Restoration Advisory Board (RAB) Meeting
Recreation Center
Natick, Massachusetts
March 30, 2010
DRAFT Meeting Minutes

I. Attendance

RAB Members Present:

Robert Campbell	Massachusetts Department of Environmental Protection (MassDEP)
James Fitzgerald	Community Member
Joel McCassie	Installation Co-Chair, U.S. Army Natick Soldier Systems Center (NSSC)
John McHugh	Chief of Environmental & Health Office, U.S. Army Garrison Natick
A. Richard Miller	Community Member
Dr. Kannan Vembu	Board of Selectmen Representative
Christine Williams	U.S. Environmental Protection Agency (EPA)

RAB Members Absent:

Tony Doheny, Jr.	Community Member
Steven Lubic	Board of Selectmen Representative
Marco Kaltofen	Co-Chair, Community Member
Elizabeth McCoy	Employee Member U.S. Army Natick Soldier Systems Center (NSSC)
Neil Osgood Jr.	Community Member
Jim Straub	Massachusetts Department of Conservation and Recreation (MassDCR)
Dr. Harlee Strauss	Community Member

Others in Attendance:

Nathaniel Bogan	Three Seasons Ski Club
B. Patrick Conaway	LCWC
James Connolly	Restoration Officer U.S. Army Garrison Natick
Roberta Doocey	ICF International
Stacy Greendlinger	U.S. Environmental Protection Agency
Adam Lachance	Charter Environmental
Debra MacDonald	ECC
Willard A. Murray	ECC
Bryan Olson	U.S. Environmental Protection Agency
Kevin Palaia	ICF International
Tony Pisanelli	Charter Environmental
Steve Reichenbacher	ICF International
Robert Tess	ECC
Scott Weber	U.S. Army Environmental Command (USAEC)

II. Handouts

1. Sediment Remediation at the U.S. Army Natick Soldier Systems Center (NSSC) - PowerPoint Presentation by Charter Environmental and ICF International

SDMS DocID 505579

III. Meeting Minutes

Meeting chair Joel McCassie called the meeting to order at 7:05 PM and asked if there were any comments on the minutes from the November 2009 meeting; there were no comments. The minutes were accepted.

Mr. Miller indicated that he had one comment: he was surprised that notification was not given that the project would be going before the Natick Conservation Commission. He indicated that he had been out of touch for a time and asked if the RAB had been kept up to date. He suggested that the RAB be advised when matters are brought to the attention of the Conservation Commission and that, if there are outstanding questions, the RAB should have a chance to represent its view. Mr. McHugh stated that the Army's sediment remediation project would be discussed at Thursday night's Conservation Commission meeting (April 1, 2010), and that discussion would be ongoing throughout the process.

Proposed Plan for Sediment at the U.S. Army Natick Soldier System Center (SCC)

Mr. McCassie introduced Adam Lachance of Charter Environmental and Kevin Palaia of ICF International and indicated that Mr. Lachance and Mr. Palaia would give an overview of the draft final sediment remedial design.

Mr. Lachance introduced himself as the project manager for Charter Environmental, the prime contractor for the dredge cleanup, and noted the team member's responsibilities. ICF's role is remedial design plan development, and Inner Space will serve as dredging consultant. Inner Space has taken part throughout the planning process as warranted. Mr. Lachance noted that Tony Pisanelli (Charter's contract sponsor) was present, as was Steve Reichenbacher (ICF International), and that they may be responding to questions.

Dr. Vembu asked who is responsible for the post-remedial monitoring. Mr. Lachance indicated that post-remedial monitoring is not covered by the current project contract.

Mr. Lachance stated that the format for the evening would be to hit on bullet points from the draft final remedial design plan and noted that people should feel free to ask questions. The topics to be discussed included pre-design activities; mobilization and site preparation; dredging activities; dredge material handling; remedial monitoring; and demobilization and site restoration; and, most importantly, the anticipated schedule of activities.

Pre-design Activities

Kevin Palaia, ICF International project manager, stated that as a condition of the signed Record of Decision (ROD), additional sediment sampling was conducted in Pegan Cove to help in the development of the remedial design. One objective was to get a better understanding of how deep the contamination is and how deep the dredging must go in order to remove the highest concentration of contaminants. Another objective was to refine some of the hot spot dredging areas.

Additional sampling was conducted in November 2009. Data were used to support the remedial design and also to optimize the hot spots. The figure in Slide 6 illustrates the samples that were collected during the 2007 sampling, as well as those collected in November 2009. A couple of samples were collected from each hot spot to better determine the depth of the contamination. Additionally, a sample was added between the two southernmost hot spots. The RAB and public had questioned why these two hot spots were separate rather than joined as a single hot spot.

Mr. Palaia noted that, based on data collected, optimized dredging areas were determined and the two southernmost areas were connected; four area hot spots became three area hot spots, as noted in the figure on Slide 7. In the light green areas of the map, a dredge depth of 6 inches is anticipated; in the dark green areas, a dredge depth of 12 inches is anticipated. The originally proposed dredge depths were confirmed by the pre-remedial sampling data.

Mr. Lachance discussed the pre-remedial bathymetric survey of Lake Cochituate. Three hot spots were identified, creating a baseline of the lake bottom. This information has been entered into a GPS database system in the hydraulic dredge that allows the dredge contractor to know his GPS location at all times, and it marks out layers of sediment and milfoil, allowing the dredge contractor to dredge to the correct depths (the HYPACK GPS-Based System). The areas within the hot spots will be dredged to meet the overall cleanup goal of an average cove-wide average of less than 1 part per million (ppm).

Mr. Miller noted that there will be areas outside of the three hot spots that will exceed the limit. Mr. Lachance replied that Mr. Miller was correct.

Mr. Lachance indicated that a bench scale sediment dewatering test was performed in November 2009 to determine the best way to handle the dredged sediment at the Pegan Cove site. A total of four 5-gallon-pail samples were taken from the hot spot areas to design the dewatering treatment system. This allows us to determine the material's consistency. Hanging bag tests give a realistic view of what we can expect to see in the field and how water will be decanted from the geotextile bags after being dredged from the lake. Some samples were used to determine the correct coagulants and polymers needed to condition the sediment slurry prior to bagging, which will help in the separation of sediment and water. This is a realistic predictor of chemical composition of the decanted water and aids in the design of the decant water treatment system. The water will be treated before it is discharged back into the lake.

Dr. Vembu asked if multiple hang bag tests were performed. Mr. Lachance replied that two tests were performed and the results indicated that 40-sieve geotextile bag material worked best. Mr. Lachance noted that the coagulants and polymers to be used have no aquatic toxicity and are often used with drinking water applications.

Mobilization and Site Preparation

Mr. Lachance stated that he is hopeful that mobilization and site preparation will begin over the next few weeks. Two areas will be used for the entire project: the area to the north, which is the Former Proposed Gymnasium Site (FPGS), and the area in the south, which is the existing boat ramp access.

Mr. Lachance stated that, at this time, the Army does not have the authority to block off the entire cove, but buoys with warning signs will be used to close off the work area. Mr. Miller asked if blocking off Pegan Cove would make a substantive difference, and Mr. Lachance replied that in terms of safety, it would. Mr. Connolly noted that the project team is looking into the matter and have asked for permission from MassDCR to block off Pegan Cove.

Mr. Lachance stated that Slide 12 shows the buoys and silt curtains that keep sediment from transferring to other areas during dredging. On the surface, the buoys resemble a "swimming rope" and help to keep traffic out of the area. There will be lighted buoys, per Coast Guard requirements. The silt curtains float but can be anchored if necessary. Mr. McHugh added that Charter has used this technique in the past. There is a double silt curtain that floats.

Dredging Activities

Mr. Lachance explained that milfoil will be dredged up and, at the end of each day, will be collected. The area within the double silt curtain will be skimmed, much like a swimming pool.

Mr. Miller asked about the silt curtain barrier above the water surface and how high is the minimum, and is there stiffening? Mr. Lachance responded that he would need to refer to the specifications for the barrier height. To prevent material from spilling out of the curtained area, at the end of each day, the surface will be skimmed and dredged up matter will be removed.

Mr. Lachance stated that, basically, Charter will use the north as a staging area for the geotexile tubes that will be used to dewater slurry units, and for hooking up utilities. The area will be set up with erosion control. He hopes this will be done in the next few weeks. The boat ramp area in the south will be used mostly for access to the lake and getting the dredge and other equipment into the water.

Signage will be posted along the Army's fence line about fishing restrictions. After mobilization and site preparation, the dredge will be moved to the site.

Mr. Lachance showed a slide illustrating what will happen in the boat ramp area to the south. A crane will hook to the dredge and place it in the lake. Both during and before the dredge goes out, the GPS-based system will be used to mark out each hot spot area with PVC poles so the dredgers know where to work. Simultaneously, installation of the pipeline needed to transport dredged material from the south to the north area will be carried out. Once the pipeline is hooked up to the optimizer system at the northern end and the geotextile bags, the silt curtains will be set up and the pipeline will be hooked up. Once the dredge is inside, it will perform 6- or 12-inch cuts with ongoing turbidity monitoring. Depending on site conditions, the dredge could be on water at least eight weeks.

After the dredge has completed an area, sediment confirmation sampling of the bottom of the completed area will be conducted. The dredge will move to the next site. Analysis of the samples will require a 5- to 10-day turnaround time. When the confirmatory results come in, the team will determine whether backfill is needed. Finally, a bathymetric survey will be conducted to document the site before and after. It should take approximately eight weeks to complete all three areas.

Mr. Lachance then discussed the lay down area. The slurry pipe will run into an optimizer system where the sediment will be treated with polymers and coagulants and pumped into the geotextile bags. The geotextile bags will allow the material to drain/dry as much as possible. Decant water from the geotextile will be collected and pumped through a decant water treatment system. This specific treatment was determined by analysis of actual sediment from the lake bottom. The decant water treatment system consists of one or two pumps; sand filters; bag filter units; and carbon filters if they are needed. Decant water will be pumped in through the system, and discharged back into the lake. The decant water will be monitored based on the original hanging bag test. No PCBs were found in the hanging bag test decant water results. The filtration units are designed to go above and beyond what is required. Water will be monitored throughout the project and tests will be conducted.

Dr. Vembu asked what other contaminants, besides PCBs, were considered. Mr. Lachance responded that, at this time, discharge water tests will conducted for TSS, suspended solids, PCBs and pH. The sand filter will clean out many chemicals because most contamination is carried in the sediment. The carbon is on site in case the decant water samples show a high level of PCBs. Kevin Palaia noted that during the bench scale testing, analysis was conducted for many other contaminants, including PCBs, semi-volatiles, volatiles, metals, cyanide, residual chlorine, and TSS—a pretty full list of contaminants.

Mr. Lachance remarked that there could be backwashing of the sand filter, and discussions are being conducted with the subcontractor to determine how this will work. The decant water system is designed so that if one side of the system needs to be shut down for maintenance, the other side can be used for treatment, and thus it will not necessitate shutting down the entire process.

Mr. Campbell asked for clarification if both sides of the system will be operating simultaneously. Mr. Lachance replied that it should not be necessary.

Mr. Lachance continued: Once the material has been put into the geotextile bags, and has drained as much as possible, leftover sediment in the geotextile bags will be sampled. A paint filter test will be performed (1) to determine if the consistency is acceptable for a licensed facility and (2) to be put into trucks for transport. Most likely, the analysis will run along the lines of MA COMM 97 requirements, including samples which test for metals, PCBs, and other characteristics. It is dependent on what the disposal facility wants to see based on site history and project data. The disposal facility tells us what to run for analysis. Upon acceptance by a facility, when the material has dried out, some of the Jersey barriers will be moved out to create a road into the rubber-membrane-lined area. An excavator will be brought in to transfer the material to trucks. If it is not possible to pass the paint filter test because there is still too much water, there are other methods that can be used to solidify the material for shipment.

A question was raised about the design of the “rubber lagoon.” Mr. Lachance explained that Jersey barriers, most likely 42 inches high, will be used to create an enclosure that will be completely lined with a rubber membrane and sealed to prevent water from escaping. The ground beneath the enclosure will be graded so the decant water will drain to one end. He emphasized that the dredged material will remain in that area until it is removed to the licensed disposal facility.

Remedial Monitoring

Mr. Palaia stated that there will be a number of different types of monitoring occurring both before and during dredging. He first discussed discharge water monitoring.

The decant water treatment system will be in place to treat water draining from geotextile bags will be treated appropriately. The decant water may have contaminants, but the geotextile bags are designed to capture those contaminants. The water will be sampled as it drains from the bags, consistent with NPDES permit regulations. Sampling will occur more often during the first week of start up; after the first week it will be done weekly for the first month; and then monthly thereafter. There will be monitoring for PCBs, TSS, pH, and temperature. We are currently looking at a list of other contaminants that may also be monitored.

Mr. Lachance indicated that if a failure were found on the effluent side, the system would be shut down and modified. Then, as an extra precaution, the water would be retested to ensure that the modification works. The sampling schedule would then return to the same level as at start up; after one week it would be done weekly; and then monthly.

Mr. Palaia stated that the samples taken during the first week would be submitted for quick turnaround analysis. Results should be available in 48 or 72 hours.

Mr. Palaia stated that monitoring of dust and odors will be undertaken to make sure that on-site personnel and abutters are not exposed to unacceptable conditions. The geotextile tube system is a good choice for reducing dust and odor concerns because the sediment is contained within fabric bags. The only time sediment will be exposed to the air is when the bags are opened prior to loading on trucks. Real-time hand-held meters will measure dust concentrations or particulate matter (PM) concentrations. Those measurements will be collected at the perimeter of the staging area. If levels of dust exceed relevant industrial hygiene criteria, dust control measures will be put into place. The dredged material will be moist, so there are limited concerns about dust generation.

If there are concerns about odors, hand-held hydrogen sulfide meters will be used to measure hydrogen sulfide concentrations. There are methods that can be used to reduce odors, such as covering the bags with plastic sheeting, and there are odor neutralizers that can be sprayed onto the sediment to reduce odors.

Dr. Vembu asked how long the sediment would remain in the geotextile bags before the bags are opened. Mr. Lachance replied that the sediment could remain in the bags for a month or even a few months.

Mr. Palaia discussed turbidity monitoring. During the dredging process, each hot spot area will be surrounded by a two-silt-curtain system for added protection. The silt curtains prevent re-suspended sediment from migrating.

The first phase of turbidity monitoring starts before dredging begins by establishing the baseline turbidity concentration for Pegan Cove. The blue symbols on the figure in Slide 22 are the two locations where, for

a one-week period, automated data loggers will take measurements every ten or fifteen minutes and an average turbidity will be calculated over that time period. This will establish a threshold limit above which the level of turbidity is unacceptable. It turbidity measurements exceed the threshold, the project team will reassess the effectiveness of the silt curtains and determine if dredging needs to be modified. The goal is to ensure that suspended sediment is not transported to other parts of the lake. Then, during each hot spot dredging operation, monitoring will be conducted using an automated data logger at one point to the east of the hot spots, because prevailing winds move from west to east on the lake.

Also hand-measured turbidity readings collected at each hot spot during the first week of dredging will confirm that auto loggers are accurate and working properly. If measures exceed the threshold, silt curtains will be re-checked. Observations about any non-dredging related activities on the water will be recorded, such as high winds, boating, and wave action, all of which could have an effect on turbidity.

In addition to the measurements collected outside the silt curtains, measurements between curtains will be taken in each quadrant—north, south, east, and west—two to four times per day to determine if sediment is passing through the first curtain or if the first curtain is sufficient in blocking re-suspension.

Lastly, there will be a complete inspection of the floating pipeline at least two to four times per day for leaks. If a lead is discovered, dredging will cease immediately and the leak will be repaired.

Mr. Lachance noted that the dredge unit has pressure gauges, so the operator will know immediately if there is a leak in the pipeline. Mr. Palaia indicated that there are multiple layers of monitoring to ensure that turbidity is not an issue. Members of the project team will be on the lake in a boat and will see any plume of sediment that breaches the silt curtain.

Mr. Palaia was asked if boaters would stir things up and compromise the dredging process. He replied that observation will be needed and indicated that the Army is asking MassDCR to close Pegan Cove during the cleanup. If MassDCR does not close the cove, turbidity caused by boating could be an issue and will require close observation.

Mr. Miller suggested that the Pegan Cove closure issue be on the agenda at the next Lake Cochituate State Park meeting. Mr. McHugh replied that the item was on the agenda for the next Conservation Committee meeting.

Mr. Nathaniel Bogan raised a concern about boat usage in Pegan Cove. There are two separate obstacles. On the eastern shore, many people have docks where boats may be stored. Would it be possible to run the silt curtain so boaters can enter and exit their docks? This would eliminate most concerns. The second issue concerns the small water skiing slalom course that runs down the center of Pegan Cove. The course slightly overlaps the location of the planned silt curtain placement. Although the slalom course looks like a series of individual buoys, it is actually a “skeleton” suspended to a depth of about four feet. The slalom course could be dragged away for the duration of the dredging process. Project team members indicated that that would be helpful.

Mr. Palaia noted that baseline turbidity monitoring would be conducted probably in late April or early May, and this baseline turbidity could be different from June or July baselines. As the project progresses, it may be necessary to reevaluate whether the baseline turbidity and resultant threshold limit are adequate or representative of lake conditions at the time of dredging.

Mr. Palaia then discussed how a determination will be made that the sediment in Pegan Cove is clean and dredging has been completed. After dredging is completed, a series of confirmation sediment samples will be taken. Each grid on the figure in Slide 23 represents a single composite sample; in Area 3, 14 composite samples will be taken. Each grid represents a composite sample, so within each grid, five grab samples will be taken, composited into a single sample that will be representative of that area. Samples for each area will be submitted to an off-site laboratory for PCB analysis. Turnaround time will be quick—about one week (methodology used will not permit 24-hour turnaround for this type of analysis and with this type of sediment). It is critical that confirmation sampling be performed in a manner so we don't shut things down.

The results of the confirmatory samples from each area will be averaged to get a representative concentration for that hot spot area. The data will be worked into the pre-remedial concentration data set and a new cove-wide average PCB concentration will be calculated. If the average is less than one part per million, the cleanup goal will have been met. It is critical that the concentrations in each of the hot spot areas get down to a low concentration in order to drive the cove-wide average down.

Demobilization—Site Restoration

Once the cleanup goal has been met, demobilization begins. Mr. Lachance explained that demobilization entails removing equipment from the lake, and deconstruction and decontamination of the staging areas disturbed during the cleanup process. Temporary utilities will be removed, and any trees removed from the laydown will be replanted.

Mr. Miller suggested that the replanting of trees might be another topic for the April 14 Lake Cochituate State Park meeting, and noted that the rest of the shoreline has a natural planting list. He suggested creating good natural screening along the shoreline.

Mr. Lachance stressed that he was discussing only the laydown area. He noted that the only shoreline area to be disturbed is where the pipeline comes through the fence; whatever is disturbed will be replaced.

The project team hopes to wrap up the final remedial design version over the next few weeks; start site preparation in mid- to late-April; send out a public notification that has been reviewed by the Army; in May, move into the south area, getting the dredging equipment into the water; dredge throughout the summer and meet the cleanup goal of less than 1 ppm across the cove; and then wrap up with post-remedial reporting to describe and report on how the cleanup went.

Mr. Lachance then asked if there were other questions.

Mr. Fitzgerald asked for clarification about the pipe, welding, how the dredge works, the use of GPS, and timeframes. Mr. Lachance explained that the high-density polyethylene (HDPE) slurry pipe, which is very flexible, is assembled and welded on site in a process similar to heat welding. The dredge is suspended in the water and has a vacuum cutter head and a dredging head. There will be no need to use the cutter head to chop up the sediment which has the consistency of mayonnaise; the dredging head can get through the area and vacuum up the sediment. GPS technology is used to block off the hot spots, and the operator will move from north to south to clean up the lake bottom. Mr. Lachance stated that cleanup of the large area should take three to four weeks, including time needed for confirmation sampling. He also noted that there shouldn't be any more noise than with a regular boat. The project team is trying to tap into utilities on Kansas Street to eliminate the need to run generators; but if generators are needed, many now come with quiet packs. Temporary lighting may be needed depending on how late into the evening the operations go. The area is fenced off from Kansas Street. The decant water system may run 24 hours a day; however, actual dredge work hours probably will be from 7 AM until 6 or 7 PM. Project team members will be on the water throughout the process. Dredging activities will be monitored from a boat, and the dredging contractor has his own quality control measures as well. At this time, there are no plans to operate the dredge during weekends, but that it might be possible if the cove can be shut down.

Mr. Fitzgerald asked if the turbidity monitoring is a "belt and suspenders" approach. Mr. Lachance replied that Army wants to ensure that material vacuumed up from the bottom is contained in the working area. The double silt curtain system is an approved product and has been used successfully in the past. The dredge sits inside the curtain and is moved from hot spot to hot spot.

Mr. Fitzgerald noted that the amount of milfoil is incredible and asked if the dredging system might become clogged. Mr. Lachance indicated that the subcontractor says this has not been a problem in the past. It was noted that the dredging subcontractor recommends dredging early in the season, before the milfoil can grow. There has been some discussion about taking advantage of daylight hours in May and June by working into the early evening; this may be worthwhile.

Mr. Bogan stated that concerning noise, this location, in general, is heavily used, and people are accustomed to activity; they probably won't be bothered by noise. Anything the project team can do to reduce the time the cove is closed will make people happy.

Mr. Lachance responded that a final decision about closing Pegan Cove has not been made. Areas of the cove will be blocked beginning in early to mid-May and will remain blocked for an approximately 8 weeks. It was asked if moving the slalom course buoys would be helpful to the project team, and Mr. Lachance suggested that this be addressed in a separate discussion.

Mr. Lachance then summarized the final details of the process: milfoil from the cove will be gathered and immediately wrapped in plastic and placed on the dredge platform; it then will be put in roll-off containers and disposed of off site.

Mr. Miller stressed the importance of careful disposal of the milfoil so that it does not spill someplace else. In addition, he stated that he wanted to go on record as repeating his personal concern that this will

be too weak a cleanup, and he posed two questions: (1) Will everyone be comfortable about averaging contamination hot spots? (2) If the dredging is completed early this summer, will the process have removed enough of the contamination? Will we be cluttering the lake with debris that will haunt us in the future?

Mr. Connolly stated that without doing any dredging, milfoil can be removed from the water and not pose any danger to humans. The risk being addressed is the theoretical risk of fish consumption. It is safe to swim in Pegan Cove, stand up in the sediment, wade, and pull milfoil; these activities pose no human health risk. When the project is completed, the average sediment in Pegan Cove will be 1 part per million or less, which is consistent with other parts of the lake system.

Mr. Miller again expressed concern about averaging contamination spots and asked how high the contamination can go and still be considered acceptable. Mr. Palaia responded that the hot spot removal areas are targeted at concentrations generally above 2.5 parts per million. When asked if the project team had been mixing grab samples to make these determinations, Mr. Palaia said no.

The issue of signage was raised. Mr. Lachance remarked that in the remedial design plan, there is an example of a fisherman warning sign that will be posted along the Army's fence line. The wording will appear in three languages, along with the international warning symbol.

Mr. Fitzgerald asked about the storage area and treatment process. Mr. Lachance stated that the disturbed area probably would be limited to eight apple trees and grass. First, the Jersey barrier containment area will be built. A 1 percent grade is needed for drainage of the geotextile bags. Sand and stone will be used to level and grade the containment area, providing a solid base, which will be lined with a geotextile liner. A trailer-mounted system is used for the addition of polymer and coagulant. The dredged material is injected into bags, and the water seeps from the bags into the containment area and then it is pumped to the decant water treatment system where it runs through filters.

Mr. Fitzgerald asked about odor from the bags. Mr. Palaia replied that usually odors are not a significant concern when using geotextile bags. Mr. Lachance stressed that dust and odor monitoring will be done in real time; worker and public safety are a priority.

Dr. Vembu asked about holding time of the decant water collection area. Mr. Lachance indicated it should be nonstop. Depending on how each day of dredging goes, we may be able to shut down at end of day and start up again the following day.

Mr. Fitzgerald asked if waste removal trucks would have difficulties with road barriers. Mr. Lachance replied that he had walked the site with the Army and the barriers should not present a problem.

Mr. Fitzgerald asked if anything would be put back into the lake. Mr. Lachance indicated that, based on confirmation sampling, it was possible that backfill would be needed; clean, washed sand would be used to cover dredged areas, if needed. Mr. Connolly stressed that the sand used would be clean and pre-tested.

A question about the disposal facility was raised. Mr. Lachance mentioned Turnkey, a Waste Management facility in Rochester, New Hampshire is the most likely disposal facility that will be used, but it was not definite yet.

Mr. McCassie thanked everyone and opened the meeting for public comments.

IV. Public Comments

Mr. Fitzgerald asked a question about the laboratory's parking lots and if the facility was close to achieving current storm water standards for the outflow. Mr. McHugh indicated that there are new criteria, but that the facility should be fine; high-tech oil-water separators are in use, which are not found at other places on Lake Cochituate.

Mr. Miller raised two items for consideration: In Pegan Cove Park, there used to be a pond, which now is mostly dry because the retention barrier broke through. In 1893, the Lake Cochituate in this area was getting very dirty from the town of Natick. A filter system was built to keep the pond clean. Eighty years later, the Army broke through the dam and it was never repaired. The pond in Pegan Cove Park was destroyed but can be restored. MassDCR now owns the land again and they lease it to the town. In Cambridge, at Alewife Reservation, Blair Pond was ten feet deep but is now only one or two feet deep yet they are getting ready to restore it. Mr. Miller proposed that we restore the pond in Pegan Cove Park. He stated that the Army broke it. In addition, there are contamination issues. Restoration of the pond involves the Natick Labs, MassDCR, and town of Natick. Is there a cooperative way to proceed? If we wanted to restore the dam, would there be contamination concerns? Might there be a way to jointly share the restoration? An earthen dam that replaced the concrete dam washed out within a year. Does this fit within the scope of this project?

Mr. McHugh indicated that the Army has historic air photos.

Mr. Miller noted that Lake Cochituate drains into Cochituate Brook which, in turn, drains into the Sudbury River. The lake is also a flood retention pond. The Army Corps used to monitor water depths and release water as needed to prevent flooding. Should that procedure be re-implemented? What difference would that make in terms of leaching out more toxic waste?

Mc. McHugh indicated that the Army has 15 years of data.

Mr. Connolly indicated that similar questions have been evaluated, that Mr. Miller had posed a range of questions, and that it was difficult to form an immediate response.

Dr. Vembu asked about the date of the next meeting. Mr. McHugh replied that it could be scheduled before the summer.

Mr. Miller expressed thanks to everyone for their attendance.

Mr. McCassie adjourned the meeting at 9 PM.