

Part IV

Responses to Scoping Comments

Draft Generic Environmental Impact Statement

Suffolk County Vector Control and Wetlands Management Long-Term Plan and Environmental Impact Statement

November 15, 2002

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INTRODUCTION

Comments on the proposed scope were received during the public comment period on the Draft Scope for the Generic Environmental Impact Statement (GEIS), which officially began August 14, 2002 with the publication of notice in the Environmental Notice bulletin and ended September 25, 2002, at the close of business (4:30 pm). Some comments were received prior to the beginning of the comment period, and some, due to delivery problems, were received after the official deadline. All comments received were nonetheless accepted as comments on the Draft Scope.

A total of 35 comments were received, from 31 different individuals, groups, agencies, and organizations. The County has also included the transcript from the Public Scoping Hearing held on September 10, 2002. In addition, meeting minutes from the Citizens Advisory Committee meetings of September 5 and September 23, 2002, have been included as comments, as have meeting minutes for the Joint Technical Advisory Committee-Steering Committee meeting of September 17, 2002. Informal comments generated within the County (from the Departments of Health Services, Public Works, and Planning, as well as from members of the Council on Environmental Quality, have also been addressed.

The comments and responses to each comment are grouped by subject matter. Where a comment resulted in a change in Scope, the changes are discussed. A copy of all the comments on the Draft Scope is available in the document entitled, "Scoping Comments Generic Environmental Impact Statement Suffolk County Vector Control and Wetlands management Long-Term Plan," through the Office of Ecology, Department of Health Services, 220 Rabro Drive, Hauppauge (631-853-2250).

Parties Responding with Comments on the Draft Scope

Comment	Author	Affiliation
1	R.L. Swanson, Director	Waste Reduction and Management Institute
2	Henry Dam	
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
4	Meeting Minutes	Citizens Advisory Committee Meeting
5	R. Mendelman	Harbor Marina & Gardiner's Marina
6	Bob McAlevy	
7	J.W. Pavacic, Regional Permit Administrator	NYSDEC
8	Public Hearing Transcript	Public Scoping Hearing
9	T. Isles, Director	Suffolk County Department of Planning
10	R. Kluesener, Supervisor, Department of Environmental Control	Town of Babylon
11	Meeting Minutes	Joint Steering Committee/Technical Advisory Committee Meeting
12	Charles F. Wurster and Ernest Habicht	Village of Old Field
13	John Kelley, M.D.	
14	J. Schaefer, President	The Mastic Beach Property Owner's Association, Inc.
15	B.T. Sullivan, Acting Superintendent	National Park Service
16	Arthur Kaliski	
17	Meeting Minutes	Citizens Advisory Committee Meeting
18	L. Belti-Nash, Conservation Co-Chairperson	Four Harbors Audubon Society
19	Bob McAlevy	
20	F.J. Gorman	Nesconset-Sachem Civic Association, Inc.
21	Richard Spotts	
22	E. Nadel, Ph.D., Biostatistician	Suffolk County Department of Health Services
23	Bertel Bruun, MD	
24	J.N. Ozarski, Coastal Policy Specialist	The Nature Conservancy
25	J.W. Pavacic, Regional Permit Administrator	NYSDEC
26	J. Zappieri, Coastal Habitats Unit	New York State Department of State
27	Diane Teta, Ph.D.	
28	S. Mahar	Audubon New York
29	R.C. Kluesener, Supervisor, Department of Environmental Control	Town of Babylon
30	A. Esposito, Associate Executive Director J. Otney, Long Island Program Director	Citizens Campaign for the Environment
31	Robert B. Devinney, Ph.D.	
32	T.B. Lyons, Director of Environmental Management	NYS Office of Parks, Recreation and Historic Preservation
33	D. O'Kane, Executive Director	North Fork Environmental Council, Inc.
34	Anne Hopkins, President	Orient Association
35	K. McAllister	Peconic Baykeeper
36	S. Terracciano and J.L. Eimers	United States Geological Survey
37	Hon. Michael J. Caracciolo	Suffolk County Legislator
38	Diane Spit, Conservation Co-Chair	Four Harbors Audubon Society
39	Patricia Martinkovic, Refuge Manager	United States Fish and Wildlife Service

1. PROJECT MISSION STATEMENT

Comment

Comments were received requesting a succinct definition of the project goals.

Parties Responding

Comment	Author	Affiliation
5	R. Mendelman	Harbor Marina & Gardiner's Marina
11	Meeting Minutes	Joint Steering Committee/Technical Advisory Committee Meeting

Response

The following Mission Statement was developed for the project:

The overall objective of the project will be to develop a long-term, Suffolk County-wide Vector Control and Wetlands Management Plan. The plan will protect public health, while minimizing pesticide usage and optimizing environmental quality. As part of the program, wetlands management will be implemented insofar as such management is relevant to the control of mosquitoes, while minimizing adverse impacts to the wetlands.

The program will be based upon program and literature reviews, field reconnaissance, and impact assessment (including public health and ecological risk assessments). A detailed evaluation of alternatives will be performed, including cost-benefit analyses. Examples of possible recommendations include:

- Specifications of allowable chemical usage (types, application rates and methods, etc.) to optimize ecological protection while protecting public health;
- Implementation methodologies for non-chemical vector control methods;
- Detailed descriptions of treatment areas (exact locations, setbacks for particular applications, etc.);
- Guidelines for wetlands restoration activities, such as Open Marsh Water Management (OMWM);
- A comprehensive education and outreach program; and
- A framework for future monitoring and management.

Change in Scope

The Mission Statement reflects the project Scope, and so did not result in any change in Scope.

2. NUISANCE AND PUBLIC HEALTH CONTROL OF MOSQUITOES

Comment

Several comments referred to the need to distinguish between mosquito control implemented for the reduction of ‘nuisance’ mosquitoes vs. mosquito control implemented for the protection of public health. Some comments suggested that nuisance control techniques might be different than those employed for prevention of disease outbreaks. It was suggested that mosquito control is not necessary at all for nuisance impacts. There were comments suggesting the County carefully define its intent with regard to disease control as compared to nuisance impacts.

Parties Responding

Comment	Author	Affiliation
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
8	Public Hearing Transcript	Public Scoping Hearing
11	Meeting Minutes	Joint Steering Committee/Technical Advisory Committee Meeting
15	B.T. Sullivan, Acting Superintendent	National Park Service
17	Meeting Minutes	Citizens Advisory Committee Meeting
21	Richard Spotts	
24	J.N. Ozarski, Coastal Policy Specialist	The Nature Conservancy
27	Diane Teta, Ph.D.	

Response

To date, disease control and control of mosquitoes to preserve quality of life (“nuisance control”) have been inextricably linked in the Suffolk County Vector Control program. This is because it is possible to view all mosquito control as the prevention of disease, as all human-biting mosquitoes on Long Island can *become* disease vectors. Therefore, any reduction in the prevalence of those species that *can* carry disease can be said to be for the purpose of protecting public health.

This study will make every effort to differentiate between the activities. To this end, a major task will be defining certain key terms, through research of law and mosquito control literature, and incorporation of public input. The list of definitions will include the following (the explanations attached to each term are meant to be illustrative rather than definitive):

- “nuisance” – interference with comfort, use or enjoyment of property, and having no significant public health component
- “public health nuisance” – a term of art, defined in Public Health Law
- “public health threat” – a situation posing potential substantial health risk to the population
- “public health emergency” – a situation of substantial health risk to the population

Risk assessments and management alternatives will all be evaluated in the context of these terms and their associated definitions.

It must be understood that all Suffolk County-native human-biting mosquitoes have the potential to be disease vectors. In addition, there is a wide-spread perception that disease threats from mosquitoes are limited, both geographically and temporally, as compared to more widespread and common problems generated by mosquitoes with regard to warm-weather outdoor activities in Suffolk County. However, it is not clear that Division of Vector Control data support such perceptions. One of the tasks of the project will be to determine exactly where and when, and under what conditions, mosquitoes affect people in the County.

In that context, the management strategies associated with health implications and those addressing nuisance conditions may have different aspects. Although specific health and environmental risk evaluations have not yet been conducted, it is likely that greater potential environmental impacts will be tolerated in situations with clear public health implications as compared to those where quality of life issues are the major consideration.

The mosquito control program associated with impacts thought not to be related to public health will include consideration of the following issues:

- The assessment of potential impacts resulting from the modification of wetland environments to minimize mosquito propagation, versus the public benefits that may accrue from these changes;
- Definitions of appropriate larvicidal steps when propagation control efforts are insufficient;
- The development of surveillance programs to determine if, when, and where adulticides should be used; and,
- The practicalities and economics associated with nascent trapping technologies.

The disease prevention and control effort will include consideration of the following issues:

- Continuing public education efforts to minimize mosquito propagation;
- Surveillance efforts to identify the specific parts of the County where disease transmission may be increasing; and,
- A clearly outlined active control element, appropriate to the risk presented by the disease threat.

Both programs will be carefully assessed in light of recent County legislation that may restrict responses under some conditions, and in terms of the latest scientific information concerning:

- The value of wetland environments;
- The aspects of wetlands that create these environmental values;
- The best long-term management means for different wetland types to maximize positive wetland functions;
- Environmental and public health effects associated with pesticide application drift; and,

- Other pertinent information regarding impacts of control measures (the potential for developing control effort-resistant mosquito populations, costs and other practicalities associated with different control strategies).

Change in Scope

The Long-Term Plan will clearly distinguish between the defined aspects of mosquito control for Long Island. Local and national law, regional and other vector control agencies, the TAC and CAC, and other interested parties will be consulted regarding management strategies for both public health and quality of life issues. Control measures will be examined and evaluated with recommendations made based on the intended objective. Potential recommendations may include varying action thresholds and control measures depending upon the intent of the control action.

3. INCLUSION OF THE WEST NILE RESPONSE PLAN

Comment

The State and Federal governments have each prepared West Nile Virus Response Plans to address the threat of disease from West Nile Virus. Comments suggested that the Long-Term Plan incorporate the County West Nile virus reaction plan (which is usually undertaken as a declared Health Emergency, and so is not part of the County's Annual Plans of Work). Comments referred to the State and Federal documents and requested explanations as to how and why the County complies or doesn't comply with the plans.

Parties Responding

Comment	Author	Affiliation
8	Public Hearing Transcript	Public Scoping Hearing
12	Charles F. Wurster and Ernest Habicht	Village of Old Field
17	Meeting Minutes	Citizens Advisory Committee Meeting

Response

Discussion of the West Nile Virus Response Plans will be incorporated into the Long-Term Plan. The WNV Response Plans were designed primarily to reduce mosquito populations in order to reduce the risk of transmitting WNV. To date, studies have not been done to establish a correlation between vector control activities and transmission of WNV.

As currently practiced, SCVC's response to WNV has been less aggressive than recommended in the WNV Response Plans in the overall interest of reducing the use pesticides. The Long Term Plan will examine the Response Plans and the appropriateness of the current County response to outbreaks of WNV, resulting in the establishment of reasonable guidelines for SCVC's response to WNV.

Change in Scope

The Long Term Plan will include discussion of the State and Federal West Nile Virus Response Plans. A Suffolk County WNV response plan will be developed as part of the Long Term Plan, which may incorporate part or all of the State and Federal plans. The alternatives analysis done as part of the risk assessment will include a quantitative risk evaluation of the 2002 West Nile Response Plan used by the County. Regional vector control agencies will be contacted regarding their response strategies with respect to the outbreak of West Nile Virus.

4. IMPACT ON NON-TARGET ORGANISMS

Comment

Numerous comments suggested that the Long Term Plan include an evaluation of the potential impact of VC pesticides on non-target species, including household pets. Groups of non-target marine and freshwater organisms include the general categories of: mosquito predators, invertebrates, finfish, herptiles, and birds; and the more specific: insects, dragonflies, bats, particular birds, birds undertaking winter migration, crustaceans, clams, and toads and frogs. Additional concern was voiced over impacts due to VC practices on endangered, threatened, and special concern animal and plant species. One comment requested an ecosystem-wide evaluation of impacts so that all potential non-target effects would be addressed. Comments were also registered over the impact of *Gambusia* fish on non-target organisms (other than mosquito larvae). Other comments suggested that the work plan include evaluations of techniques to increase the abundance of mosquito predators.

Parties Responding

Comment	Author	Affiliation
1	R.L. Swanson, Director	Waste Reduction and Management Institute
2	Henry Dam	
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
6	Bob McAlevy	
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21	Richard Spotts	
24	J.N. Ozarski, Coastal Policy Specialist	The Nature Conservancy
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27	Diane Teta, Ph.D.	
28	S. Mahar	Audubon New York
30	A. Esposito, Associate Executive Director J. Ottney, Long Island Program Director	Citizens Campaign for the Environment
38	Diane Spit, Conservation Co-Chair	Four Harbors Audubon Society
39	Patricia Martinkovic, Refuge Manager	United States Fish and Wildlife Service

Response

The Workplan will include a study of the potential impacts of VC chemicals on *any* non-target species. Non-target organisms can be exposed directly to adulticide spraying, or from application drift transported to ponds, streams, and wetlands through the air or from runoff, but also from other means of control, such as predatory fish or other animals, or from larvicides. Secondary impacts can also occur through terrestrial and aquatic food chains. Research laboratories identified in the literature search will be contacted to determine if they are actively investigating VC chemical impacts on non-target organisms and if they are aware of other

researchers that may be active in the field. Ecological literature will be reviewed to determine if predation effects have been well-categorized.

Change in Scope

The literature search will include toxicity data as it relates to non-target organisms and species, including household pets. The Team will also investigate whether modern mosquito pesticides and their degradation products/metabolites bioaccumulate. Dose-response and hazard data will be investigated for a variety of wildlife species, including non-target insects. In addition, a search will be conducted for literature on direct toxic effects of these compounds in insectivorous birds, and the effects of these compounds in domestic household pets, primarily dogs and cats. The search will also investigate the ecosystem alterations caused by the use of Vector Control chemicals, and whether that could increase the risk of disease.

The quantitative ecological risk assessment will include an evaluation of the potential pesticide exposures and risks in pets. Risks will be evaluated for dogs and cats, because the data necessary to characterize potential exposures and toxicity are more likely to be available for these animals than for other domestic pets. The primary pathways likely to be evaluated include inhalation, ingestion while grooming, and incidental ingestion of soil. The degree to which any pathway can be quantitatively evaluated will be largely dictated by the availability of quantitative exposure and toxicity data.

The impact assessment will include an evaluation of potential impacts on insectivorous birds. This will be approached by evaluating the dietary exposure risks for insectivorous birds in the target application area predicted to have the highest environmental residues and highest food-chain bioaccumulation. This evaluation will likely be quantitative and will be conducted for a representative insectivorous species that occurs in the County. The impact assessment also will include an evaluation of the potential indirect effects as a result of pesticide-induced prey reductions. As part of this assessment, the potential for significant reductions in the non-target insect abundance following spraying will be evaluated, and, if so, the potential magnitude of that decrease. If significant reductions are expected to occur, available ornithological literature will be reviewed to identify data that characterize changes in population size or decreased reproductive success in insectivorous birds as a result of changes in prey density or availability. A quantitative or qualitative estimate of population-level impacts will be provided, depending upon the quality of the data available to support such estimates.

In addition, unintended consequences may arise from other means of vector control, such as the use of mosquito predators to control mosquito populations. It is highly probable that any organism that is an effective mosquito control will not consume only mosquitoes, due to boom-bust mosquito population dynamics. This means these predators will have alternate prey, and the impacts of increasing predator density and activities on these non-target prey species will be investigated to the degree the literature allows. Similarly, physical traps may attract insects other than mosquitoes, the creation of salt-water pannes may reduce habitat for species other than mosquitoes, etc. It is the intent of this study to discuss the impacts to the overall ecology

from the mosquito control means selected, with the caveat that these investigations may suffer from a lack of pertinent scientific studies.

5. MOSQUITO CONTROL ACTION THRESHOLDS

Comment

Numerous comments referred to the need to define a “health emergency” that would initiate a spraying event. Concerns were raised as to the definition of what constituted a nuisance event. Other comments suggested that thresholds needed to be established that would define when larvicides would be applied and when adulticides would be utilized. Similarly, it was suggested that criteria be established for aerial vs. ground spraying.

Parties Responding

Comment	Author	Affiliation
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
6	Bob McAlevy	
8	Public Hearing Transcript	Public Scoping Hearing
15	B.T. Sullivan, Acting Superintendent	National Park Service
17	Meeting Minutes	Citizens Advisory Committee Meeting
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24	J.N. Ozarski, Coastal Policy Specialist	The Nature Conservancy
30	A. Esposito, Associate Executive Director J. Ottney, Long Island Program Director	Citizens Campaign for the Environment

Response

Action thresholds are necessary in order to establish a program that is objective, predictable, and quantifiable. However, the criteria cannot be so rigid as to eliminate the role of the Vector Control professional’s experience and judgment.

As part of the Workplan, different larvicide and adulticide action thresholds would be established for quality of life mosquito control and for disease control. A combination of factors would be considered when defining quality of life mosquito control thresholds including landing rates, trap data, location, resident input, season, and weather. Scaled thresholds may be considered so that the Vector Control response is in proportion to the impact.

A separate action threshold would be established in response to the incidence of West Nile Virus disease in humans. The threshold would be determined solely based on disease transmission risk. The Work Plan would include a methodology to establish that risk. One of the means of establishing the risk of disease to humans would be continuing measurements of actual disease incidence in mosquito populations along with an assessment of the likelihood of transmission and the human infection rate. It will be critical to define a threshold based on these and other data rather than on perceived risk. In addition, the receiving area for vector control would be considered in terms of the risks associated with the use of pesticides. A balance would be sought in establishing thresholds between the risks associated with West Nile Virus and the risks associated with exposure to vector control chemicals.

The source of the infected mosquitoes, if it can be determined, would also be considered in defining a spatial response threshold of the control program. Geographic action thresholds

would be defined based on the reported incidence of disease in mosquitoes and on the human and environmental sensitivity of the area considered for control.

Change in Scope

Pesticide use action thresholds will be established as part of the Workplan through consultations with other VC professionals, examination of historic VC data, through examination of efficacy data, and by establishing human and environmental risks.

6. EFFICACY OF PESTICIDES IN CONTROLLING MOSQUITOES

Comment

Numerous comments were received regarding the ability of pesticides to control mosquito populations. Concerns were raised regarding the creation of resistant populations, and many comments addressed the concept of whether mosquito control with pesticides had long-term impacts on mosquito populations (some comments suggested that it increased mosquito numbers). Specific concerns were raised with regard to the effectiveness of larviciding and adulticiding as a means of reducing the threat of West Nile virus.

Parties Responding

Comment	Author	Affiliation
2	Henry Dam	
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
4	Meeting Minutes	Citizens Advisory Committee Meeting
8	Public Hearing Transcript	Public Scoping Hearing
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38	Diane Spit, Conservation Co-Chair	Four Harbors Audubon Society

Response

Vector control chemicals were demonstrated by their manufacturers to be effective in killing mosquitoes as part of their registration process. Questions have arisen, however, as to how effective the chemicals are as applied in the field. As part of the Workplan, an assessment would be made (through a literature review and interviews with VC professionals) of the percent reduction in larval and adult mosquito populations possible when applied as directed. This task would be part of the examination of the existing vector control program.

Resistance to vector control chemicals is an issue that Suffolk County Vector Control handles by alternating the types of products they use in a particular application.

Change in Scope

Suffolk County Vector Control mosquito population data would be examined before and after chemical applications to assess the efficacy of the applications. The impact of larvicides on subsequent adult population densities and the incidence of WNV would be approximated. Similarly, the relationship between adulticiding and the incidence of WNV would be estimated.

If sufficient data were not available from prior years or from other vector control programs, consideration would be given to conducting such a study as an early demonstration program.

As part of the Workplan, a literature search will be done to determine if chemical resistance (for the chemicals under consideration) has been documented in mosquitoes. In addition, the vector control experts and entomologists associated with the project would be queried for their knowledge of current research on the subject of chemical resistance. Alternating use of chemical controls has been effective in preventing resistance in other organisms.

7. IMPACTS AND EFFICACY OF GROUND AND AERIAL SPRAYING

Comment

Several comments addressed the issue of mosquito resistance to pesticides, as discussed above. Numerous comments were received that proposed the need for an evaluation and comparison of the potential environmental and human health impacts of ground and aerial spraying, including physical impacts associated with the methods of application. Other comments suggested the need to quantify the efficacy of both spraying methods in terms of their capacity to reduce adult mosquito populations and the incidence of mosquito-borne diseases.

Parties Responding

Comment	Author	Affiliation
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
8	Public Hearing Transcript	Public Scoping Hearing
11	Meeting Minutes	Joint Steering Committee/Technical Advisory Committee Meeting
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25	J.W. Pavacic, Regional Permit Administrator	NYSDEC
27	Diane Teta, Ph.D.	
28	S. Mahar	Audubon New York
39	Patricia Martinkovic, Refuge Manager	United States Fish and Wildlife Service

Response

Ground and aerial spraying are employed to toward different objectives and are expected to have different impacts on the environment and human health. Ground spraying includes both hand applications and truck-mounted spraying. Hand applications are the most controlled in terms of quantity and aerial extent. Truck-mounted spraying is less controlled as everything is sprayed within a certain distance of the road. Aerial spraying is conducted after a particular area has first been mapped and delineated from the air. The ability to determine the efficacy of any of these techniques in reducing adult mosquito populations would depend on the reliability and extent of mosquito population surveys conducted before and after pesticide applications. The efficacy of the techniques in terms of reducing the incidence of mosquito-borne diseases can only be determined if extensive monitoring for infected mosquitoes is conducted. The County currently analyzes approximately 12,000 larval and adult mosquito surveys each year. Suffolk County Vector Control's long-term goal is to "to limit pesticide use while still protecting the public." The County has had success in targeting their applications as evidenced by a reported 74% reduction in adulticide applications from 68,496 acres in 2000 to 18,400 acres in 2001. The County would reduce further its use of pesticides if they were found to be ineffective in reducing mosquito populations.

A related issue is the relationship of spraying to mosquito-borne disease prevalence. A reduction in overall mosquito populations would seem to also reduce the prevalence of disease carrying mosquitoes. However, it may be that a significant reduction in the number of potentially disease-carrying mosquitoes may not yield a corresponding reduction in the transmission of disease. Targeted control of disease-carrying mosquitoes in areas with high human population densities may be an approach that increases the efficacy of spraying in reducing disease.

Change in Scope

The impacts and efficacy of ground and aerial spraying will be addressed as part of the examination of Suffolk County Vector Control's Existing Operations. Historic SCVC mosquito population and spraying data will be examined in an effort to determine the impact of the spraying on mosquito population density as well as on the incidence of mosquito-borne diseases. In addition, data would be sought from other regional and national vector control districts on spraying efficacy.

If there is insufficient data, data collection methodologies will be recommended and criteria suggested for the measurement of efficacy. Early action recommendations may incorporate additional before and after spraying population monitoring (trapping)

8. PESTICIDES AND HERBICIDES UNRELATED TO VECTOR CONTROL

Comment

Comments were received regarding the unregulated use of pesticides and herbicides by homeowners as well as pesticide use by pest control companies, landscaping contractors and farmers. Concern was raised about the cumulative effects of all of the pesticides, the application rates and methodologies of VC chemicals as compared to other pesticide and herbicide applications. Additional concern was raised regarding the ability of the risk analysis to quantify pesticides used by others than regulated applicators, and so to generate an accurate analysis of non-VC pesticides use.

Parties Responding

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8	Public Hearing Transcript	Public Scoping Hearing
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25	J.W. Pavacic, Regional Permit Administrator	NYSDEC

Response

Large quantities of pesticides are used by others outside of Suffolk County Vector Control. New York State regulates many users, including pest control companies and landscaping contractors. Farmers also use large quantities of these chemicals. Homeowners purchase significant but unregulated quantities of many types of pesticides and herbicides.

Impacts from these uses can be estimated. The impacts, similar to VC pesticides impacts, include non-target impacts at the site of application, and non-target impacts following transport (through run-off, groundwater, air deposition following dispersion, sedimentation). There are potential human impacts, both at the application site and following transport.

Change in Scope

Pesticide and herbicide quantities other than Vector Control chemicals will be quantified and categorized. These quantities will be compared to the quantities of Vector Control chemicals that are used. Qualitative human health and ecological risk assessments will be performed to provide a baseline comparison. This may serve to place Vector Control pesticide use in context.

Data used will include local NYSDEC registration information, agricultural usage from NYSDEC and Cornell Cooperative Extension, and projections of local sales and use rates from State and national records.

9. IMPACTS ON CHILDREN AND PREGNANT WOMEN

Comment

Numerous comments suggested that the Work Plan include an examination of the potential impacts of VC pesticides on human eggs, fetuses, infants and children. Specific health impacts included asthma and spontaneous abortions. Impacts on pregnant women were also of concern. Many of these comments included specific references to work at the Mt. Sinai School of Medicine Center for Children's Health and the Environment, and also to its director, Dr. Phillip Landrigan..

Parties Responding

Comment	Author	Affiliation
4	Meeting Minutes	Citizens Advisory Committee Meeting
6	Bob McAlevy	
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31	Robert B. Devinney, Ph.D.	

Response

It has been recognized from the initial stages of the project that certain populations may be more at risk and be of greater public concern. The consultant team had included special expertise to address breast cancer issues, which were thought to be of particular public concern. All risks analyses include factors to account for biases in standard health data sets (which largely are based on adult, 50 kg males), often adding 10-100 times the potential risk to address more sensitive members of the population.

The analysis had been intended to address special sensitivities associated with populations such as children and pregnant women through typical safety factors. This approach will be modified to more directly address these issues, as data allow. The literature search would likely have included studies conducted at Mt. Sinai, and perhaps by Dr. Landrigan in particular. These data sources will be explicitly referenced in the research now.

Change in Scope

The literature search will include specific research by Dr. Teitelbaum on the research conducted by others in her department (she is a member of the Mt. Sinai department of Community Medicine), although the study will not be restricted to work conducted there. Dr. Landrigan will be asked to specifically review some of the pertinent portions of the Task 3 and Task 8 reports,

as a peer reviewer. The risk analysis conducted by CPF will incorporate data uncovered in the literature search to generate, as is possible, a child and pregnant woman-specific risk analysis as a worst case situation. Where data are not available, appropriate risk multipliers will be used to approximate the special risks faced by these populations. Pathways considered will be expanded to include within-the-home exposure, considering such potential chemical adsorption media as rugs and air conditioner filters.

The project team does not believe it is necessary to hire Dr. Landrigan as a team member in order to properly address these issues, however.

10. TRAINING FOR VECTOR CONTROL STAFF

Comment

Several written comments and some informal discussions included mentions the need to review training provided to members of the Vector Control Division staff. The comments included discussions of compliance with mandated setbacks , staff ability to use sophisticated navigation equipment, and general compliance with chemical regulations.

Parties Responding

Comment	Author	Affiliation
1	R.L. Swanson, Director	Waste Reduction and Management Institute
28	S. Mahar	Audubon New York

Response

Proper training of VC staff is an important component of a professional VC operation. Training programs can not only help protect the health of VC staff, but can also help assure the public that VC chemicals are being applied according to the regulations and guidelines established in the Long Term Plan. All aspects of Vector Control operations were intended to be reviewed as part of the project Workplan, and local and selected other programs were to be reviewed and use as comparatives to the Suffolk County program.

Change in Scope

More effort has been assigned to the two professional mosquito control experts (Drs. Parsons and Crans) that have been solicited to help devise the Long-Term Plan. In addition, Dr. Spielman of the Harvard school of Public Health has been asked to review County operations. The members of the CA/CE Team involved in the reviews will ensure that the results from the legal and regulatory review are carried into the proposed Long-term Plan, and will be assisted by Mr. Sinnreich in this task. The review of other mosquito control programs will specifically include a training component, and the best elements of those programs will be used to create a sound Suffolk County training program.

11. PUBLIC NOTIFICATION

Comment

Comments were received regarding spraying schedule and pesticides impact notifications. The current County practice of not recommending staying indoors and minimizing exposure to pesticide applications was particularly criticized.

Parties Responding

Comment	Author	Affiliation
1	R.L. Swanson, Director	Waste Reduction and Management Institute
8	Public Hearing Transcript	Public Scoping Hearing
28	S. Mahar	Audubon New York
30	A. Esposito, Associate Executive Director J. Ottney, Long Island Program Director	Citizens Campaign for the Environment

Response

The County currently gives a minimum of 24-hour advance notice of aerial and ground-based adulticide applications. Because larvicides are applied directly to mosquito habitats (with only incidental human exposures), the County perceives little need for notice. The 24-hour notification is controlled largely by the need to quickly respond to control mosquito populations of concern. Weather is a major factor, as only certain conditions are appropriate for adulticide applications, and if too long notice is given, weather forecasts are not specific enough to determine if conditions will be acceptable.

Cancellation of spray events causes public confusion and inconvenience. Although the County does not counsel residents to take special precautions during adulticide applications, many individuals decide to modify their activities. This leads to unhappiness if the event does not occur.

Timely responses to mosquito problems (whether due to mosquito numbers or disease potential) is necessary. If the response is to address mosquito numbers, delay results in burgeoning populations in most cases, as more larvae mature and swell the adult population. If disease exposure is the determinant, delays increase potential risks from exposure to the carriers. In either case, delay causes harm.

The County acknowledges that exposure to pesticides (of any kind) carries some risk. This is the basis for the health warnings often issued in other jurisdictions when adulticiding is to take place. However, the professional judgment of Health Department staff in 2002 was that the increase in risks due to exposure to the particular adulticides used by Vector Control, at the concentrations used by Vector Control, posed inconsequential risks to the exposed populations. Therefore, rather than create undue fear and inconvenience, the Commissioner issued what has been derided as an inadequate warning of risks associated with these chemicals.

As part of this study, other regional and major mosquito control efforts will be closely reviewed. The review will include the notification time limits used elsewhere. As part of the results of this study, a health risk assessment of exposures to adulticides will almost certainly be conducted (unless adulticiding is not part of the preferred management plan and its major alternatives – a slight chance, indeed).

Change in Scope

More emphasis will be placed on comparing notification procedures used elsewhere and those made by Vector Control. Alternative notification means (reverse fire call chains, for example) will be researched. The results of the adulticides health risk assessment will be explicitly used to derive appropriate language for adulticide applications under the proposed Vector Control plan.

12. EARLY-ACTION (NYSDEC Recommended) EXPERIMENTS

Comment

Several commenters, and especially the NYSDEC, made explicit recommendations for research to address perceived data gaps. NYSDEC in particular proposed some generic topics for field work in its earliest comment set, and followed up with a specific proposal for a “caged fish” experiment. The County’s biostatistician responded with comments on the experimental and analytical designs. Other informal feedback was received regarding that particular proposal.

Parties Responding

Comment	Author	Affiliation
1	R.L. Swanson, Director	Waste Reduction and Management Institute
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
7	J.W. Pavacic, Regional Permit Administrator	NYSDEC
8	Public Hearing Transcript	Public Scoping Hearing
11	Meeting Minutes	Joint Steering Committee/Technical Advisory Committee Meeting
17	Meeting Minutes	Citizens Advisory Committee Meeting
22	E. Nadel, Ph.D., Biostatistician	Suffolk County Department of Health Services
24	J.N. Ozarski, Coastal Policy Specialist	The Nature Conservancy
36	S. Terracciano and J.L. Eimers	United States Geological Survey

Response

The County has always envisioned conducting field work, especially well-designed tests of particular theses, to augment the literature and data reviews proposed for this project. In addition, the County has always envisioned this project as the beginning of a longer term monitoring and research component aimed at determining the environmental effects of the various components of the Vector Control program, particularly where they intersect with broader programmatic needs of the County with regard to its environment. Some of these broader topics include overall determinations of wetlands health and status, groundwater quality, the interaction between groundwater and surface waters at discharge points (especially subaqueous marine discharges of groundwater), and general estuarine health and status. Therefore, the County intends to continue some aspects of the Early action projects into the indefinite future, as required to meet either the needs of the ongoing Vector Control program management, or for other purposes.

The County appreciates the comments and informed suggestions on this topic; however, besides noting fields of interest that appear to require more work, wishes to restrict its specific identification of projects until the literature review is complete.

However, the County does offer the following in response to particular suggestions:

- Some of the NYSDEC suggestions seem to imply that the State pesticide registration procedure is inadequate. NYSDEC allows certain pesticides to be used in New York, and often sets restrictions on their use. The pesticides used by Vector Control fall into the latter category. Some of the proposed work suggested by NYSDEC appears to be intended to provide a basis to either sustain or modify the label restrictions. As noted by one submission, such work does not seem to be appropriate for the County to undertake, but rather appears to be the responsibility of the NYSDEC Pesticides Unit.
- The scope of some of the NYSDEC proposals appears to be unrealistic given the time frame and, especially, funding availability for this project. Ultimate fate and transport field work, including biotic transformations and fate, are multi-year, multi-million dollar projects for each compound so analyzed.
- Despite substantial and substantive criticisms of the caged fish experiment, the County will work with NYSDEC to create a jointly-acceptable field test of acute toxicities associated with a selection of adulticides (and, potentially, certain larvicides).
- Although not reflected in the amended scope, the County recognizes the wisdom of collecting data from areas that may have higher exposure rates (such as Mastic-Shirley and Fire Island). Histories of exposures to VC chemicals will probably be added to the factors used in selecting the Primary Study Areas (which are likely to be the sites of most Early Action projects).
- The County acknowledges the benefits of collecting data on entire ecosystems in order to measure effects from stressors. However, creating limited-time, limited-cost projects necessitates carefully crafted experimental designs where the generated data clearly test the hypotheses in question. Ascertaining effects throughout the ecosystem seems to be more properly a goal of the long-term monitoring approach to be designed as part of the project, rather than a means of augmenting the literature search for the DEIS.

Change in Scope

Certain potential Early Action Projects have been articulated in the Final Scope, including a potential OMWM demonstration and a variant on the NYSDEC caged fish proposal. The County has extended its contract with the USGS to continue its low concentration and SPMD pesticides monitoring work.

13. INCLUSION OF “ALTERNATIVE” INFORMATION SOURCES (SUCH AS NEWSPAPERS)

Comment

Comments were received recommending that newspaper articles be used as credible sources of information for the project. Other comments were received both recommending and rejecting the DEIS on mosquito control pesticides conducted by New York City as a credible source of information.

Parties Responding

Comment	Author	Affiliation
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
8	Public Hearing Transcript	Public Scoping Hearing
17	Meeting Minutes	Citizens Advisory Committee Meeting
30	A. Esposito, Associate Executive Director J. Otney, Long Island Program Director	Citizens Campaign for the Environment

Response

Newspapers are only as accurate as their sources of information, and, while newspapers espouse desires to transmit truth, they in fact are somewhat less scrupulous in this regard as compared to peer-reviewed journals. Furthermore, newspaper articles either represent secondary sources (where the reporter cites an existing resource) or are based on personal interviews. Use of personal interviews without having any context regarding the interviewer or the interviewee may not be appropriate in many cases.

CCE would like the County to accept newspaper accounts of health impacts from pesticides as having the same weight as official notices generated by a Health department or the CDC. The County will not do that. However, the County is willing to use these articles as signposts to such more official data sources, which the County will very willingly accept as credible.

The NYC and Westchester DEISs represent potential treasure troves of information applicable to this project. The project team will use these studies, but only after weighing the data and research that has been reported there. Some specific tasks in the work plan have been to evaluate the data and methods used in these and similar studies; therefore, the conclusions reached in those studies will not be adopted by this project unless they are independently reached.

Change in Scope

A slightly increased emphasis has been made to evaluate the specifics of some of the modeling made in conjunction with the NYC and Westchester EIS. Official data to verify the stories cited by CCE will be sought as part of the literature search.

14. NON-CHEMICAL CONTROLS FOR MOSQUITO MANAGEMENT

Comment

More comments were received on this topic than any other. Comments were received asking for generic consideration of non-chemical means of mosquito control, and also for other specific methodologies. The specific suggestions included: OMWM and other means of water and wetlands management including evaluations of the effectiveness of ditching, although other comments warned that the study seemed too focused on this particular topic; predation, both in general and by specific species such as fish, bats, specific birds, and dragonflies; traps; and alternatives such as garlic, herbs, and spices.

Parties Responding

Comment	Author	Affiliation
1	R.L. Swanson, Director	Waste Reduction and Management Institute
2	Henry Dam	
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
5	R. Mendelman	Harbor Marina & Gardiner's Marina
6	Bob McAlevy	
8	Public Hearing Transcript	Public Scoping Hearing
9	T. Isles, Director	Suffolk County Department of Planning
11	Meeting Minutes	Joint Steering Committee/Technical Advisory Committee Meeting
12	Charles F. Wurster and Ernest Habicht	Village of Old Field
16	Arthur Kaliski	
17	Meeting Minutes	Citizens Advisory Committee Meeting
18	L. Belti-Nash, Conservation Co-Chairperson	Four Harbors Audubon Society
21	Richard Spotts	
24	J.N. Ozarski, Coastal Policy Specialist	The Nature Conservancy
25	J.W. Pavacic, Regional Permit Administrator	NYSDEC
26	J. Zappieri, Coastal Habitats Unit	New York State Department of State
27	Diane Teta, Ph.D.	
28	S. Mahar	Audubon New York
29	R.C. Kluesener, Supervisor, Department of Environmental Control	Town of Babylon
32	T.B. Lyons, Director of Environmental Management	NYS Office of Parks, Recreation and Historic Preservation
33	D. O'Kane, Executive Director	North Fork Environmental Council, Inc.
35	K. McAllister	Peconic Baykeeper

Response

It has been a clear priority for this project to consider all viable means of mosquito control in formulating the Long-Term Plan. The structure of this project is such that it can respond to alternatives beyond the methods currently employed by the County. The County has explicitly stated on several occasions that all aspects of the current VC program are in play.

Therefore, the project team welcomes the suggestions raised in the comments. Many of the suggestions were already explicitly included in the draft Scope or Workplan. Some of the specifics the Team had not yet considered, though.

The County is committed to expending a great deal of effort in considering wetlands management techniques. This is because the current program spends a great deal of its budget and personnel time on wetlands management and it is an issue of great interest to many County residents. Wetlands management is also a facet of Vector Control activities that could result in either serious or long-term changes to the environment (for good or ill). Therefore, it is a necessary and major component of the plan of work for this study.

The County does recognize that some of the proposed activities may not generate complete and pertinent data sets until well after the completion of the GEIS process. This is the nature of research in complex and slow-to-change environmental systems. Thus, some of the activities proposed or the project may actually not prove to be useful for the completion of the GEIS.

However, as a management plan, this project has a lifetime that extends beyond the months associated with the GEIS process. The data generated in the years after the GEIS holds the promise of further molding of the Long-term Plan to account for this additional information.

The County rejects the notion that because the information and activities may not be complete for the DEIS or even the FEIS, that they should not be undertaken in this project.

Change in Scope

Some additional research will be undertaken on the ecology of local mosquitoes, including the role of predators on abundance. The potential for use of natural predators for mosquito control will receive greater emphasis. Extra care will be taken to ensure that long-term water management projects are adequately prepared, funded, and continued beyond the time period of the EIS.

15. STORMWATER CONTROL SYSTEMS

Comment

Several comments were made regarding the need to add fresh water systems to the project scope. These comments coincided with an internal discussion regarding the need to address stormwater systems as potential mosquito habitats.

Parties Responding

Comment	Author	Affiliation
9	T. Isles, Director	Suffolk County Department of Planning
17	Meeting Minutes	Citizens Advisory Committee Meeting
25	J.W. Pavacic, Regional Permit Administrator	NYSDEC

Response

The focus of water management for this project has been on salt water marshes. This is because these environments have been the focus of Vector Control activities (primarily, ditching in the 1930s, and ditch maintenance since then). Fresh water environments that have undergone similar manipulations tend to be limited to small fresh water tributaries entering salt water wetlands, and the intermittent headwaters of some of the County's larger rivers (where channels are sometimes maintained). Because most fresh water wetlands in the County have not been manipulated for mosquito control purposes, especially over the past several decades, they are not perceived (given the regulatory climate) as good candidates for active alteration activities. This is not the case for salt marshes that have already undergone extensive changes for mosquito control reasons, and which have continued to be managed for this purpose. Although NYSDEC has not approved County proposals yet, it seems reasonable to allow further manipulations of water flows in environments that have previously been extensively altered. Thus, the County focus has been on salt marshes and proposed OMWM activities.

Recharge basins have recently been identified as attractive candidates for the creation of surface water habitats in interior Suffolk County. A design change would encourage ponded waters in these structures (the standard design has been to encourage rapid infiltration to minimize the need for additional stormwater capacity). These anthropogenic environments would also seem to be acceptable sites for manipulations to discourage mosquito presence. The project had anticipated some inclusion of such sites.

However, it is increasingly clear that other stormwater structures (catchbasins and sewers, for example) may be prime breeding sites for certain disease-bearing mosquitoes. This could be the reason for the distribution of West Nile virus cases in southern Huntington, for example. This makes these structures of great interest in understanding how best to control mosquitoes to preserve human health in the County.

Change in Scope

Therefore, a major addition has been made to the study of mosquito habitats. The consultant will now select several pilot study areas (with the County's assistance), map storwater structures in those areas, and determine the value of these structures as mosquito habitat.

16. RECENT STORMWATER MITIGATION REGULATIONS

Comment

Because of the change in Scope outlined in Section 16, "Stormwater Control Systems," the County became aware of an additional problem. Current stormwater control regulations and policies focus on decreasing bacterial and sediment impacts from stormwater. These could be in conflict with needs to reduce mosquito habitat values in stormwater structures.

Parties Responding

This comment was raised in internal discussions.

Response

Recent USEPA regulations (Phase II Stormwater Regulations, for example) and general policies have identified stormwater as a significant source of non-point pollution to surface waters. Primary concerns are bacterial contamination, and sediments (sediments in and of themselves, and also as carriers of other contaminants). Both problems can be partially addressed by the simple expedient of increasing time in a system prior to release. This is because coliform concentrations decrease with time, for one, but also because both sediments and bacteria will fall out of solution in still environments. Therefore, a primary intent of modern stormwater structures has been to increase detention times.

Still waters are also a requirement for mosquito breeding. This means that the preferred means of addressing stormwater quality may increase mosquito habitat.

It may be that an adequate solution addressing both concerns can be engineered. It seems that Florida has been working on this, in particular (although the kinds of stormwater structures used in Florida tend to be very different from the general approach used on Long Island).

Change in Scope

The Scope was expanded to include this important issue in the workplan.

17. LOCAL WEST NILE VIRUS EXPOSURE AND DISEASE RATES

Comment

Many comments were received regarding West Nile virus, and the health and environmental threat it poses. Some comments suggested that it is not a very serious problem; others suggested it is extremely serious. The comments tended to request explanations of the County mosquito control program in light of “true” risks associated with the virus.

Parties Responding

Comment	Author	Affiliation
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
4	Meeting Minutes	Citizens Advisory Committee Meeting
6	Bob McAlevy	
8	Public Hearing Transcript	Public Scoping Hearing
11	Meeting Minutes	Joint Steering Committee/Technical Advisory Committee Meeting
12	Charles F. Wurster and Ernest Habicht	Village of Old Field
14	J. Schaefer, President	The Mastic Beach Property Owner's Association, Inc.
15	B.T. Sullivan, Acting Superintendent	National Park Service
17	Meeting Minutes	Citizens Advisory Committee Meeting
19	Bob McAlevy	
20	F.J. Gorman	Nesconset-Sachem Civic Association, Inc.
21	Richard Spotts	
27	Diane Teta, Ph.D.	
29	R.C. Kluesener, Supervisor, Department of Environmental Control	Town of Babylon

Response

West Nile virus, as experienced on Long Island, has not been clearly defined in terms of public risk. There have been some initial surveys of infection rates of the general public, but most statistics on the disease tend to express the impact in terms of incidences of encephalitis, and deaths.

Additionally, following the initial concerns regarding crow deaths, there has been little work done on the environmental impacts of the disease.

Further complicating this discussion is the possibility that the disease is being expressed differently elsewhere in the country. For example, some have suggested there is a mode of disease transmission other than mosquitoes at work in Illinois. The Midwest in general appears to be suffering from a strain with much greater avian virulence. Different mosquitoes, as might be expected, also act as vectors in other parts of the country.

It is clear that one of the necessary steps in this study needs to be an explication of the risks associated with West Nile virus, however. This demands a large effort to obtain and communicate the absolute latest information available. If it should prove that the virus is a

major human health or environmental problem, then the acceptable risks associated with its control may be commensurately greater. If it should prove to be a minor annoyance, then perhaps very little risk will be tolerated for mechanisms used to prevent illness.

Change in Scope

Several of the project experts have been asked to increase their efforts in this regard. In particular, Drs. Spielman and Pollack are expected to have a greater project presence, in order to present the very latest data and interpretations on the evolution of West Nile virus in North America, and the implications for Suffolk County residents. Additionally, CPF will be requested to expand their analysis of baseline ecological implications associated with avian, pet, and other organism reactions to West Nile virus.

18. REVIEW OF EXISTING REGULATORY PROGRAMS

Comment

Several comments were received that suggested the legal and regulatory framework of mosquito control will require a great deal of attention. It has also been suggested that several of the proposed study topics appear to fall within the purview of State or Federal agencies, rather than Suffolk County.

Parties Responding

Comment	Author	Affiliation
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
8	Public Hearing Transcript	Public Scoping Hearing
10	R. Kluesener, Supervisor, Department of Environmental Control	Town of Babylon
15	B.T. Sullivan, Acting Superintendent	National Park Service
17	Meeting Minutes	Citizens Advisory Committee Meeting
20	F.J. Gorman	Nesconset-Sachem Civic Association, Inc.
29	R.C. Kluesener, Supervisor, Department of Environmental Control	Town of Babylon

Response

The project tema has always had an emphasis on the regulatory and legal aspects of mosquito control. For this reason, legal expertise was retained as an explicit part of the research team. Review of regulations, laws, and public policies affecting mosquito control has always been a major study topic.

However, it is also clear that some comments seem to expect the study to either duplicate, validate, or expand upon what appears to be State or Federal regulatory responsibilities. Therefore, as part of the work for this project, an examination of the regulatory responsibilities of NYSDEC and USEPA, especially with regard to pesticides registration, will be made. A critical reiew of the adequacy of these efforts will be offered.

Change in Scope

The Scope has been expanded to include this critical review work.

19. IMPACT OF VECTOR CONTROL CHEMICALS ON FOOD AND FARMS

Comment

Comments were raised regarding the potential impact of mosquito pesticide applications on food products, including the potential impacts on humans. Other comments discussed the impact of pesticide applications on organic produce and organic farm registrations..

Parties Responding

Comment	Author	Affiliation
1	R.L. Swanson, Director	Waste Reduction and Management Institute
8	Public Hearing Transcript	Public Scoping Hearing

Response

The pathway, of Vector Control chemicals impacting the population through local food products, is one that was not considered in the original scope of the study. However, this does appear to represent a substantial pathway for certain individuals.

Specific impacts as regard expectations for organic foods, and the regulatory impacts associated with involuntary spraying of registered organic farms, are also issues that were not considered in the original scope.

Change in Scope

The human health risk assessment will be expanded to discuss potential impacts from the consumption of local food that may have been exposed to VC chemicals. Additionally, the literature search and legal-regulatory discussions will be expanded to include the concerns regarding organic foods and farms.

20. INCLUSION OF ORIENT MOSQUITO DISTRICT IN PLAN

Comment

It has been requested that the Orient Point area, which currently has its own Mosquito Control District separate from the County, be included in the scope of this project.

Parties Responding

Comment	Author	Affiliation
4	Meeting Minutes	Citizens Advisory Committee Meeting
8	Public Hearing Transcript	Public Scoping Hearing
17	Meeting Minutes	Citizens Advisory Committee Meeting
33	D. O'Kane, Executive Director	North Fork Environmental Council, Inc.
34	Anne Hopkins, President	Orient Association
37	Hon. Michael J. Caracciolo	Suffolk County Legislator

Response

This project was conceived as a County-wide effort to develop the Long-Term Plan for vector control. As such, it is appropriate for the Orient area to be included.

Change in Scope

The Orient area will be incorporated into the study.

21. TECHNICAL ADVISORY COMMITTEE/PROJECT TEAM MEMBERSHIP

Comment

Some comments requested expansion of the membership of the Technical Advisory Committee, and also recommended additions to the consultant team assembled for the project.

Parties Responding

Comment	Author	Affiliation
1	R.L. Swanson, Director	Waste Reduction and Management Institute
3	J.W. Pavacic, Regional Permit Administrator	NYSDEC
4	Meeting Minutes	Citizens Advisory Committee Meeting
7	J.W. Pavacic, Regional Permit Administrator	NYSDEC
8	Public Hearing Transcript	Public Scoping Hearing
11	Meeting Minutes	Joint Steering Committee/Technical Advisory Committee Meeting
15	B.T. Sullivan, Acting Superintendent	National Park Service
17	Meeting Minutes	Citizens Advisory Committee Meeting
19	Bob McAlevy	
21	Richard Spotts	
23	Bertel Bruun, MD	
31	Robert B. Devinney, Ph.D.	

Response

The Technical Advisory Committee (TAC) was carefully established with agency representation incorporating expertise that would allow the Committee to provide technical oversight for the project. The Citizens Advisory Committee (CAC) was established to allow private citizens and interested organizations to have a forum to provide input to the project as well. A representative of the CAC will sit on the TAC panel so that CAC input will be part of the TAC process. Through either forum, the input of all interested parties will be part of the planning process. It is an express charge of the County that public participation in this project be maximized.

The County has been working to broaden the membership of the TAC by approaching professionals who are not associated with government agencies (especially those in the academic sphere). However, it is difficult to persuade these busy people to volunteer time, and there are few new members to report. The County will endeavor to broaden the review of the project through peer review of specific areas of investigation; the peer reviews will not require the significant time commitment requested of TAC membership, and also carry a modest stipend (on the order of \$500-\$750).

The consultant team was assembled to meet the rigorous technical demands expected to ensue from the project, and to also minimize overall costs for the County. The Consultant is aware that the Mt. Sinai Department of Community Medicine, and Dr. Philip Landrigan, its chair, appear to have specific expertise that could be used to address issues of concern. However, the number of experts that could be expected to make contributions to various aspects of the

project is essentially unlimited – given the extremely broad scope of the project. The project team, as currently constituted, includes a member of the faculty of the Department of Community Medicine, Dr. Susan Teitelbaum. Dr. Teitelbaum, through her own research, will address many of the issues that Dr. Landrigan might discuss. Similarly, the mosquito control experts associated with the team (Drs. Parson and Crans) will be able to discuss standard and non-standard means of mosquito control.

Change in Scope

There has been no change in Scope.

22. CITIZENS ADVISORY COMMITTEE BUDGET

Comment

The CAC has requested a separate budget to carry out public education and outreach activities, pending Steering Committee approval of a workplan to be submitted by the CAC.

Parties Responding

Comment	Author	Affiliation
17	Meeting Minutes	Citizens Advisory Committee Meeting

Response

The consultant's budget and workplan were requested to include a considerable amount of effort for public participation and demonstration projects. The consultant is also expected to maintain relations with the CAC, to understand CAC concerns and wishes, and to make presentations to the CAC when requested. However, the consultant's budget did not contain explicit funding for CAC activities of the kind envisioned in this comment.

It is anticipated that, based on a work plan by the CAC, that the CAC will make a presentation to the County Legislature to persuade the Legislature to fund its extra endeavors. Any contract resulting from such legislation would be managed through the project manager (the Office of Ecology, Department of Health services).

Change in Scope

There has been no change in Scope.

23. NYSDEC INVOLVEMENT IN PLANNING PROJECT

Comment

It was suggested that the NYSDEC be intimately involved in the planning process as they have regulatory control over activities of the County's Vector Control Division. NYSDEC has additionally made comments regarding its vision for its role in the project.

Parties Responding

Comment	Author	Affiliation
8	Public Hearing Transcript	Public Scoping Hearing
11	Meeting Minutes	Joint Steering Committee/Technical Advisory Committee Meeting
17	Meeting Minutes	Citizens Advisory Committee Meeting
25	J.W. Pavacic, Regional Permit Administrator	NYSDEC

Response

The NYSDEC has explicitly stated that it is restricting itself to an advisory role. This is because it has regulatory responsibilities over certain potential aspects of the Long-term Plan. Certain permits may need to be acquired from NYSDEC in order to conduct some of the Early Action projects. NYSDEC suggested that it may be possible to conduct expedited review of those projects.

Change in Scope

There is no change associated with this comment.