOH	N	
<u>IV.C.5. Water Recharge</u>				
1. Require the subsequent recharge of suitable quality water, where appropriate.	2	NYSDEC	I	
2. Prepare and periodically update a map showing general areas of high and low water table elevations (see IV.C.1.1.).	2	NYSDEC	N	
3. Develop model local zoning ordinance and guidance covering on-site recharge of stormwater.	2	LIRPB	I	
4. Continue demonstration project on MWT/aquifer recharge in Nassau County and evaluate future application elsewhere.	2	NODPW	I	Project complete. Final report not yet published.

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<u>IV.C.5. Water Recharge (Cont'd.)</u>				
5. Consider recharge with surface water during periods when surface water is plentiful.	2	NYSDOH, NYOEDP	C	
<u>IV.D. ZONING AND LAND DEVELOPMENT CONTROLS</u>				
(See Sections IV.B.5., IV.B.6., IV.B.7., IV.C.1., and IV.C.5.)				
<u>IV.E. RESPONSE AND REMEDIATION PROGRAMS</u>				
<u>IV.E.1. Spill Response</u>				
1. Prepare and disseminate a guidance document addressing petroleum and hazardous material spills and cleanup.	2	NYSDEC	N	
2. Develop an ongoing training program for spill response personnel.	2	NYSDEC	I	
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	SOHHS, NODH, NYOOH	I	Funds now available from Superfund for emergency cleanings.

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<u>IV.E.1. Spill Response (Cont'd.)</u>					
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.
<u>IV.E.2. Management of Contaminated Aquifer Segments</u>					
1.	Maintain capacity to perform trackdown on sources of significant contamination incidents.	2	NYSDEC, SOHS, NODH, NYDDOH	I	
2.	Develop and maintain a priority system for contamination source trackdown.	1	NYSDEC, NYSDOH	N	Priority water problem list will be used for this in future.
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	First prepared in 1983. Second in progress.
4.	Develop response strategies for contaminated aquifer segments to protect water supply wells.	2	SOHS, NODH, NYDDOH	N	
5.	Execute a demonstration project to evaluate the effectiveness of unproven management technologies for contaminated aquifer segments.	3	NYSDEC	N	

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IV.E.3. Wellhead Treatment

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| 1. Maintain an ongoing technology assessment function on wellhead treatment methods. | 2 | NYSDOH | N | |
| 2. Prepare and maintain guidance for water purveyors on availability and costs of wellhead treatment. | 2 | NYSDOH | Q | |
| 3. Perform pilot water supply treatment project for pesticides and nitrates. | 2 | SODHS | I | |

IV.E.4. Water Main Extension/Water Importation and Water Quality Treatment Districts

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| 1. Identify areas needing public water, establish priorities, estimate costs, and investigate alternatives. Review with appropriate representatives. | 2 | SODHS | C | |
| 2. Identify areas appropriate for establishment of Water Quality Treatment Districts, and propose the establishment of county districts. | | SODHS | N | |
| 3. Evaluate treatment technology for private residential water supplies and monitor effectiveness of systems installed. | | SODHS | I | |
| 4. Examine the need for government subsidy of water supply extensions and develop needed legislation. | 2 | Legislative Commission on Water Resource Needs of Long Island | N | |

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<u>IV.E.5. Sewering</u>				
1. Perform an inventory of areas likely to require detailed evaluations for sewerage to prevent or reduce contamination and estimate study costs.	2	NODH, SODHS	N	
2. Review above report and recommend feasible options for accomplishing the needed evaluations.	2	NYSDEC	N	
3. Evaluate extent and impact of storm and sanitary sewers on groundwater.		NODH, SODHS, NYDOH	N	
<u>IV.F. REGULATORY ENFORCEMENT</u>				
1. Implement the DEC commitments for SPDES enhancement. (These commitments made in relation to the enforcement of <u>all</u> regulatory programs.)	1	NYSDEC	I	
2. Enhance analytical capability and surveillance to support enforcement for <u>all</u> major contaminant source control programs.	1	NYSDEC, NYSDOH, NODH, SODHS, NYDOH	I	
3. Annually review effectiveness of enforcement activities, functional and geographic priorities, and levels of resource deployment.	1	NYSDEC, NYSDOH	I	Meeting held in fall of 1985.

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4.	Place higher enforcement priority in the area of industrial establishments discharging without a proper permit.	1	NYSDEC	N	
5.	Evaluate the use of DOH watershed rules and regulations to strengthen quality enforcement on Long Island.	1	NYSDOH, NYSDEC	N	
<u>IV.G. PUBLIC EDUCATION AND PARTICIPATION</u>					
1.	Implement "long-term" educational approach through curriculum development.	2	SUNY @ Stony Brook	I	Draft prepared.
2.	Develop and implement an information and education program on Long Island Groundwater.	2	NYSDEC, NYSDOH, NODH, SOHS, NYDOH	N	205 (j) proposal.
3.	Include discussion of proposed new educational activities and materials at annual Regulatory Management Oversight meetings.	3	NYSDEC, NYSDOH	N	
4.	Act as forum for discussion of education needs and approaches and for effective involvement.	2	LIIGOC	N	
5.	Conduct a public participation program for this Long Island Groundwater Management Program.	1	NYSDEC	C	