

# THE MARTHA'S VINEYARD COMMISSION

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## *Martha's Vineyard Commission Minutes for the Regular Meeting of October 18, 2001*

The Martha's Vineyard Commission (the MVC or the Commission) held its Regular Meeting on Thursday, October 18, 2001, at 6:30 p.m. in the cafeteria of the Martha's Vineyard Regional High School, Edgartown-Vineyard Haven Road, Oak Bluffs, Mass.

At 6:36 p.m., a quorum being present, James Vercruysse – a Commission member at large from Aquinnah as well as the Chairman of the Commission – called the Regular Meeting to order. *[Commission members present at the gavel were: J. Athearn; J. Best; C. Brown; M. Cini; M. Donaroma; D. Flynn; J. Greene; T. Israel; J.P. Kelley; M. Ottens-Sargent; K. Rusczyk; L. Sibley; R.L. Taylor; R. Toole; J. Vercruysse; K. Warner; A. Woodruff; and R. Zeltzer. Mr. Oglesby arrived at 7:42 p.m.]*

### **Discussion/Vote: Beach Road Realty Trust Office Building (DRI #535).**

Chairman Vercruysse proposed that the Commission get a bit of business out of the way before the Public Hearing commenced. The Commission moved to the **Land Use Planning Committee (LUPC) Report**, specifically a report on the Conditions the committee was recommending for the Beach Road Realty Trust Office Building (DRI #535). Richard J. Toole – an Oak Bluffs Commission member at large and the LUPC Chairman – delivered said report.

Mr. Toole began by remarking that the development in question was “one of the most over-studied projects” the Commission had ever looked at. He reported that the LUPC had voted unanimously to recommend Approval of the project with Conditions. He then read aloud the list of six recommended Conditions. *[See the Full Commission Meeting File of October 18, 2001 (the meeting file) for a copy of said list.]*

Chilmark Selectmen's Appointee Jane A. Greene made a **Motion To Move To Item Six, Possible Vote: Beach Road Realty Trust Office Building (DRI #535)**. Said Motion was duly seconded.

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Tisbury Selectmen's Appointee Tristan Israel drew the members' attention to the third Condition, which concerned the Applicant's offer to work with the Town of Tisbury on a bicycle easement. In view of the fact that the Town had in mind possibly more than an easement for a bicycle path, Mr. Israel requested that the word "bicycle" be deleted. Thus, the Condition would read: "The Commission accepts the Applicant's offer to work with the Town of Tisbury, should the Town wish to explore the option of an easement through the property."

County Commission representative Daniel Flynn asked if Mr. Israel wanted the word "easement" to be singular or plural. "I'll go with one," answered Mr. Israel.

In addition, Mr. Israel wanted to know exactly what was meant by Condition No. 6, which read: "The Commission accepts the Applicant's offer to assign parking spaces to tenants; and further, to work with the Tisbury Park-and-Ride to accommodate the remaining parking needs of the project." Mr. Israel wondered if the Commission should set a specific number of spaces. Chairman Vercruysse explained that the intent of the Condition was to encourage the Applicant to work with the Town so that the 17 parking spaces in back of the proposed building would not have to be increased.

Megan Ottens-Sargent, the Aquinnah Selectmen's Appointee, suggested that there be some reference to the Vineyard Haven Harborfront District regulations, which stipulated a particular number of parking spaces based upon the size of a lot in the District. "So that it's clear that the limit is based on regulatory issues," she stressed. Ms. Greene responded that the Applicant had offered to work with the Park-and-Ride and that the Commission was simply accepting his offer. "It's not a questions of regulatory or not," she said. "It's what he offered to us."

Linda Sibley, a West Tisbury Commission member at large, suggested that clarity could be better achieved by referencing the specific number of spaces indicated by the Applicant, which was two parking spaces per office. "Then that makes it very specific," she noted.

With the Chairman's permission, **Bruce MacNelly, the architect for the project, and Sean Murray, an attorney for the Applicant**, made some comments. Mr. MacNelly explained that their original intention had been to assign two spaces per office. Mr. Murray pointed out that they wished to "leave it vague, depending on the tenant. We need some flexibility."

Ms. Greene proposed that Condition No. 6 should be left as it was. Mr. Flynn made the point that the office building would not be completely filled with tenants at the start; so it did not make sense, for instance, to allow the first tenant in the building to have only two spaces, when there would be 15 empty spaces on the site. "I mean, they only have 17," he remarked. "You can't have any more cars in there than 17."

Ms. Greene made a **Motion To Approve The Beach Road Realty Trust Office Building With Conditions As Amended**, duly seconded. MVC Executive Director Charles W. Clifford conducted a roll call vote on said Motion, with the following results:

AYES: J. Best; C. Brown; M. Cini; D. Flynn; J. Greene; T. Israel; M. Ottens-Sargent; K. Rusczyk; L. Sibley; R. Toole; and J. Vercruysse.

NAYS: None.

ABSTAINING: None.

INELIGIBLE: J. Athearn; M. Donaroma; J.P. Kelley; R.L. Taylor; K. Warner; A. Woodruff; and R. Zeltzer

The time was 6:46 p.m.

**Continued Public Hearing: Down Island Golf Club, Inc. (DRI #543).**

*[The Commission members present for the entirety of this session of the Public Hearing were: J. Athearn; J. Best; C. Brown; M. Cini; M. Donaroma; D. Flynn; J. Greene; T. Israel; J.P. Kelley; M. Ottens-Sargent; K. Rusczyk; L. Sibley; R.L. Taylor; R. Toole; J. Vercruysse; K. Warner; A. Woodruff; and R. Zeltzer. Mr. Oglesby arrived at 7:42 p.m.]*

The Chairman handed the gavel to Mr. Toole, who was the Hearing Officer that evening. Mr. Toole explained that this was a Continued Public Hearing, carried over from July 5, 2001, at which time no testimony had been taken. He then read into the record the Notice of Continued Public Hearing for the Down Island Golf Club, Inc. (DRI #543). *[See the meeting file for a copy of said notice.]*

Mr. Toole emphasized that this was a new Development of Regional Impact and not a continuation from the first proposal (DRI #515, denied by the Commission on July 20, 2000). "So any testimony that was given during that first Hearing process for that last proposal will have to be resubmitted," he said.

Mr. Toole then referred to the schedule of Hearing sessions that had been published: tonight's session would cover water quality, water usage and environment issues; on November 1, course design, habitat issues, fiscal issues and affordable housing would be addressed; and on November 15, traffic, employee housing, public access to trails and access to Town parcels would be taken up. A fourth Hearing session – the date of which had not been set – would be arranged if more time was needed for public testimony, he added.

"I'm going to do my best to make sure this is a fair process," stated Mr. Toole. He then outlined the procedure that would be followed. Members of the public who wished to be

recognized were asked to sign in and indicate whether they were for or against the proposal, since the Hearing Officer would alternate the types of testimony. Members of the public would not be allowed to read their testimony and should hand in any written statements to the Staff Secretary. Those testifying were asked to make their comments as brief and to-the-point as possible; repetitious testimony would be cut off. Testimony should address the merits of the project, and all questions should be directed to the Hearing Officer.

"This is not going to be a debate, and I won't tolerate any personal attacks," stressed Mr. Toole. "Please be polite and listen. Applause and booing is totally inappropriate and takes up valuable time." The sessions had to end at 9:30 p.m., he concluded, since everyone had to vacate the building by 10:00 p.m.

#### **Commission Member Disclosures.**

Mr. Toole then read his disclosure statement into the record. In order to dispel concerns about a conflict of interest, he said, he had checked with the State Ethics Commission regarding his ability to sit on the Hearing. "The Ethics Commission has ruled that I have no conflict of interest and directed me to file Disclosure Form 286A with the Town Clerk of the Town of Oak Bluffs and with the Martha's Vineyard Commission," he continued. That form and the accompanying letter from the Ethics Commission were part of the public record at the Martha's Vineyard Commission, Mr. Toole concluded.

James Athearn, a Commission member at large from Edgartown, disclosed that there had been some questions about whether his previous participation in the Vineyard Conservation Society constituted a conflict of interest. "And the Ethics Commission ruled there was no conflict," he said, adding that he, too, had filed the letter and appropriate forms with the Town Clerks of Edgartown and Oak Bluffs as well as with the Martha's Vineyard Commission.

John Best, a Commission member at large from Tisbury, stated that there had been a question in his case about a possible conflict of interest due to his wife's membership in and service on the board of the Vineyard Conservation Society. "And the State Ethics Commission also found that I was not in conflict as long as I filed a Disclosure Form 286A with Oak Bluffs, the Town of Tisbury, from which I am from, and the Martha's Vineyard Commission," he said. That form, a letter from the Ethics Commission, as well as a letter of his own, were available for perusal at the MVC Offices, he concluded.

Marcia Mulford Cini, also a Commission member at large from Tisbury, stated that in order to dispel any concerns regarding any conflict of interest since she had recused herself from the bulk of the Hearing sessions on the first Down Island Application, she had taken the precaution of going to the Ethics Commission, getting cleared, filing the appropriate forms and submitting them to the Public Record.

Andrew Woodruff, a Commission member at large from West Tisbury, said that he too had filed Form 286A regarding the previous employment of his father by the Vineyard Conservation Society. He had filed this form with the Town Clerks of Oak Bluffs and West Tisbury and had received a letter from the State Ethics Commission clearing him of any conflicts, he noted, adding that copies of these documents were available at the Martha's Vineyard Commission Offices.

Chairman Vercruysse stated that he had also filed the appropriate forms and had asked the State Ethics Commission for an opinion regarding whether or not he was in conflict because a person he works with had made an offer on some land related to the project that may have been available. "And the Ethics Commission ruled that if I checked with my employer and wrote the appropriate letters to my Town and to the Commission and to the Town of Oak Bluffs, that I would not be in conflict," said Chairman Vercruysse. "So I've done all that, and it's all Public Record, and everyone can examine that."

Ms. Ottens-Sargent said she wished to mention that she was a trustee of the Edey Foundation. "And I gather there is no conflict," she added.

#### **Applicant's Presentation.**

##### **A. Introduction by Robert Mone.**

**Robert Mone, an agent for the Down Island Applicant,** introduced himself and explained that he would be presenting the new plan for the golf course with Ron Mechur and Herb Putnam, also agents for the Applicant. Also on hand, Mr. Mone continued, were technical professionals who could answer any scientific questions that might arise.

Mr. Mone spoke briefly of the mediation process that had followed the Denial of the first Down Island Application, as well as of the Court-Ordered Remand. "Our team bridged the gap between the old plan that had been denied and the new plan as presented tonight," he said. Because some of the Commissioners had not been members during the first Application process, Mr. Mone continued, he would be reviewing briefly the old plan "in order to emphasize the changes in the new plan."

Mr. Mone emphasized that those changes had been made to address the points of the Denial as well as to respond to the suggestions that had come out of the mediation process. In addition, he noted, per the recommendation of the mediation group, he and Messrs. Mechur and Putnam had gone back into the community to speak to all parties interested in the Southern Woodlands.

"The new improved plan is environmentally sensitive and community-spirited," Mr. Mone said. "The denial of the original plan has given us the opportunity to make the new plan better." He concluded that he hoped those listening would agree that the Applicant's team had responded to and given answers to all of the reasons offered by the Commission in its Denial of the original Application.

Mr. Mone then outlined the presentation planned for that evening: Mr. Mechur would give a brief slide presentation comparing the denied plan with the new plan; Messrs. John Guswa and Charles Natale would present the science involved; and Jim Ward of Nutter, McClennen & Fish and Mr. Mone himself would speak about the environmental insurance policy and the Island Pond Fund. If there were questions that could not be answered that evening, said Mr. Mone, the Applicant's team would bring the answers to those questions to the next session of the Hearing.

**B. Ronald H. Mechur on the New Site Plan.**

Using slides to illustrate his points, **Ronald H. Mechur, an Oak Bluffs appraiser, planner and consultant who was acting as the Applicant's agent**, began by going over the main site features of the denied plan for the benefit of the members who had not sat through that series of Hearing sessions. "That's why I'm here now," he said, "to try to bridge the gap between what took place before and where we are now."

Mr. Mechur pointed to the original site plan, submitted to the Oak Bluffs Planning Board in October 1999. In December of the same year, he continued, a three-volume Draft Environmental Impact Report became part of the record; said report had received a preliminary approval from the Secretary of the Executive Office of Environmental Affairs. The latest submission, he said, was contained in the black binder that each member had received.

Mr. Mechur went on that the original plan, which covered 219 acres, was to build an equity golf course of 300 members with 150 Island members. Now that the site had expanded to 273 acres (a 25 percent increase), he said, the Applicant's team had been able to redesign the golf course and mitigate the impacts that had been of concern to the Commission during the first Application process. For instance, Mr. Mechur pointed out, in the earlier plan Ms. Sibley had not been satisfied with the Applicant's proposed mitigation measures for an area of pitch pine habitat for the Imperial moth. With the expanded acreage, he said, that problem had been resolved.

Mr. Mechur then oriented his listeners to the 1999 site plan. The entire parcel, he explained, belonged to an area called the Southern Woodlands, a District of Critical Planning Concern (DCPC) which contained around 400 acres in all. In addition, he noted, there were three other DCPCs that affected the property: the Island Road District; the Coastal District; and the Lagoon Pond District.

Further describing the regulatory intricacies governing the site, Mr. Mechur related that the property also contained two areas of contribution to three wellheads and was subject to the Town of Oak Bluffs' own Water Protection Bylaw. Moreover, he continued, a landlocked 24-acre Town parcel sat within the site, and Ancient Ways and Special Ways for which there was no current public access had to be dealt with.

Mr. Mechur then recounted how expanding the acreage of the site had allowed the Applicant to have the Specials Ways – like Chase Road, Farm Neck Road and the Back Road – all remain undisturbed. In addition, all the public trails could now be used year-round, and a trailhead parking area had been provided.

Mr. Mechur reminded the Commission that a key objection to the earlier plan had concerned the elimination of the Webb's Campground. "With Bob [Mone's] and Herb [Putnam]'s help, we found a way to develop and retain a portion of the campsites," he said. The Applicant intended to execute a ground lease with the Town of Oak Bluffs for \$1 for 20 years, Mr. Mechur explained, and the Town would be able to run a 30-some-site campground in that area. Moreover, the cottage on site could be used by the Town for their check-in location. In the same area, he added, was the aforementioned trailhead parking.

In the Hearing for the earlier plan, Mr. Mechur recalled, members of the Featherstone Meetinghouse community, which abutted the golf course site, had expressed concern about the clubhouse and parking lot located nearby. With the expanded acreage, he said, the Applicant had been able to shift the access road about 1,000 feet. "The clubhouse has now been moved," he reported. "The original parking lot, which was 160 spaces, has now been reduced to 100 spaces. Originally, we said that we would phase it. I believe there was a concern about that. So we've reduced the impact of that."

Mr. Mechur then described how during the first series of Hearing sessions, Mr. Israel had raised the issue of trying to mitigate the traffic along the Barnes Road access. Through Mr. Mone's efforts, Mr. Mechur said, an arrangement had been made with the Martha's Vineyard Arena to have those headed for service and employee facilities come in off the Edgartown-Vineyard Haven Road so that the traffic was split. This, in turn, would allow them to put the dormitories in four buildings instead of one, Mr. Mechur went on, so the neighborhood context question had been addressed as well. In addition, any unused dormitory space would be offered to local businesses for their employees.

Another area of concern, said Mr. Mechur, had been a six-acre Native American site. Because the Applicant could now bring in the utilities by way of the Edgartown-Vineyard Haven Road, he pointed out, there would be no need to excavate that site, thereby satisfying the no-tolerance policy of the Wampanoag Tribe. In the black binder, he noted, could be found a document called an Archaeological Preservation Restriction. This would be granted to the tribe, which would then oversee the six acres.

Mr. Mechur referred to a one-acre piece that had already been deeded the preceding May to Island Elderly Housing. He related how IEH had proposed to the Department of Housing and Urban Development that they build senior-assisted-living units; so they had had to present evidence of site control to the Federal agency. Thus, the one-acre lot had been deeded by the Applicant to IEH so that they could begin their permitting process at the Federal level.

Still another area of concern regarding the earlier plan had been the landlocked 24-acre Town parcel, said Mr. Mechur. The Applicant had approached the Town about "a possible swap that hasn't really materialized," he said, explaining how originally the land had been deeded to the Town for the purpose of affordable housing lots. So that the land could be used for that purpose, explained Mr. Mechur, the Applicant would be providing a 40-foot right-of-way, which would make the parcel available as part of the protected forest preserve of 100 acres, another feature considered desirable by some Commission members. This, he said, opened up the area to do a small cluster Chapter 40B development.

As part of the redesign of the golf course, Mr. Mechur went on, the amount of managed turf had been reduced from 74 acres to 68. "And you probably don't want to hear it, but it is less than Vineyard Acres II, a project you've already approved," he noted, referring to a golf course being constructed in Edgartown. Regarding the propagation of native grasses – one of Ms. Sibley's concerns – a long text put together by, among others, Ann Hale and Tom Chase, would be the Applicant's guidebook for native plantings for the entire golf course, he added.

Mr. Mechur turned to "the real benefit of this shifting of design" – the moving of the golf course use to the side of the property near Sengekontacket Pond, which is better flushed and less endangered by nitrogen loading that Lagoon Pond is.

Another aspect of the project that they had begun work on during the earlier Application process, said Mr. Mechur, was the Applicant's offer to certain large users in the Lagoon Pond watershed – namely, Tisbury Marketplace, the Martha's Vineyard Arena and Island Elderly Housing – to upgrade their septic systems. Those agreements were already signed, he said, and those nitrogen reductions had become part of the calculations that that would be presented later that evening.

Responding to a question from Mr. Mechur, DRI Coordinator Jennifer Rand announced that site visits were scheduled for Tuesday, October 30, at 4:00 p.m. and Saturday, November 10, at 9:00 a.m.

Mr. Mechur then went over the topography of the site, which ranged from 15 feet above mean sea level to about 128 feet. Besides the pitch pine already mentioned, most of the trees were oak, he related. The property was 85 feet above the water table, and there were no wetlands or endangered species or habitat concerns on the site, he concluded.

**C. John H. Guswa and Charles J. Natale on Science Issues.**

**John H. Guswa, a hydrogeologist who had been on the science team for the previous Application,** introduced himself, noting that he had 27 years' professional experience in his field, including seven with the U.S. Geological Survey Water Resources Division. His role in this project, he continued, was to provide technical assistance and evaluation related to the design and analysis of the pumping tests, the groundwater flow directions,

and the impacts of water use on the water balance. He pointed out that in summary he believed the proposed modifications to the plan would not result in any adverse effects on the water source and that the hydrologic effects of the revised plan were very similar to what they had been under the original plan. (Mr. Guswa used a series of Power Point slides to illustrate his arguments, as did Mr. Natale, who spoke next.)

Focusing first on **water balance**, Mr. Guswa explained that they had considered two water-pumpage conditions, one for the turf grow-in period (when more water would be required) and one for the more mature turf (years three and beyond). The daily average pumping rate during these two periods, he said, was 0.18 million gallons a day for the grow-in period and 0.14 million gallons a day for the mature turf period. He estimated that the annual operational period would be 240 days. So for the mature turf, this would amount to 33.6 million gallons a year; for the grow-in period that would come to 43.2 million gallons annually.

Mr. Guswa then compared that pumpage to the total amount of water recharge that occurs on the Island, which is 48 million gallons per day. "Then we see that the amount of water pumped by Down Island Golf [Club] represents less than two-tenths of a percent of the amount of groundwater recharge that occurs daily on the Island," he said.

Looking at just the Oak Bluffs watershed, which had a recharge rate of 8 million to 10 million gallons per day, Mr. Guswa reported that the pumping rate would amount to 1.5 percent of the total recharge. Finally, the Down Island Golf Club property itself, which had a recharge rate of 1.4 million gallons per day, would have an expected pumpage of 0.36 million gallons daily. "So what we're talking about [in] the pumpage is about 40 percent of the groundwater recharge that occurs on the golf course," he explained.

Mr. Guswa outlined how the recharge was calculated, including a consideration of the amount of rainfall that penetrates the ground as well as the rate of transpiration. "You come up with an average daily demand per month of pumpage that would be required," he said. He then showed a graph plotting the pumpage requirements over the course of a season, running from March until November, or 240 days, for both the grow-in period and the mature period. During the former period, about 90-plus acres would be irrigated, he explained, while during the latter, about 68 acres would need irrigation, a reduction of about 25 percent.

"We've done this analysis, the consultant to the ... Oak Bluffs Water District has done the analysis – the amount of water that will be pumped for irrigation will have a negligible effect on the local and regional water supply," concluded Mr. Guswa.

Mr. Guswa then addressed that issue of **groundwater flow direction**. Pointing to a regional groundwater elevation contour map of the area of the proposed golf course site, he showed the water table contours, noting that one of the basic principles of groundwater flows was that they moved from higher water table elevations to lower water table elevations. He indicated the 5-, 10-, 15 and 20-foot contours. So, he related,

the high point on the water table was located south of the proposed golf course location. Following the principle of groundwater flow, he explained, such contours would then at some point produce what is called a groundwater divide, a divide between groundwater that would flow northerly versus groundwater that would flow in a generally southerly direction.

Mr. Guswa continued that beneath the golf course itself, the contour measured around 10 feet above mean sea level, and the historic record indicated that there was about a 4-foot seasonal fluctuation in the water table; so it would go from about 8 to 12 feet.

Moreover, Mr. Guswa related, when one looked at the northerly-southerly groundwater flow divide, one also had to consider the ridge in the water table in the area of the proposed golf course, extending out towards Oak Bluffs. "So we can similarly draw a groundwater divide running through the golf course along the top of that ridge, if you will," he said, showing the path that the groundwater would take beneath the golf course.

To the east of that, Mr. Guswa went on, the groundwater would flow in an easterly direction, either toward Sengekontacket Pond or out toward Nantucket Sound; and to the west, groundwater would flow in a northerly direction out to Vineyard Haven Harbor or to Lagoon Pond. "So, basically this ridge, this divide actually causes water to fan out in a radial flow, if you will, a radial direction from beneath the golf course," he said. (All of these points were illustrated with slides.)

Mr. Guswa then showed a map that illustrated zones of groundwater recharge of surface waters in the vicinity of the Down Island Golf Club site. "And you see that the Down Island golf course represents some percentage, a small percentage of the total area of groundwater which contributes discharge to Lagoon Pond," he stated. Similarly, he continued, there was a region whose recharge flowed toward Sengekontacket Pond and then a much smaller region where groundwater flow was essentially discharged to Nantucket Sound.

**Charles J. Natale, Senior Vice President of Environmental Science Services, Inc.,** described himself as the principal scientist involved with the project since its inception. He provided some details about his background in environmental science and regulatory requirements. What he was trying to do with the Down Island Golf Club plan, he remarked, was to "present an environmentally sensitive plan that meets the needs of the Island and the environmental interests, but also respects the land and the quality of conditions that are there."

Mr. Natale described how a lot of time had been spent designing the property to minimize impacts to the environment, including terrestrial ecology and the woodlands, in addition to trying to increase the biodiversity of the property by adding water features. "The property right now is essentially a dense woodland," he said. "The soils are on the property are predominantly sandy glacial soils, so it doesn't hold water."

Mr. Natale then focused on the **projected nitrogen loading from the site** if developed. Providing some background, he explained how the managed turf industry had come far in the science of designing and managing the turf to minimize nutrient loading. Out of the 273 acres of the site, about 68 acres would be managed turf, he went on; the rest would remain either natural woodland or in its natural condition, such as meadows and other cover types. During the turf establishment, more nutrients were required, he said; but once the turf became established, less intensive management was called for.

"On these particular soils, if you take a particle of nitrogen and put it on the grass, 90 percent of that gets uptaken or consumed by the plant," Mr. Natale related. The team had adopted a 10 percent leaching factor for the property, "and that is conservative in our estimation," he said. "We've reviewed those factors with MVC Staff. They generally agree with that particular rate for these soil conditions." So, he continued, a portion of that 10 percent of residual nitrogen that left the surface of the grass would "load" into the recharge area.

Mr. Natale went over how the team had carried out their calculations. There were a number of cover types on the site, including tees, greens, fairways, primary rough, secondary rough, unmanaged land and developed land (clubhouse, parking lots and so forth). In addition, the wastewater system would contribute to the nutrients loaded into the groundwater. The units used for nitrogen loading were pounds per year, and if one were to add up all the columns for the loading for all the cover types, it would come to 1,309 pounds per year of total net nitrogen that would potentially be contributed to the groundwater.

In turn, Mr. Natale continued, that 1,309 pounds per year could be partitioned into discharge areas - 622 pounds would go to Lagoon Pond, 276 pounds to Nantucket Sound and 411 pounds to Sengekontacket Pond. Kate Warner, the West Tisbury Selectmen's Appointee, wanted to know if the graph Mr. Natale was pointing to had been included as one of the exhibits in the black binder. "Yes," answered Mr. Natale, although the particular format being projected for the presentation was easier to understand, he added.

Mr. Natale emphasized that the nitrogen loading from the current plan had not really changed from that of the earlier proposal, although the managed turf had been reduced by 7 or 8 acres. What had changed, however, was where the nitrogen was being distributed, he said.

In the earlier plan, the majority of the golf holes were in fact in the Lagoon Pond watershed, Mr. Natale explained, "which happens to be a little bit more nitrogen-sensitive, perhaps even much more nitrogen-sensitive than Sengekontacket. The revised plan has shifted the managed turf areas over to the Sengekontacket watershed and therefore, in our opinion, creates a benefit in the sense that we reduce the actual loading to Lagoon Pond ... And Sengekontacket has much more assimilative capacity for this residual nitrogen."

[C. Mikel Oglesby, the Governor's Alternate, arrived at this point, 7:42 p.m.]

Late in the process for the earlier plan, Mr. Natale recounted, the team had begun to look at **ways to mitigate the new nitrogen coming into the surface waters**. Thus, they had come up with the concept of a negative offsets *off* site, since they had done everything they could *on* the site to minimize any nitrogen loading resulting from the golf course facility. He described how the team had identified certain facilities that were major contributors and had concluded that 2,320 pounds of nitrogen per year could be reduced in the watersheds of Sengekontacket and Lagoon Ponds as a result of the offset project. "That is, obviously, a thousand pounds more, actually, we'd say, a reduction of a thousand pounds more than what we're actually contributing," he said.

Mr. Natale went over some of the details of the agreements that had been established with Island Elderly Housing, the Martha's Vineyard Arena, Webb's Campground and the Tisbury Marketplace. The program, he stressed, would actually improve their systems through tertiary treatment improvements and denitrification improvements.

Although there could be some discussion of the numbers, he said, based on Title V standards and conditions "we believe these are what are the maximum permitted numbers. They have the ability to emit this much nitrogen through the groundwater. Whether they do it or not on a daily basis, on an annual basis, today or next year, remains to be seen. But their permits say they can put this much in." Most of the reductions in loading would occur in the Lagoon Pond watershed, he noted, "which is really where they need to happen."

Going over the numbers, Mr. Natale outlined how there would be 1,309 pounds of nitrogen generated per year by the golf course facility, with 622 pounds going to Lagoon Pond, 276 to Nantucket Sound and 411 pounds to Sengekontacket. The off-site mitigation measures would result in the following reductions: Island Elderly Housing, 455 fewer pounds annually; the IEH expansion, 228 fewer pounds; Tisbury Marketplace, by 264 pounds; Webb's Campground by 485; Martha's Vineyard Arena by 545; and the rest from smaller-scale residential and commercial users.

Mr. Natale then addressed the subject of **monitoring programs**, in other words, how the Applicant could prove he was achieving what he said he would. Having spent many hours with MVC Water Resources Planner William Wilcox and consultant Brian Howes, the team had set up a program to monitor both groundwater conditions and nutrient-loading conditions. The groundwater would be monitored through monitoring wells, he explained, and the nutrient loading would be measured by pan lysimeters.

Mr. Natale described the pan lysimeters, which would be put "underneath the turf, below the root system, typically a couple of feet below the surface of the turf mat." The lysimeters would collect leached water, he said, and that water would be tested for nitrogen, perhaps on a monthly basis.

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The Commission Staff had requested that the lysimeters be set up in the different turf types – with good reason, Mr. Natale went on. The tees and greens, for instance, tended to be more intensively managed, whereas the fairways were “almost like your lawn. It’s basically managed lawn,” he remarked. The roughs, on the other hand, were only fertilized twice a year, once they had grown in. So, related Mr. Natale, lysimeters would be put in each of the watersheds, down-gradient, covering all the different turf types. Unmanaged areas were also included since nitrogen was released as plants broke down.

Turning to the subject of the monitoring wells, Mr. Natale described how a series of monitoring wells would be set up on the site – both up-gradient and down-gradient – in paired cuplets to measure the nitrogen in the shallow subsurface water as well as at deeper depths of the aquifer.

The Commission Staff had wanted to know how the Applicant would be gauging water demand based on a regional scale, continued Mr. Natale. The plan they had devised was to use a U.S. Geological Survey well in the State Forest to index and measure groundwater elevations on the Island as a whole. Before construction of the course, the monitoring wells would be installed, “and we’ll monitor the elevations on our property in relation to the index well,” he explained.

Mr. Natale provided some specifics: “So if the index well is at minus one foot ... and our wells are minus point five feet, we know that there is that measurable difference between what we have and what the well shows before we actually start pumping irrigation wells on the property. So we’ll be able to measure that and set a benchmark.” Once the irrigation had begun, he said, the team would be able to measure how much they were drawing down relative to the index well itself.

“If there are drops in the index well that are over certain percentages,” Mr. Natale stressed, “we’ll go into a curtailment mode. We’ve outlined this in our letter to the MVC Staff. We’ll go into what’s called a water management or water conservation mode. We will then basically take mitigation measures where we’re reducing our pumping volumes. We have ponds on the property. We will pump-store, and so if we have to pump, we’ll pump at night, off-peak hours. And we use the water in those ponds then to use for irrigation so we’re not pumping from the aquifer during peak-demand times, typically, during the normal day.”

Mr. Natale added that they would also monitor the wells on the golf course property for draw-downs and, in addition, would coordinate with the Town of Oak Bluffs Water District, “because they’re looking at the Lagoon Pond and perhaps a new well in the State Forest.” He emphasized that Deacon Perotta, the Water District Supervisor, was “comfortable with what we’re proposing here” and that they would all work together in the event of a drought.

Mr. Natale then summed up by reiterating the goals of these programs. Mr. Mechur added some details about a plan under which the Applicant would fund a three-year

continuing program with a contribution of \$75,000 per year to the fund that attorney James Ward would talk about. "So there's an ongoing septic-system enhancement or improvement around the ponds," he said. In addition, he reported, they intended to fund a \$10,000-a-year administration of that program, so that the organizations and Town Boards that sat on that program would have funds to get the job done.

Moreover, Mr. Mechur related, the Applicant was currently funding Island Elderly Housing's design team to upgrade their existing facilities and the proposed construction of new units. "Those design fees are about a thousand dollars per system, and it could be upwards of a hundred thousand dollars ... just for the upgrades," he added. The time was 8:00 p.m.

**D. Robert Mone on the Environmental Impairment Insurance Policy.**

Mr. Mone recounted how there had been "a lot of talk about providing an environmental impairment insurance policy to protect the Towns that are involved in this project and also, obviously, the shellfish people who might be impacted. And we are prepared to provide a ten-million-dollar environmental impairment insurance policy naming the Town of Edgartown, the Town of Oak Bluffs, the Town of Tisbury and the shellfish groups as named insured on those policies."

**E. James Ward on The Island Pond Fund.**

Attorney James Ward, partner at the Boston firm of Nutter, McClennen & Fish, noted that he thought he had been on the project team the longest of anybody. He had worked with Mr. Mechur, he said, putting together the black binder. He pointed out that the exhibits behind Tabs 23, 23, 26 and 27 were documents they had prepared that related to the nitrogen reduction program.

As Mr. Natale had mentioned, contracts had been signed with a number of large users, Mr. Ward continued. But in order to make the best contribution, the team had decided to do something that would be a longer-term solution, he said, and what they had proposed was to create a fund. He had advised them to set up a nonprofit corporation called the Island Pond Fund (see Tab 26). He had not yet filed the papers with the Secretary of State, he said, because at this point the officers of the corporation had not been chosen.

In discussing the make-up of the board, Mr. Ward explained how they had come up with the following: a member of the Martha's Vineyard Commission; a member of the Martha's Vineyard Shellfish Group; a member from the Lagoon Pond Association; a member from the Friends of Sengekontacket; members from the Towns of Oak Bluffs, Edgartown and Tisbury; and a member from the golf club itself. The nonprofit corporation would be run by its members, whose job it was to do what the corporation had been set up to do, in this case, to distribute money to improve the ponds.

Mr. Ward described the contracts they had developed for the Island Pond Fund to use. One, found behind Tab 22, was for a large user, and another, behind Tab 23, was for the owner of a single-family house. "So once this entity is up and running," he explained, "we'll contribute money to it ... to help fund these upgrades." If for some reason the nonprofit corporation was dissolved, he added, the money would have to be donated to other similar causes.

**Staff Report: Water Resources Planner William Wilcox on Groundwater Issues.**

William M. Wilcox – the Commission's Water Resources Planner – referred the members to a document entitled *Down Island Golf Course, Staff Notes: W. Wilcox, 18 October 2001*. [Said document will hereinafter be referred to as the Staff Notes. See the meeting file for a copy.] Mr. Wilcox explained that the green pages were a narrative of his thoughts on the project proposal, the single blue page contained facts and figures that had been requested, and the yellow sheet was what he referred to a "stretch" of Mr. Natale's nitrogen-loading figures in order to reach the most conservative conclusions possible.

**Lagoon Pond** was "very near its nitrogen loading limit," reported Mr. Wilcox, "if not already at it." It was long on a north-south axis, and its inlet was at the extreme north end, he said. "So when the tides flood into the pond," he related, "the high tide has a tendency to push water back up to the head of the pond, and the following low tide, well, the water that's at the head of the pond never really makes it out of the pond on that tide. It kind of sloshes back and forth, and it takes time for the water to get out of the system."

"So what that means in terms of nitrogen," Mr. Wilcox continued, "is that nitrogen that gets into the pond has an opportunity to be taken into the phytoplankton cycle and maybe get through the cycle once or twice before it actually exits the system. That means it can be building blocks for more phytoplankton than it would be in a pond that flushes and exchanges very quickly."

One of the symptoms in the Lagoon that was probably attributable to nitrogen loading, said Mr. Wilcox, was the decline and loss of a small eelgrass bed in the west arm of the Lagoon, which is closer to the heavier nitrogen-loading area associated with the downtown Vineyard Haven vicinity. He added, though, that there had also been small declines in the eelgrass beds in the main arm of the Lagoon, which is primarily a residential area.

Mr. Wilcox went on that Rick Karney, head of the M.V. Shellfish Group – whose facility was based about halfway up the length of the Lagoon on the Vineyard Haven side – had reported occasional low-water-quality periods at the hatchery, particularly during rainy spells. At those times the phytoplankton system in the pond seemed to convert to a breakdown system, wherein bacteria and fungi consumed the phytoplankton, which was suffering due to a shortage of sunshine.

On the other hand, Mr. Wilcox reported, **Sengekontacket Pond** was long on a north-south axis, but the inlets were on the east side. So the tidal flushing there was much more efficient, he remarked. However, it too had lost "pretty much all of its eelgrass," he said. "The only remaining eelgrass in the system at this time [is] scattered patches in Majors Cove and fairly substantial beds in Trapps Pond on the Edgartown end, but really none in the main body of the pond."

The cause of the depletion of the eelgrass beds from Sengekontacket, which had occurred in the late '80s and early '90s, was unclear, noted Mr. Wilcox. "It may have been wasting disease. It may have been nitrogen loading. We don't know," he said.

Next, Mr. Wilcox addressed the **groundwater divide** that had been described by Mr. Guswa. "It makes sense that the water would flow off the high point in either direction," he remarked. He then described how the water table did not really mirror the surface water topography, although it did to a certain extent. "So it would make sense that the groundwater would follow a similar pattern," he said.

Mr. Wilcox continued: "However, the placement of the divide through the center of the property is reasonable, but it is not precise. And it's difficult to be precise without having a lot more ... data points. When you look at the groundwater contour map under the property, the curvature of the contours is very, very minor, a very small curvature. You try to place that divide at the point of maximum curvature of the contours... So it's a reasonable placement for the divide, but there is some uncertainty there."

Mr. Wilcox explained that this translated to a bit of uncertainty as to how much nitrogen and how much of the wastewater was going in each direction, particularly the nitrogen associated with the golf course itself.

The Water Resources Planner then turned to the **nitrogen-offsetting program** proposed by the Applicant, noting that the principles governing it were sound. "It really is a workable way to offset or mitigate impacts," he commented. "However, the location of the offsets is really important." For instance, he went on, the Island Elderly Housing facility was "right in the backyard of the golf course. If you offset nitrogen there, it's nitrogen that's not getting into the groundwater [and] you're really offsetting the impact of the golf course to a certain extent, because that groundwater flows pretty much together into the Lagoon, and there's a measurable compensation that goes on right at that point."

On the other hand, Mr. Wilcox pointed out, the groundwater under the Tisbury Marketplace drained probably for the most part into the west arm of the Lagoon and perhaps drained somewhat into Vineyard Haven Harbor. "So that offset, although I think it's beneficial and the west arm needs help," he observed, "it doesn't directly offset the impact of the golf course nitrogen loading as well as the Island Elderly Housing does."

The Applicant's team had used the Title V design flows in calculating the offsets, explained Mr. Wilcox. "In actuality," he said, "we don't know what the amount of wastewater is that goes through Island Elderly Housing or the Arena or the Tisbury Marketplace. I believe there may be some metering available from the Tisbury Marketplace."

Mr. Wilcox continued his explanation: "And so the concentration of the nitrogen in the wastewater times the volume of daily wastewater production gives you the weight of nitrogen. So if there's uncertainty in the volume of wastewater, there's uncertainty a little bit in the amount of nitrogen that's being released by those systems. And so that translates to a little bit of uncertainty about the amount of nitrogen offset that can be had by upgrading these systems with the denitrification systems."

Mr. Wilcox moved on to the yellow sheet in the *Staff Report*, which he described as "my contortion of Charlie [Natale]'s figures." What he had done, he explained, was stretch to the farthest point possible the nitrogen that the course would be adding to the groundwater. "I'm not even sure the leaching rates I used are probable maximums," he noted.

Concurrently, continued Mr. Wilcox, he had reduced the offset load claimed by the Applicant's team based upon his belief that the flow from the sources was probably not as high as they had assumed. He then went down the list of sources. The Applicant's figures showed that the total Down Island site-wide loading would come to 1,309 pounds per year, with the portion of that going into the Lagoon being 622 pounds.

In his calculations, explained Mr. Wilcox, he had assumed that there might be as much as a 25 percent leaching loss from the tees and greens – Mr. Natale had used a 13.8 percent rate in his figures – and as much as a 20 percent leaching loss from the fairways and the primary rough – Mr. Natale had used 9.75 percent. Mr. Wilcox had also assumed that the concentration of wastewater nitrogen from the golf course would be 5.0 milligrams per liter, while Mr. Natale had assumed 3.0 milligrams per liter.

Based, then, on Mr. Wilcox's assumptions, the probable maximum loading to Lagoon Pond from the Down Island Golf Club site would come to 1,410 pounds (as opposed to Mr. Natale's estimation of 622 pounds).

Mr. Wilcox then went over the Applicant's **offset figures for Lagoon Pond** resulting from the programs at Island Elderly Housing, the Tisbury Marketplace and the Webb's Campground, plus some additional offsets from various sources. For this side of the equation, Mr. Wilcox said, he had contracted the numbers by assuming that the actual wastewater flow was 60 percent of Title V allowed flow, which, he thought, was "in the ballpark of what a residential house would produce. And Island Elderly Housing, I think we can argue, is a lot of residences packed together." And in his calculations, explained Mr. Wilcox, he had left out the Webb's Campground offset numbers since the campground had not been operating for some time.

Using those assumptions, concluded Mr. Wilcox, he had come up with total offsets of 2,069 pounds per year, as opposed to Mr. Natale's estimation of 2,942 pounds per year. "You can see that even stretching the numbers, as far as the Lagoon side is concerned, they're still offsetting their load," he stated. Mr. Wilcox then noted another assumption he had made: that half of the loading the Applicant was estimating would go into Nantucket Sound would, in fact, go into the Lagoon.

Mr. Best began to ask Mr. Wilcox a question, but the Hearing Officer requested that he wait.

Mr. Wilcox then went over the figures for the **possible range of nitrogen loading for Sengekontacket Pond**, as graphed on page 8 of the *Staff Report*. The Applicant had calculated the golf course's load to Sengekontacket at 411 pounds per year, while Mr. Wilcox's maximums – with the same sorts of assumptions made with regard to the Lagoon Pond figures – had come to 1,109 pounds. He explained that he had contracted the offsets from the Martha's Vineyard Arena but had left the added offset of 125 pounds per year alone. So while the Applicant had calculated an offset of 670 pounds per year, Mr. Wilcox had arrived at an offset of 399 pounds.

Mr. Wilcox added that he had done a preliminary nitrogen-loading estimate for Sengekontacket Pond. "And the tolerance for the pond is approximately 21,000 kilograms and the watershed's approximately 4,000 acres. So the loading, if you just distribute it over the whole watershed, that's allowable is around 5.0 kilograms [per acre], which is around 11 pounds per acre," he said. "And I think if you multiply out the number of acres [of the golf course] in the Sengekontacket watershed with this offset, they're going to be below that limit."

Mr. Wilcox noted that he, like Mr. Natale, was not as concerned with "the Sengekontacket side of things because it is so much better flushed."

Next, the Water Resources Planner turned to item 4 on page 2 of the *Staff Report*, which concerned the **system for monitoring nitrogen output**. One of the things that should be measured, he said, was the actual leaching loss from the course; another was the actual nitrogen load coming out of the upgraded systems. Still another was the load provided by the on-site wastewater treatment plan. The last factor to consider, he said, was the water table and the effect the withdrawal for irrigation purposes would have on the groundwater beneath the course and extending over to the Lagoon Pond public supply.

"My feeling is, I would prefer to see more money be put into the lysimeters and, if need be, less put into the monitoring wells," Mr. Wilcox remarked. "The reason for that is it's very difficult to get what I would feel is a balanced ... groundwater sample and convert that to what's actually being lost from the golf course."

Mr. Wilcox explained: "Whereas, if you've got pan lysimeters, you can measure exactly what's infiltrating beyond the root zone and you don't have to worry about dilution in the groundwater and you don't have to worry about whether your well stream is a little bit too deep and so it's actually sampling groundwater that is recharged off the site. Or it's [the well stream is] maybe a little bit too high and it's actually sampling groundwater that's recharging from your unmanaged land or maybe a mix of unmanaged land and golf course." He concluded, "I see well water quality data as being very difficult to interpret."

Mr. Wilcox then described how all of the greens would be underlined with an impermeable membrane such as a type of geo-fabric and how the greens would discharge off to the side into a vegetative swale. "That allows whatever nitrogen that gets through the green plant material to have sort of a second go by being infiltrated in the grass in the vegetative swale," he said. "But it also allows an opportunity to sample exactly what's coming out of the green if those liners are installed. So you can sample the outlet."

Mr. Wilcox emphasized the importance of carrying through the monitoring proposals. He then commented that the environmental impairment insurance policy was a good idea. However, he added, it might take litigation to pry loose the resources promised by such a policy. He himself had floated the idea of having some sort of performance bond with a release schedule that depended on how well the entire project progressed and how much nitrogen was actually removed.

#### **Questions From the Commission Members Regarding the Staff Report.**

Mr. Best had a question about how the **charts on the yellow sheet of the Staff Report** had been set up. Mr. Wilcox explained: the first column contained annual loading as projected by the Applicant's team for all the nearby bodies of water, that is, Lagoon Pond, Sengekontacket Pond and Nantucket Sound; the second column contained loading and offset numbers as estimated by the Applicant's team for Lagoon Pond (on the first yellow page) and Sengekontacket Pond (on the second yellow page); and the third column listed Mr. Wilcox's probable maximums for the loading and minimum offsets into these ponds according to his own calculations.

Kenneth N. Rusczyk, the Oak Bluffs Selectmen's Appointee, wanted to know if any attempt had been made **using dye to identify which systems around Lagoon Pond were working properly** and which were not. "I think the short answer is no," replied Mr. Wilcox. "Dye-testing would be really tough to do because ... you pump the dye in the toilet and flush it, and it goes into the septic tank, and if the septic tank is full, maybe it goes out into the leaching pit, and then it's got to get into the groundwater and travel to the pond. It works great if you've got a pipe, a straight pipe going into the water ..."

Mr. Wilcox then described some testing that had been done by Bruce Poole (testing that in Mr. Wilcox's opinion should be continued), who had sampled some of the seeps by just putting in a small collection pipe and drawing water out of the pipe, or by excavating a small hole, even in the beach, and collecting a sample from there. "And he has found

high levels of nitrogen in some of those seeps," reported Mr. Wilcox, "and certainly the higher-density residential areas that you have around the Lagoon, up toward, around Brush Pond – there's a good deal of nitrogen going into the groundwater from those residences, and it's certainly having some effect."

Chairman Vercruyse recalled that in the earlier proposal, the Applicant had **planned to use the wastewater treated on-site for irrigation**. "Is that still in place?" he asked. Mr. Wilcox answered that he was not sure if it was specifically mentioned in the black binder. "It is," said Jennifer Rand, the Commission's DRI Coordinator. Mr. Wilcox noted: "You could argue that 10 percent of the nitrogen that's in the wastewater gets to the groundwater and the rest gets taken up by the plants. So conceivably that could lower the wastewater level."

And would that be another recycling through the soil? asked Chairman Vercruyse. "Yes, exactly," responded Mr. Wilcox. "It gets treated to either 5 or 3 milligrams per liter in the wastewater treatment system. Then it goes out and gets sprayed on the grass, and the grass takes up whatever ... nitrogen it can take up. And maybe a little bit gets by. So, yes, it gets a second treatment."

Mr. Flynn referred to Mr. Wilcox's mention of downtown Vineyard Haven's being a major contributor of nitrogen to the Lagoon. [See page 15 of these Minutes.] Had Mr. Wilcox taken into consideration **the wastewater plant and the sewerage that the Town of Tisbury was doing**? Mr. Flynn wondered. "That will certainly make a big difference," remarked Mr. Wilcox. "It will get out a chunk of the Beach Road nitrogen, and it will take out some of the sites right around Memorial Park."

Mr. Wilcox added that currently **"a huge amount of runoff" came down the slopes of streets like Causeway and Skiff** and went into the Mud Creek area. He had been working with the Tisbury Highway Department, he said, to try to secure some grant money to try to get that runoff into the ground and get filtered. "That will take a little of the nitrogen out of it and will improve the situation, I think," he concluded.

Responding to another question from Mr. Flynn, Mr. Wilcox explained: "The sewage collection system will take the wastewater out of pretty much all of Beach Road and wherever else the sewer goes, and will take it up to a treatment plant. It'll treat it and discharge it in a leaching field or two, one of which, I think, drains toward Tashmoo. The other drains toward Vineyard Haven Harbor. So in a sense, that will be eliminated from the Lagoon completely."

Mr. Flynn asked if Mr. Wilcox had an estimate of how many **pounds of nitrogen per year the sewerage would eliminate**. "I don't know," replied Mr. Wilcox. Would it be on the order of the net offset from the upgrading of the Tisbury Marketplace system? inquired Mr. Flynn. "Oh, it would be greater than that," said Mr. Wilcox, "probably multiplied by 10 or 20, with all those different sources there."

Mr. Flynn also wanted to know if the Applicant's contention that the **groundwater flow** from the golf course would be **more toward Sengekontacket Pond** than it had been in the earlier plan was accurate. "There'd be more nitrogen loading," said Mr. Wilcox, "because they've moved more of the golf course to the Sengekontacket side." "So it would be less damaging to Lagoon Pond, which is more sensitive," noted Mr. Flynn. "When compared with the original plan that was denied, yeah, definitely," declared Mr. Wilcox.

Ms. Ottens-Sargent wanted to hear more about **Aqua Shade**, a product that Mr. Wilcox had referred to on page 6 of his *Staff Report*. "It's that pretty blue color that you see, I believe, in Peter Rosbeck's pond on the West Tisbury Road when you drive by," replied Mr. Wilcox. "I don't think water's naturally that color... It's a dye material that is added to ponds to reduce the light penetration, so it reduces the phytoplankton growth so you don't get that swampy look."

Are there any ill effects from that? asked Ms. Ottens-Sargent. "Not that I'm aware of," said Mr. Wilcox. Has it been used in the Lagoon when there have been algae blooms? inquired Ms. Ottens-Sargent. "No, no, it wouldn't be used in a tidal pond," answered Mr. Wilcox. "They're planning to use it in their irrigation ponds that are on site just to keep them attractive."

Mr. Athearn wondered if soil in the 80 or so feet that the water traveled from the turf to the groundwater might have some characteristic that would cause the water to flow in an unexpected direction. Mr. Wilcox replied that there was the possibility of material like **cement cobble or silt being present, which could shift the direction of the flow**. "But I don't recall it being mentioned in any of the drilling logs that are in the reports," he said. "Maybe before I come down one way or the other, I should go back and look at those drilling logs."

Mr. Athearn also wanted to know if the **pan lysimeters** provided accurate per-square-foot measurements of nitrogen. Mr. Wilcox explained: A number of areas for each type of turf cover were chosen, and the lysimeters would be buried under the root zone; each lysimeter would have a semi-permeable top, which would not let silt and the like into the collection area; this top *would* let into the pan the rainwater and irrigation water that percolated down through the soil; a collection port would be provided from which one could draw the sample.

"And so," continued Mr. Wilcox, "if you have a pan lysimeter under the fairway and your average nitrogen concentration over the course of the whole year is, let's just say, one milligram per liter – you know how many acres of fairway there are and you have a rough estimate of how many cubic feet or gallons of water are recharged through that fairway. And you can therefore multiply the volume by the concentration and come out with a weight of nitrogen."

Responding to another question from Mr. Athearn, Mr. Wilcox explained that the bigger the pan and the greater the number of lysimeters, the better. "Concentration, you know, is a funny thing, because it can be really turned around by dilution," observed Mr. Wilcox. "So if somebody wanted to manipulate the data, they could irrigate the dickens out of the golf course before a sample was going to be taken. So I think there's got to be some sort of disinterested third party who takes the samples, who just shows up and there they are."

Ms. Greene wanted to know if there was any point in putting in monitoring wells, since they only collected what went directly into the well. Mr. Wilcox replied that this would be his temptation "from the water quality end of it. I think that several of them – and there may already be enough of them in there to carry this out – are necessary to determine whether the drawdown is more than it should be and whether their pumping rate needs to be adjusted. But my preference would be, as I said, to put more pan lysimeters in and fewer monitoring wells, because they only sample a small area."

Another problem with the wells, he added, was just how the groundwater stream was caught. "You might have a stroke of bad luck and hit somebody's effluent stream from their septic system. Then the alarm bells go off," he said.

Mr. Woodruff wanted to confirm with Mr. Wilcox that in fact **some of the fertilizer would be run through the sprinkler system.** "Yeah, I believe a portion of the fertilizer," answered Mr. Wilcox. "There are a number of different kinds of fertilizer products that are proposed, and at least one of them was soluble. I think it might be Coron. Some of them are clearly organic materials. Some of them are, depending on how you define organic, maybe marginally organic, and some of them are clearly not organic."

Mr. Wilcox referred Mr. Woodruff to page 6 of his October 18 *Staff Report*, which contained an extract on some of the different fertilizers that had been proposed by the Applicant in Appendix N of the 1999 submission. "As you can see, ammonium sulfate's not an organic material, but it's a ready source of nitrogen," he said. "IDBU, you know, strictly speaking, it's by a chemist's definition ... organic. But 30 percent nitrogen fertilizer for an organic gardener would be an impossibility."

Mr. Woodruff also wanted to know if the Applicant had submitted a schedule for the fertilizer application at various stages of turf development. Mr. Wilcox replied yes, that this was contained in Appendix N, contained in one of the three volumes of the first plan. "They have a sort of a **proposed fertilizer scheme** for each of the three years, I believe, and for each of the different turf types," he said.

Mr. Wilcox added that the fertilizer which would be applied through the fertilizer system – Coron – was proposed to be applied at a rate of one-tenth of a pound per nitrogen per 1,000 square feet. "They're going on at really low rates and maybe more frequent

applications," he remarked, "and that's a good thing because that gives the turf a chance to pick it up before it gets past the root zone."

Mr. Israel asked if there were **different flushing rates for different parts of the ponds in question**. "Yes," responded Mr. Wilcox, "Trapps Pond is a great example. When you drive by Beach Road and you're going down by Edgartown and you're looking at, let's say, a flood tide, the water just boils through that culvert into Trapps Pond. And that's because it's all kind of stuffed up on the Sengekontacket side and it's struggling to get through. And vice versa, on the ebb tide, it kind of stacks up and boils out going into Sengekontacket."

Mr. Wilcox continued that he had run an estimate for the flushing time of Trapps Pond. "I can't tell you off the top of my head what it is," he said, "but it's substantially more than Sengekontacket. Sengekontacket is on the order of, I think, three days for a 95 percent exchange. Trapps might be 12 days or something [on] that order."

However, Trapps Pond was, he added, quite removed from where the nitrogen loading from the golf course could be expected to occur. Responding to another question from Mr. Israel, Mr. Wilcox reported that for the Lagoon Pond flushing rate, the tide gauges had been put in at the drawbridge, at Maciel Marine and at the shellfish hatchery to try to get at the problem of different flushing rates in different parts of the Lagoon.

In response to a comment from Mr. Israel, Mr. Wilcox noted that there was no wastewater going into Sengekontacket, so the "5 milligrams per liter" in the third column on page 8 of the *Staff Report* should be crossed out.

#### **Questions from the Commission Members to the Applicant.**

Richard L. Taylor, a Governor's Appointee, wanted to know: 1) how one would access the funds promised by the insurance policy; 2) why had the Applicant chosen \$10 million as a limit; 3) and what the relationship was between the **Island Pond Fund** and the **environmental impairment insurance policy**.

Mr. Ward replied that the Island Pond Fund and the insurance policy were "totally separate issues." The fund would be set up strictly to provide money to fund upgrades and repairs of septic systems, he explained, while the insurance policy was something that had been suggested to the Applicant. "If there's a problem, it's like any other kind of insurance," said Mr. Ward. "You have to file a claim. You have to present a case. They have to evaluate the claim, and then they'll decide to pay it ... If there's a problem, they're going to pay."

Mr. Taylor asked for an example of what a claim might be. Mr. Ward provided the example of a fertilizer spill on the property which ran down into the pond, killing all the shellfish. One would have to evaluate what the financial loss was and then use the policy to pay for that loss, he said.

Mr. Taylor suggested that Mr. Ward file with the Commission an example of a prototype of an insurance policy from one or more of the companies that issued this type of insurance. "Otherwise, it is illusory," he declared. "You just simply reference the ten-million-dollar policy, you give me no itemization of what a real claim would look like. So the public has no feel, if there's a catastrophe here, there is relief." "I can certainly provide that," responded Mr. Ward, who added that a sample policy was in the black binder, although the specific policy for the golf course had not been drawn up because the course did not yet exist.

Mr. Taylor again inquired, "Where did ten million dollars come from?" "I guess it came out of thin air," replied Mr. Ward. "It came from suggestions we heard from people we contacted, as a reasonable number." Mr. Taylor expressed his concern that a worst-case scenario should be studied to determine if \$10 million would be enough to cover the damage done. "To me, the ten million dollars should be related to some kind of problem," he said. Mr. Ward asked if what he wanted to see was some kind of calculation. "Precisely," answered Mr. Taylor.

Ms. Ottens-Sargent asked Mr. Mone to define the **difference between an insurance policy and a bond**. Mr. Mone gave the example of a performance bond for a construction project that had been put out to bid by a Town. The performance bond ensured that if the construction company went out of business, the Town would be able to access that money to finish the project. "So it's money basically held hostage in the event of something happening," he said, "and they can release that money if performance wasn't achieved."

Ms. Warner wondered if the exhibits in the black binder included any projections on the amount of **electrical use on the property**. "Because it's my belief that [with] all this water being pumped, you might be making a fairly large demand on our limited electrical supply," she explained. "So if you can't answer that tonight, I'd like to hear about that in the next session." Mr. Mone said he would have to wait until the next session to have that data.

Ms. Cini wanted to know if there was any room in the mission of the Island Pond Fund to **hire a consultant to evaluate the monitoring program**. Mr. Ward replied that the Articles of Organization would not prevent the Fund from doing that and that this could be provided for in the bylaws of the nonprofit corporation.

Chilmark Commission member at large Robert Zeltzer asked Mr. Mechur **why the lease with the Town for the campground would run specifically for 20 years**. "If it's going to be a long-term benefit for the Island, why 20 years? Why not 99 years or perpetuity?" he inquired. Mr. Mechur responded that it "could certainly be adjusted" and that the current arrangement allowed for 40 years total. Mr. Ward stated that the Town was free to renew the lease so long as they could pay the \$1 rent.

Responding to a question from Ms. Greene, Mr. Ward explained that the Town would have the easement for the landlocked parcel in perpetuity. Ms. Greene suggested that the Applicant look at a lease for the campgrounds that would give the Town at least 100 years. Mr. Mechur noted that if the project got that far, this could be worked out at the local level with the Planning Board.

Mr. Best referred to the fact that in his offset figures, Mr. Natale had indicated that the campground made a nitrogen-loading contribution of 495 pounds per year and that Mr. Wilcox had discounted this since the campground had not been in operation for some years. If the Town came back with a campground, what was the Applicant proposing for the mitigation for the additional nitrogen loading generated thereby? he wondered. Also, would that be left up to the Town to deal with, or would the Town be working with the Applicant? "My suggestion would be that they put in composting toilets and just basically eliminate the nitrogen loading," answered Mr. Wilcox.

Mr. Best also wanted to know if having the flows at different times of the year had any significant effect on the receiving ponds. For instance, he said, the arena would have a relatively higher flow in the winter season, when the golf course probably would have low or no flow. "The short answer to that is no," responded Mr. Wilcox.

Mr. Wilcox then elaborated: "I think it gets so complicated, it's really hard to sort out, because the groundwater moves about a foot per day, so if it's 3,000 feet from the Lagoon, it's going to take nine years to get there." He did not think there was a way, he added, to predict at what time of year the water would arrive from different sources. "That's why we use annual load, over the course of a year," interjected Mr. Natale, "because it helps average out and factor in all the differences ..." The time was 8:59 p.m.

#### **Questions and Testimony from Public Officials.**

**John Bradford of the Oak Bluffs Planning Board** wanted to know if any analysis had been done to **compare the effects of the development of the golf course project with other possible developments on the site.** Mr. Mechur replied that, as those present were aware, there was an alternative proposal for the site. It was the Applicant's view, he said, that since there would be only one entity to be monitored, the golf course was a better alternative than 90 houses as of right and 90 guesthouses by Special Permit, which is what could be built there with three-acre zoning.

Mr. Wilcox said that his calculation for figuring the number of houses that could be built on the property in question included taking out 10 percent for roads and so forth. Thus, he had come up with a total of a possible 81 houses on the lot. If they were occupied by 2.5 people, each of which averaged 2.5 kilograms of nitrogen production per year, that would come to 500 kilograms or 1,000 pounds, he said. "Then you have to add in lawns," he noted, joking, "Just maybe the short answer is, I just don't know."

**Paul Bagnall, the Edgartown Shellfish Constable and Marine Biologist**, remarked that it appeared to him "that Sengekontacket is kind of getting the short end of the stick for the remediation. If we move the boundary line a few hundred feet that way, which is the line for the watershed divide, and take the Ice Arena out of the equation, I think the answer for Sengekontacket is on-site remediation of individual homes."

**David Grunden, Shellfish Constable for the Town of Oak Bluffs**, said he wanted to reiterate his concerns about the nitrogen loading and potential detrimental effects to the pond. "I ask that the Commission look at that issue closely as they reconsider," he concluded.

"What are your concerns, David?" wondered Mr. Flynn. One concern, replied Mr. Grunden, was ensuring that the remediation programs did, in fact, work. In addition, he went on, there seemed to be "some question on the numbers and so forth. I would really like to make sure that that remediation program will work if it's approved because I do believe that Lagoon Pond is really at its maximum load, not only showing loss of eelgrass in certain areas, but we're also seeing poor water quality."

Mr. Flynn wanted to know if Mr. Grunden was satisfied with Mr. Wilcox's presentation. "Yes, I am," responded Mr. Grunden.

**Derek Cimeno – Tisbury's Shellfish Constable and Herring Warden, as well as a board member of the Martha's Vineyard Shellfish Group** – wished to reiterate what Mr. Grunden had said. He pointed out that a report by Commission Staff member Jo-Ann Taylor, for instance, showed that the Lagoon was "at the brink of nitrogen load – it can't do any more." In addition, the Department of Environmental Management had done a study that had documented the die-off of eelgrass beds in the pond and the threats to bay scallops on the bottom.

Mr. Cimeno continued that he thought the Towns of Oak Bluffs and Tisbury were working hard to prevent further degradation to Lagoon Pond. For example, the sewerage of Beach Road would help, he said, and recently Tisbury and Oak Bluffs had received "a couple of hundred thousand dollars from Coastal Zone Management to relieve the runoff going into the pond, relieve the hydrocarbons, the cadmium, the feces, and the Towns are really working hard to reduce the nitrogen."

Mr. Cimeno remarked that with a shellfish hatchery, a lobster hatchery and a herring run in the Lagoon, "to add another fifteen hundred, two thousand pounds of nitrogen to the pond – I think we're playing Russian roulette with the pond, and it's a real scary option for us to take as far as the stewards of the pond and the people that look out for the pond."

He added that the Applicant's gesture of donating a few hundred thousand dollars was good, "but on my side of the pond last year, we had a half a million dollars in quahogs

taken commercially in one year." He referred as well to the problematic flushing rates of the Lagoon.

"You just thoroughly confused me," commented Mr. Flynn, who pointed out that Mr. Cimeno had just said that he was concerned about the 1,500 pounds of additional nitrogen that would go into the pond as a result of the golf course proposal. Yet there had been testimony that evening – "at least I hope there was" – that an offset would actually take more than 1,500 pounds of nitrogen out of the pond, he said. Mr. Cimeno replied that he was simply saying that as Towns they had the power to mitigate the nitrogen loading with system upgrades and so forth. "No question," remarked Mr. Flynn.

Mr. Rusczyk wanted to know what Mr. Cimeno's position would be toward building 81 houses instead, putting another 1,100 pounds of nitrogen into Lagoon Pond in addition to runoff from the lawns. Mr. Cimeno pointed out that right now they were looking at a golf course. And if houses were to go in instead, he said, the Commission had the power to oblige the builder to put in a tertiary wastewater treatment system right on the property. Finally, he noted, the housing development would probably use less water than a golf course would.

Ms. Ottens-Sargent made the point that currently the Southern Woodlands was a pure recharge source and it sounded as if one of Mr. Cimeno's concerns was that any additional nitrogen runoff into the pond would upset further the health of the pond. Mr. Cimeno noted that as pure runoff, water now coming from the Southern Woodlands helped to dilute the stagnant water at the far end of Lagoon Pond. He added that a lot could be done through the Towns, for instance, insisting that houses be set a certain distance from the pond or requiring denitrification systems.

Mr. Toole then read into the record a **letter dated October 17, 2001 from Richard R. Mavro, the Oak Bluffs Building and Zoning Official**, who was not able to attend the Hearing that evening. *[See the meeting file for a copy.]* The letter read in part: "[P]lease accept this letter as my full support for the proposed Down Island Golf Course Project."

#### **Testimony from Members of the Public.**

**Ann Margetson of Oak Bluffs** remarked, "I've heard talk about nitrogen. I haven't heard enough talk about anything except nitrogen." She was concerned, she continued, that with development the pond would be receiving something less than pure from the property in question. "If Sengekontacket is so healthy, why does it smell so terrible at the Edgartown end all summer long?" she asked. "It used to come and go, and now it never goes. Why is it dying and changing? Perhaps if Farm Neck came before us today, we wouldn't pass it."

Ms. Margetson also wondered what would happen to the water supply in the event of a drought. All the figures presented were based upon the current status of water, she said. "I think we're experiencing so many emergencies now – environmentally and socially

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and politically – that we have no idea whatsoever of what water will mean to us in the future,” she declared, “and I ask that we save our water to be used in a more necessary way.

Ms. Margetson continued: “I do not think that growing grass to pay golf on is the same as farming for food, because I have heard it said that farmers use nitrogen. I do not think that growing food can be compared in any way to feeding a golf course.” Furthermore, she said, the history of the efficacy of experts was “very poor,” as evidenced by the Woburn experience. “Even the best efforts of our State and public officials to monitor things have gone awry. Why should we think that any kind of monitoring here will be better than what has gone before?” she asked.

**Richard Lochridge of Chilmark** began by saying that he would like to play on the proposed course. “This process has been great,” he then remarked. “I think it’s made the golf course proposal better ... It seems to me that this is a great example of local government doing its job ...” He added that the course had a great potential to be a great benefit to the community.

**Linda Marinelli of Oak Bluffs** commented, “I agree with that gentleman. It’s a wonderful project. So let’s put it in Chilmark.”

**Cheryll Sashin of Oak Bluffs** said that it was quite evident that the Applicant’s team had come back with a proposal that “can benefit this Island in a great many ways.” It was important for the Commission to recognize the fact, she went on, that the Applicant was offering things there were not necessarily required. “I think it’s a 100 percent positive for Oak Bluffs and for Martha’s Vineyard,” she concluded.

**Eric Shenholm of Oak Bluffs** said that one thing he had often heard from the people who lived and worked on the water was that any more nitrogen loading – “like even a few pounds” – would be bad. “What that tells me is that development at all is bad,” he declared.

Mr. Shenholm added that in his experience as a builder, the Applicant could not simply come in and build 300 houses, as he had threatened to. “It has to be approved. You can’t just buy a piece of property and do what you want with it,” he said. “As a public, I don’t think we should be snowed by this whole thing.” Mr. Shenholm also raised the possibility that a groundskeeper applying fertilizer might simply drive around a lysimeter.

**Al Mahoney, an Oak Bluffs shellfisherman**, stated that the issue of the ponds was important to him. “But as an Oak Bluffs resident, as I look at this plan and visualize homes or any developments, which *is* an eventuality whether we like it or not,” he continued, “I see the same amount of fertilizer on lawns going right down. I’m not a scientist. I’m not saying it’s going to happen. But it’s a distinct possibility when you have residences, they’re going to put fertilizers on their lawn, and I’m thinking the same amount there is still going to be leaching into our groundwater.”

Mr. Mahoney remarked as well on the "beautiful open space" of the Farm Neck Club (of which he was not a member), available for cross-country skiing and other activities. He concluded, "It is not an issue about golf. It's an issue about the environment and the state of the groundwater. Golf is not an issue." A private golf club, he said, was no different than a private beach up-Island.

**Peggy Vance of Vineyard Haven** remarked that when she looked at the Tisbury Waterworks water quality table, it indicated the detected level of nitrates as 0.95, which was on the high end. When she looked at Oak Bluffs, the detected level was 0.78, and then when she looked at a well on a family's property on Chappaquiddick – an island that had its own aquifer – and there the level was 0.4. "And I just want the Commission to be concerned about our water quality," she declared, "and that we need to work on all the ways that we can make our figures, you know, better, because if Chappaquiddick isn't concerned, they're going to be reading, you know, point-nine-five, point-seven-eight, and *you're* already up there."

#### **Questions and General Comments from Members of the Public.**

**Rupert Robinson** of Oak Bluffs wanted to know what the golf course was going to do for the recreational person in the Town of Oak Bluffs. Mr. Toole indicated that this aspect of the proposal would be covered in another Hearing session.

**Owen Larkin of Edgartown, Managing Partner of the Vineyard Golf Club, Inc.**, remarked that, quite frankly, he felt ambivalent about the Down Island Golf Club proposal. He said that he could argue the merits of the golf course or speak in opposition to it. "I've been here now for four and a half years, I live in Edgartown," he said, "and the thing that keeps percolating to the top is the culture of Martha's Vineyard. So, while these estimable gentlemen pay you folks great deference and homage, the guy who writes the paychecks calls you ..." *[Mr. Larkin used two rude terms.]*

"So let's address hypocrisy," Mr. Larkin continued. "I think that's enough," interjected the Hearing Officer. "We are dealing with the project. We're not dealing with personalities here, we're not getting into any of the underlying politics." Mr. Larkin asked if he could comment on the project management, then began to say, "I want to know why..." He stopped in mid-sentence and walked away from the microphone. "That is so out of line," commented Mr. Rusczyk.

**John Curelli of Oak Bluffs** asked if there was an inventory of chemicals other than nitrogen that the Applicant planned to have applied to the golf course. Mr. Toole explained that that subject would be coming up in another Hearing session.

The time was 9:30 p.m. The Hearing Officer announced that the Hearing would be continued to Thursday, November 1, 2001, at 6:30 p.m. in the same place, the Regional High School cafeteria. Ms. Rand announced that two visits to the Down Island Golf Club

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site had been scheduled: one for Tuesday, October 30, at 4:00 p.m.; and the other on Saturday, November 10, at 9:00 a.m. The Meeting recessed for two minutes while the audience members left the room.

**Welcome to Governor's Appointee Joseph P. Kelley.**

Chairman Vercruysse introduced the Commission members to Joseph P. Kelley, a Governor's Appointee who was attending a Commission Meeting for the first time.

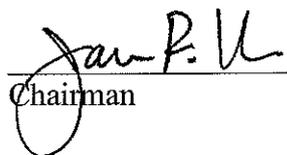
**Appointment of the Nominating Committee.**

Chairman Vercruysse noted that the Nominating Committee had to be appointed during the October Regular Meeting, that is, that evening. Said committee had to consist of one member from each of the six Towns, plus the County Commission representative. "I accept," said Mr. Flynn.

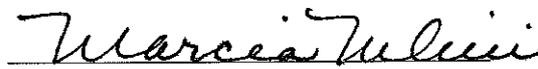
The Chairman appointed the following members to the Nominating Committee: Christina Brown (Edgartown); Daniel Flynn (County Commission); Megan Ottens-Sargent (Aquinnah); Trisan Israel (Tisbury); Kenneth Rusczyk (Oak Bluffs); Andrew Woodruff (West Tisbury); and Robert Zeltzer (Chilmark).

Ms. Warner then announced the schedule of sessions for the Sustainability Indicators project.

The Regular Meeting adjourned at 9:35 p.m.

  
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Chairman

1-17-02  
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Date

  
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Clerk/Treasurer

1-17-02  
\_\_\_\_\_  
Date

PRESENT: J. Athearn; J. Best; C. Brown; M. Cini; M. Donaroma; D. Flynn;  
J. Greene; T. Israel; J.P. Kelley; M.C. Oglesby; M. Ottens-Sargent;  
K. Rusczyk; L. Sibley; R.L. Taylor; R. Toole; J. Vercruysse;  
K. Warner; A. Woodruff; and R. Zeltzer.

ABSENT: A. Bilzerian; and E. Horne.

*[These Meeting Minutes were prepared by Staff Secretary Pia Webster using shorthand notes taken at the Meeting, as well as a tape recording of the Meeting.]*

***Summary of Revisions to the  
Meeting Minutes of October 18, 2001  
Proposed by the Commission Members  
in the Meeting of November 29, 2001***

*[An excerpt from the Meeting Minutes of November 29, 2001 follows immediately. It describes the revisions requested by the Commission members with regard to the Meeting Minutes of October 18, 2001.]*

<b><i>Page</i></b>	<b><i>Para.</i></b>	<b><i>Sent.</i></b>	<b><i>Proposed Revision</i></b>
6	2	1	Delete the phrase "a Power Point image program" and substitute the phrase "slides to illustrate his points".
29	4	1	Delete the words "Brookline and".