18 Scoping Concordance

Extensive scoping was conducted for this project. The formal Scope is included as an Appendix to the DGEIS (see Appendix D).

The Scope was generated through the project Workplan and from comments received from the public and interested parties. The consultant team has nearly completed all items included in its Workplan; all important elements of the Workplan have been incorporated into the Long-Term Plan and DGEIS.

There was much public interest in the scope of the DGEIS. To assist reviewers and other interested parties, the following concordance between elements of the DGEIS and scoping comments has been prepared.

A total of 35 comments were received, from 31 different individuals, groups, agencies, and organizations. The County also included the transcript from the Public Scoping Hearing held on September 10, 2002, and meeting minutes from the Citizens Advisory Committee meetings of September 5 and September 23, 2002, and the Joint Technical Advisory Committee-Steering Committee meeting of September 17, 2002. The comments were grouped by subject matter and discussed in terms of Scope changes in the Scoping Responsiveness Document, published for public consideration in 2002. That format has been maintained here.

Table 18-1. 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
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. Ottney, 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

PROJECT MISSION STATEMENT

Comment

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

Response

The *project* goals were not directly addressed in either the Long-Term Plan or the DGEIS. Section 2.7 of the DGEIS discusses the goals and objectives of the Long-Term Plan.

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 versus 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.

Response

Section 2.8, among other parts of the DGEIS, extensively discusses the County's approach to this issue.

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.

Response

Mosquito control to address disease concerns was included in the County's approach (see section 2.10, especially concerning surveillance and adult control). Section 2.3 specifically discusses Federal and other jurisdiction WNV guidance. Section 2.10 specifically identifies how the Long-Term Plan complies with CDC and NYSDOH guidance.

IMPACT ON NON-TARGET ORGANISMS

Comment

Numerous comments suggested that the Long-Term Plan include an evaluation of the potential impact of vector control 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, reptiles, amphibians, 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 vector control 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.

Response

Section 7 of the DGEIS, in particular Sections 7.8 and 7.9, discussed the effect of the selected pesticides on non-target organisms. Household pets were not included in the analysis, following a literature search that found little to no relevant information to support a separate analysis. According to the quantitative risk assessment, none of the pesticides had any potential impacts on any mammals or birds, supporting the notion that household pests did not need separate

consideration. The risk assessment did include representative species from many of the groups identified above.

The Long-Term Plan, especially in the Wetlands Management Plan, has attempted to broaden the sources of information available to SCVC to ensure that vector control actions do not impact species or ecological settings of concern (see Section 2.10).

The risk assessment included use of an ecosystem model to evaluate the most serious potential impact identified in that analysis (see Section 7.9).

Gambusia were evaluated in Section 7.7. Predator augmentation was not found to be an effective means of control (see Section 2.10, and some brief comments in Section 7.7), with the exception of encouraging killifish in salt marshes (see section 2.10, and Section 7.6).

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 versus ground spraying.

Response

Specific triggers for every aspect of the Long-Term Plan have been explicitly identified in Section 2-10. The process by which a health emergency is determined is described there. Aerial applications will be limited to health emergency applications, as near as can be determined, because of permit requirements if applications are to be made over fresh water wetlands.

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.

Response

These issues are discussed mostly in Section 7.9 and Section 8.9, although the health threat effects of mosquito control are addressed in Section 7.11, Section 9.2, and Section 13.

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.

Response

Resistance was discussed, as mentioned above. The risk assessment differentiated between aerial and ground applications and potential impacts from larvicide applications by air were identified and discussed. Efficacy of application methods was briefly discussed, as well (Section 7.9).

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 vector control 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-vector control pesticides use.

Response

Section 3 discussed the impacts associated with non-vector control pesticides. It did prove to be impossible to conduct as thorough an analysis of these impacts as was accomplished through the quantitative risk assessment.

IMPACTS ON CHILDREN AND PREGNANT WOMEN

Comment

Numerous comments suggested that the Work Plan include an examination of the potential impacts of vector control 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. Philip Landrigan.

Response

Dr. Susan Teitelbaum, a researcher in Dr. Landrigan's laboratory, was used a subconsultant to address breast cancer and children's health issues. Her information was presented in Section 3 and Sections 7.8 and 7.9.

Pregnant women and fetuses were not addressed specifically in the analysis. No human health effect, including spontaneous abortions, was identified through the risk analysis. Special risks associated with pregnant women and other sensitive populations were included in the analysis through margins of error, as is often the case in quantitative risk assessment.

TRAINING FOR VECTOR CONTROL STAFF

Comment

Several written comments and some informal discussions included mentions of 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.

Response

These procedures were reviewed as part of the general assessment of the Division of Vector Control in the Long-Term Plan.

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 appliacations was particualry criticized.

Response

Some improvements in public outreach and notification were suggested (see the Long-Term Plan, Appendix A, and Section 2-10). It has been recommended, as part of the Long-Term Plan outreach approach, that the Commissioner of SCDHS review and reconsider (if necessary) the advisement associated with pesticide applications.

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.

Response

A modified Caged Fish experiment, developed with NYSDEC input, was undertaken (see Sections 6.2, 6.3, and 6.4).

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.

Response

Although several newspaper articles are cited in the DGEIS, the predominant source of information for the project was the scientific and technical literature. The Westchester County and New York City EISs were used as efficient screens of the toxicological literature, but they were not exclusively relied on. Most of the information relied on in this analysis was developed independently from those EISs.

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 suh as garlic, herbs, and spices.

Response

Section 6, the Long-Term Plan (section 2.10 and Appendix A), and Section 7.6 all discuss alternatives to chemicals as control means.

STORM WATER 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 storm water systems as potential mosquito habitats.

Response

Increased surveillance of storm water control systems was an important part of the Long-Term Plan (Section 2.10), supported by Early Action Project efforts (see Sections 6.9 and 6.10), and evaluated in Section 7.4. Fresh water wetlands were reviewed in Section 5, and were an important part of the Wetlands Management Plan (Appendix B), although current regulations limit potential actions in the environments (see Sections 2.7, 2.10, and 7.6).

RECENT STORM WATER MITIGATION REGULATIONS

Comment

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

Response

Breeding in storm water structures appears to be a function of maintenance (see Sections 6.9 and 6.10) rather than treatment methodology. This is discussed in Sections 2.10 and 7.5.

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.

Response

A major effort was conducted to use local data as inputs to a Harvard School of Public Health model for mosquito-borne disease. The data were not sufficient to run the model, and selecting default values was perceived as preselecting the important results that might have been obtained. Therefore, a more simplistic analysis was made. Illness and fatality rates in Suffolk County were compared to Connecticut (where a major control program, but different in scope is operated), and to infection rates where mosquito control was either not in place or was ineffective (Douglaston, Queens, in 1999, and Cuyahoga County, Ohio, and the Toronto vicinity, in 2002) but comprehensive serosurveys were conducted. These results were discussed in Sections 7.11, 9.2, and 13.

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.

Response

An extensive survey of regulations and laws governing mosquito control in general and Suffolk County in particular was conducted (see Sections 2.5, 2.6, and 2.7. The legal basis for Suffolk County's program is presented in Section 2.5.

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.

Response

This pathway was evaluated in the quantitative risk assessment (section 7.9). Organic farms are identified as no-spray addresses, but a greater effort will be made to identify these locations and ensure they are not treated except when necessary under a Health Emergency (see Appendix A and Section 2.10).

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.

Response

The plan only addressed those mosquito control activities that the County has direct control over. However, in Section 3.1, it was noted that the geographical scope of the study included the Orient district, and that there seemed to be no reason why the conclusions reached for the County as a whole should not apply to Orient.

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 onsultant team assembled for the project.

Response

This was not addressed in the Long-Term Plan or the DGEIS. A list of the TAC members is included in Section 1, and the front material contains the consultant team participants.

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.

Response

The consultants often had representation at CAC meetings, and CAC minutes were reviewed as part of the preparation of the DGEIS, to ensure that all important issues raised at meetings were included in the DGEIS. The Long-Term Plan anticipates the production of an outreach brochure by the CAC (see Appendix A, and Section 2.10).

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.

Response

Section 1 details NYSDEC presence at and involvement in advisory and other important committees. NYSDEC also played vital roles in the Caged Fish experiment (see Section 6.2), and the Wertheim Demonstration Project (Section 6.1).