

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

Technical Advisory Committee (TAC)

September 8, 2003 Meeting Summary

The meeting opened as everyone present introduced themselves and their respective organizations.

Agenda Items 1: Review and Approval of July 25th Meeting Summary

The minutes from the July 25th TAC meeting were approved with modifications.

Agenda Item 2: Program Overview / Update from Suffolk County Department of Health Services

Walter Dawydiak reported that the contract with Cashin Associates is almost ready to be signed. There have been some changes with sub-consultants. Amy Juchatz and other SCDHS staff will now be responsible for the literature review on risk assessment. Ducks Unlimited has also been brought aboard to conduct an OMWM project.

Dawydiak then presented an outline of the program's technical studies to assess the ecological and human impacts of vector control methods, West Nile Virus (WNV), and mosquito populations.

TAC and audience members then raised some questions on the details of some of the studies such as measuring the ditching conveyance of pollutants from uplands to tidal bays in the OMWM project, non-target species impacts, and WNV impacts on wildlife (birds). Jack Mattice summarized the discussion by stating that the specifics of many of the studies will depend on the information obtained and lessons learned from the literature review. The TAC will review the summary paper of the literature review and use it as a background for providing input and advice on the research design of the proposed technical studies. Mattice also requested outlines and flow charts for individual projects, as the projects are referred for TAC review.

Marie Lawrence said that, upon request, she could provide information on studies that have been performed within the Fire Island National Seashore, particularly as related to non-target species. George Proios added that TAC members can even undertake some of the work in a topic area that they are interested in and pass any relevant studies they find to SCDHS. Proios, for example, will contact water resources institutes. SCDHS made it clear that any assistance in the literature review would be most appreciated, especially in obtaining unpublished data.

George Proios recommended that the program focus on developing measures of success, early on in the program. The SCDHS, SCDPW, and consultants will do so.

Agenda Item 3: TAC Administration

Chairman Mattice led the discussion. The membership list for voting members was reviewed and several members that have not attended at least three meetings were placed on the non-voting membership list. Several agencies will be contacted to appoint a local representative. Several members expressed concern about the wording of the Conflict of Interest (COI) policy. Member Kaufman offered to prepare a draft version for the committee to review. Kevin McAllister expressed concern that Kaufman would essentially draft the COI to exclude the Baykeeper as a result of the lawsuit filed against the County. Kaufman assured the committee that he could prepare the COI without bias. The draft COI will be sent to Chairman Mattice for review.

Agenda Item 4: Dry Deposition Monitoring

Robert Waters from SCDHS, Bureau of Marine Resources gave an update on the deposition monitoring that his office has conducted. To date, 11 spray events have been monitored with over 100 samples collected for analysis. His office is also conducting biological monitoring in 3 areas in the East Patchogue area. Mussels and crabs are placed in the creeks prior to a spray event and removed following an aerial or truck spray event. Tissues will be analyzed by Dr. Brownawell's lab at Stony Brook University for the presence of resmethrin and PBO. Susan Antenen questioned the use of mussels and crabs. Dr. Robert Nuzzi explained that both species are commonly used as indicators. Marine Resources is also sampling water quality parameters at Wertheim National Wildlife Refuge in support of OMWM activities. Sampling will be coordinated with USGS.

Agenda Item 5: USGS Monitoring

Stephen Terracciano reported that all monitoring has been completed, but there are no new results to release as yet. Five Semi-permeable Membrane Devices (SPMD's) were deployed, and twenty-five water samples were collected. Two aerial sprayings this year were monitored.

He also announced a preview of an informational video that is available on the web on the USGS WNV monitoring program.

DeWitt Davies started a discussion on the appropriateness of individual entities doing press releases of their programs as related to vector control. The general sentiment of the TAC seemed to reflect that press releases are good for information dissemination and are certainly appropriate as long as the organization reports only on its own programs and doesn't claim to represent the TAC or the SCVC program.

Agenda Item 6: OMWM Update

David Tonjes presented to the TAC the plan for pre-operational monitoring of OMWM activities at Wertheim National Wildlife Refuge. A workgroup met at the beginning of the month to discuss parameters, sampling frequency and density, and monitoring methods of the project. The monitoring will take place in 4 locations in the marsh, and 4-6 transects will be established in each location at an angle to ditch construction. Mosquito breeding areas will be located and marked. A list of biological, physical and chemical parameters with locations, frequency, and sampling techniques for the pre-project monitoring was presented by Tonjes for TAC review.

Tonjes' presentation was followed by questions from TAC members about the proposed sampling and their suggestions for expanded sampling parameters. Marie Lawrence suggested

looking at the effects of OMWM on dragonfly populations. Monitoring dragonfly larvae may be the most feasible approach. Mike Kaufman asked if any of the study areas would be in an open channel, and Tonjes confirmed that all of the sites will be in the marsh.

Kevin McAllister asked if any marshes have been identified that are influenced by freshwater. He suggested testing nutrient levels and comparing those ditches influenced by freshwater with those that are not. He feels that the effects of OMWM activities on the conveyance of pollutants through ditches from upland areas to tidal bays should not be overlooked. Tonjes pointed out that while the marsh system at Wertheim is not heavily influenced by freshwater, it was chosen as a study site for other reasons, such as mosquito control, pesticide reduction, habitat enhancement, and its availability and its designation as a refuge. Walter Dawydiak reassured the TAC that other sites are being sought for other OMWM activities, which will be designed to evaluate a more comprehensive suite of parameters, including stormwater runoff. Additionally, the current SCDHS water quality-sampling program at Wertheim does include testing for nutrients, and sampling has been performed during both dry and wet weather events.

Mark Maghini suggested evaluating the effects of depressed mosquito populations on fish that rely on them as a food supply. It was suggested that fish, bird, and perhaps even bat use of marshes before and after OMWM activities should be monitored.

George Proios initiated a discussion on the desirability of clearly describing a healthy functioning marsh and how the monitoring data will be used to make assumptions about the health of the target marsh. Susan Antenen pointed out that even without a perfect test marsh general goals could be set for OMWM such as, decreased mosquito larvae, increased use by birds, and not encouraging invasive species growth. Dominick Ninivaggi commented that the goal of this program is not primarily to restore marshes, but to determine the best mosquito control techniques, weighing both ecological and human health considerations.

Representatives from DEC expressed their opinion that the timeframe of the pre-project sampling is not adequate to draw conclusions on project impacts with a good level of confidence. Additionally they are concerned that the chosen project site has already been treated with pesticides and ditching. Tonjes acknowledged that these are valid concerns that need to be ironed out, but he questioned even the existence of a pristine, unaffected marsh. Dominick Ninivaggi stressed that this project needs to compromise between what ideal conditions are and what is practical to implement given time, financial, and physical constraints of available sites. DEC also emphasized the need for clearly expressed goals, measures of success, and pre- and post-implementation monitoring plans. Susan Antenen suggested that as the site is a USFWS refuge there is a history of monitoring programs that may have a longer record available for some of the desired parameters. Jack Mattice acknowledged that this is an issue that the County and DEC will need to come together and work on in order to move ahead with the project. Tonjes welcomed any advise or critique that DEC could offer.

Agenda Item 7: 2003 Vector Control Program

Dominic Ninivaggi explained that very wet spring and summer seasons led to higher than normal mosquito populations this year. There were 24 isolations of WNV detected in mosquitoes. Last year at the same time there were 13 isolations, with a total of 34 for the year. The 24 isolations were found in many different locations throughout the county. Three areas were treated by overhead spraying of adulticides. The decision to use this method was based on local mosquito populations, dead birds infected with WNV, size of human populations at risk, and the location of human cases of WNV.

Michael Kaufman asked how aerial spraying is chosen and how the range of spraying is determined. Ninivaggi replied that once the Department of Health determines that there is a public health risk of human transmission of WNV, the Department of Public Works chooses the best method for treatment considering local geology, natural boundaries, and wetland systems.

Agenda Item 8: Literature Search Topics & Early Program Priorities

Tonjes distributed to the TAC and audience an outline of the topics that will be covered by the literature search. The literature review will hopefully be completed by the end of January.

Adrienne Esposito requested that the literature specifically cover pesticide impacts on crustaceans and fish. Although these topics are already in the literature review (the outline is currently broadly crafted), these items will be specifically added to the outline.

A discussion then ensued on the conflict between what is the most desired and attainable level of monitoring and how to manage ecosystems with what can practicably be done under the terms of this project.

Tonjes then asked the TAC to review the distributed list of potential early action projects for discussion at the next meeting.

Agenda Item 9: New Business / Next Meeting

Susan Antenen asked what digitized maps are available for the County. Spatial data needs should be considered. Jeff Zappieri from NYS Department of State will look into whether the state has digitized the DEC tidal wetland maps from 1974 photography for the SSER and the Peconics. Marie Lawrence volunteered that FINS has aeriels available and can assist in providing them to the project.

George Proios stated that the County should consider the implications of their stormwater management program on mosquito populations. He is concerned that new stormwater devices may act as breeding grounds.

There will be workgroup meetings to further iron out the details of the Wertheim National Wildlife Refuge OMWM project. Persons interested in regularly serving on the OMWM workgroup should notify SCDHS. Anyone interested in attending is welcome.