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Minutes of the Commission Meeting Held on August 23, 2012 In the Stone Building 33 New York Avenue, Oak Bluffs, MA

IN ATTENDANCE

Commissioners: (P= Present; A= Appointed; E= Elected)

P John Breckenridge (E-Oak Bluffs)	P Chris Murphy (E-Chilmark)
P Christina Brown (E-Edgartown)	- Katherine Newman (E-Aquinnah)
- Peter Cabana (E-Tisbury)	- Ned Orleans (A-Tisbury)
P Tim Carroll (A-Chilmark)	P Camille Rose (A-Aquinnah)
- Martin Crane (A-Governor)	P Doug Sederholm (E-Chilmark)
P Erik Hammarlund (E-West Tisbury)	- Linda Sibley (E-West Tisbury)
P Fred Hancock (A-Oak Bluffs)	P Brian Smith (A-West Tisbury)
P Leonard Jason (A-County)	- Holly Stephenson (E-Tisbury)
- James Joyce (A-Edgartown)	

Staff: Bill Veno (Senior Planner), Paul Foley (DRI Planner), Sheri Caseau (Water Resources Planner)

Chairman Chris Murphy called the meeting to order at 7:05 p.m.

1. MINUTES

Commissioners Present: J. Breckenridge, C. Brown, T. Carroll, E. Hammarlund, F. Hancock, L. Jason, C. Murphy, C. Rose, D. Sederholm, B. Smith.

Fred Hancock moved and it was duly seconded to approve the minutes of July 12, 2012 as written. Voice vote. In Favor: 6. Opposed: 0. Abstentions: 3. The motion passed.

Fred Hancock moved and it was duly seconded to approve the minutes of August 6, 2012 as written. Voice vote. In Favor: 7. Opposed: 0. Abstentions: 2. The motion passed.

2. ALTERNATIVE TREATMENT FOR WASTEWATER AND SALTWATER PONDS

Commissioners Present: J. Breckenridge, C. Brown, T. Carroll, E. Hammarlund, F. Hancock, L. Jason, C. Murphy, C. Rose, D. Sederholm, B. Smith.

Chris Murphy noted that this is a presentation before the Commission and not an endorsement by the Commission.

2.1 Presentation by Dr. John Todd

Dr. Todd presented the following:

- He has committed himself to protect the coastal shores of the eastern United States.
- The premise of the EcoMachines is to use the principles of ecological design and environmental engineering to design and operate revolutionary treatment facilities.
- The goal is to create simple, cost effective and aesthetically pleasing systems for the treatment and reclamation of water.
- He reviewed several of his projects to offer a flavor of the nutrient management that is currently going on.
- The Omega Institute in Rhinebeck, New York houses an EcoMachine that treats 50,000 gallons per day. Ecologically engineered wetlands surround the building and the building is designed to be carbon neutral. The EcoMachine component extends in the waste ways and raw sewage is sterilized. It is extremely people friendly for study groups, classes and even yoga classes have been held at it.
- Sewage treatment does not need to be ugly or smelly. The Omega Institute is an educational building.
- Restorer EcoMachines are designed to capture nutrients and improve the water quality.
- A project in Grafton, Massachusetts is treating oil contaminated canals along the Blackstone Corridor. Restorer technology floats on the river and circulates water in the canal. The facility in Grafton also has an EcoMachine housed in the greenhouse. It is designed to create an incubator to improve the canal water quality and hopefully spread downstream. When the project was started in June, the first sample had over an 80 % reduction of oils in the system.
- The use of the Eco Machine and the restorer are very powerful in intransigent situations.
- The Chesapeake Bay has had huge problems. A meat processing plant generates over one million gallons of water per day. They have built a restorer and it is beginning to grow and the native vegetation rate of growth for the root systems has enormous surface area. It has saved 74% on their energy bill and reduced the need to dredge.
- Another project is in Dallas, Texas along the Trinity River. They are trying to recreate the downtown corridor and have built two lakes to be recreational. The only source of new water comes from the sewer treatment plant. The challenge was to develop a technology to remove 10,000 lbs. of nitrogen per day and produce 4,000 lbs. of phosphorus. A floating park was designed and it will manage the nutrients.
- A map showing the badly degraded water along the coast of inshore oceans was reviewed. The same places that we are destroying are the places we need to protect the most.
- The Punawai Lake restorer on the Kona coast is at the Four Seasons Resort. It has saved them \$9,600 per month in managing the water.
- They are in discussions to combine restorer technologies with marinas. They are in an early phase of conversation with Kingsman Marine in Red Brook Harbor in Buzzards Bay. They began to develop a new technology called micro restorers that live on the moorings by using four or five basic biological pathways. It is still not fully developed.
- There are a number of different ways from upstream to the watershed to ocean management and collectively the paradigm is changing. These are ecological approaches that we are taking.

- They publish a journal called the Annuals of Earth and copies were given to the Commissioners.

2.2 Commissioners Questions

Doug Sederholm asked how many of the projects have outdoor components in temperate climates. How is the Eco Machine maintained in the winter months and do the plants go dormant?

Dr. Todd said the Eco Machines are usually in greenhouses. At the Omega site, the outdoor component remains biologically active. It is deep enough and maintains groundwater temperatures. At the chicken processing plant, if the bulrush is cut in late August and September, in a few weeks it wakes up. So in Maryland you have year round plant growth by tricking the plants in early Fall. In northern facilities where there is no danger of contaminating the outdoor environment we use tropical plants.

Fred Hancock asked what kind of maintenance is needed. **Dr. Todd** noted that they use water chemistry and hire people that are more geared to being gardeners. In environments like these, people want to be in these places. They have produced movies on the topic and in the Green Machine it shows a plant operator in Naples Florida. He is the best salesperson they have ever had. He loves working in the environment that has been developed.

Erik Hammarlund asked what the upfront costs are. **Dr. Todd** said that it varies. The Chesapeake project was one third the cost of the next lowest bid.

John Breckenridge noted that there is a keen key interest on the Island in nitrogen removal with root absorption type systems. The Department of Environmental Protection (DEP) has not accepted this as an approved and certified system. Does he have that approval for his technologies? **Dr. Todd** said that it is becoming increasingly accepted. On paper it is not accepted by the DEP. As an alternative septic system it is not approved, as a wastewater treatment plant it probably would be accepted since it is at the cutting edge.

Leonard Jason asked if Dr. Todd has designed a system in Harwich twenty years ago. **Dr. Todd** said he had in the summer of 1986 as a pilot and then a full scale facility was built for two years.

Paul Foley asked if it was possible to convert a conventional municipal sewer system. Dr. Todd said you would end up with a hybrid. It would be an engineered wetland to do pre-treatment before the treatment plant.

3. STUDY OF TICK BORNE DISEASES ON MARTHA'S VINEYARD.

Commissioners Present: J. Breckenridge, C. Brown, T. Carroll, E. Hammarlund, F. Hancock, L. Jason, C. Murphy, C. Rose, D. Sederholm, B. Smith.

Michael Loberg and **Matt Poole** gave the following presentation.

- There is an Island wide project that is being run by the Town Board of Health to understand the problems with tick borne illnesses.
- They are in year two of a five year program.
- Funding is through the Hospital; \$55,000 per year.
- Their mission is to reduce the incidence and severity of tick borne illnesses and medical consequences.

- They will also be doing an outreach program. Their goal is to reduce the incidents by 70% and they can have a measurable impact.
- They owe the All-Island Selectmen a series of recommendations to be rolled out in 2014.
- The primary concern of the Board of Health is sanitary but the biggest unmet health issue is the tick-borne incidents.
- They reviewed the number of prescriptions for Doxycycline and 70-90% are for tick-borne illnesses. It has increased from 1656 in 2009 to 2110 in 2011.
- They have several committees. He and Matt Poole are chairing the Steering Committee. They also have a Medical Education Committee and an Environmental Committee.
- They did interviews and questionnaires and looked at how public education can help reduce the issue. The results showed that 40% said a family member had a tick-borne illness. The 0-18 year old age group is the highest risk group, 25% of the outside workers would not seek medical help and 63% of the tourists did not know it is a health threat.
- They went into all of the grade schools with a program that we borrowed from the Cape. They are expanding the program into the tenth-grade health classes next year.
- They have produced eight new educational videos with Island opinion Leaders.
- Health agents meet every month and this is the first time they have a web site to include information on the subject. The website can be found at; mvboh.org.
- They are working with Nantucket, Barnstable County and students from UMass, Boston University and Tufts in researching and studying this issue.
- A speakers' bureau is being developed to promote education and research findings, as well as developing printed materials for Island visitors. Environmental programs are also being developed.
- Data is also being collected in Chappaquiddick and Naushon.
- The findings and data have been reviewed and 90% of the tick disease on the Island comes from the nymphs.
- Over the last year we have learned that prevention and education can provide an immediate reduction in risk.
- Measures can be taken when working or spending time outdoors such as the use of chemically bonded repellent socks and Permethrin spray for clothing, gear and tents. The ticks will drop off.

Christina Brown asked if it is the same as the mosquito spray that is used on Chappaquiddick.

Matt Poole said it is similar, one is organic and one is synthetic.

Christina Brown asked if there are any concerns using the synthetic spray on your skin. **Matt Poole** said that you apply it to the outside of your clothing so it is not absorbed through your skin. **Michael Loberg** noted that it is toxic to fish but it is similar to pharmaceutical products such as the shampoo that is used for lice.

4. NEW BUSINESS

Commissioners Present: J. Breckenridge, C. Brown, T. Carroll, E. Hammarlund, F. Hancock, L. Jason, C. Murphy, C. Rose, D. Sederholm, B. Smith.

4.1 Reports from Chairman, Committees and Staff

Fred Hancock updated the Commissioners that some progress has been made on the MVTV project. They are operating under a temporary construction agreement for one year. They have a deadline of August 31, 2012 to come up with a permanent guideline. The temporary agreement is affecting the bottom 25 to 30 feet of the driveway and it is not a major disruption of the Church parking area. The MVC has sent a letter that stated they (the Church) are in non-compliance and if they do not complete the access agreement, the Commission will ask the Building Inspector to pull their Certificate of Occupancy. It seems to have worked. Paul Foley sent a friendly reminder on August 23, 2012 on the permanent guidelines.

5. OLD BUSINESS

Commissioners Present: J. Breckenridge, C. Brown, T. Carroll, E. Hammarlund, F. Hancock, L. Jason, C. Murphy, C. Rose, D. Sederholm, B. Smith.

5.1 MVC Town Planning Board Support

Leonard Jason asked if we ever got a report from the Executive Director on supplying the MVC support to each town. **Chris Murphy** said that it was issued to the Commissioners via email approximately one month ago. There are a number of different staff members from the MVC that are working with several of the town planning boards.

5.2 Housing Needs Assessment Committee

Christina Brown gave a brief update on the Housing Needs Assessment. We have asked a consultant, Karen Sonnenberg to help us and she is very experienced on housing needs and especially on the Cape. She has started to gather data.

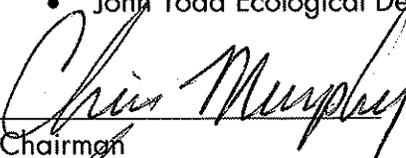
5.3 Financial Committee

Brian Smith said the Financial Committee auditors were in last week. There were no problematic findings.

The meeting was adjourned at 8:20 p.m.

DOCUMENTS REFERRED TO DURING THE MEETING

- Minutes of the Commission Meeting – Draft - Held on July 12, 2012
- Minutes of the Commission Meeting – Draft - Held on August 6, 2012
- John Todd Ecological Design, Inc. – Dr. John Todd Bio


Chairman

10/24/12
Date


Clerk-Treasurer

10-18-2012
Date