

**MEETING NOTES OF
BARNES AQUIFER PROTECTION ADVISORY COMMITTEE**

DATE: 9/6/16 **LOCATION:** Easthampton Municipal Offices, Easthampton, MA

MEMBERS AND DESIGNEES PRESENT:

<u>X</u> M. Czerwec, Easthampton D. Conti, Holyoke	<u>X</u> C. Seklecki, Easthampton J. Burkott, Holyoke	A. Smith, Holyoke
<u>X</u> T. Gaughan, Southampton	<u>X</u> M. Hanc, Southampton	James Labrie, Southampton
<u>X</u> Heather Miller, Westfield	K. Leigh, Westfield	Jay Vinskey, Westfield
<u>X</u> R. Newton, Smith College	<u>X</u> P. Gambarini, PVPC	

Others present: Mary Ann Babinski, Westfield City Council; Barbara M. LaFlam, Southampton resident; Mark Reed, Heritage Survey; Jeff Tannatt, Williston-Northampton School; John Perry, Dynamic Energy; Charles B. McCullagh, Jr.; Daniel Desrochers, Westfield News; Ben Hildebrand, Sage Engineering

TIME OF CALL TO ORDER: 3:35 p.m. **TIME OF ADJOURNMENT:** 5:05 p.m.

Action Items from Meeting:

PVPC

- Prepare comment letter on Utz Building Addition
- Write up 9/6/16 meeting notes
- Prepare and distribute agenda for next meeting
- Continue assistance where needed for Cook Road land protection
- Finalize annual report

BAPAC members

- Help finalize Developments of Regional Impact comment letters

1. Adoption of June 7 meeting notes

Adoption of the June meeting notes was recommended by Tom Gaughan, seconded by Marla Hanc, and unanimously approved.

2. Citizen Speak

Mary Ann Babinski said that she would like to work with BAPAC to revisit recommendations to improve Westfield's Water Resource Protection Overlay District Ordinance. She said the contamination of several wells, the drought, and the outdoor watering restrictions provide a powerful motivator now to do something more with the ordinance that is far more publically visible. It is time to put a big collective foot down and take water supply protection seriously, she said. She noted that the discussion at the June meeting about installing signs is very important to making the Aquifer more visible to everyone.

3. Developments of Regional Impact

Solar Array, 198 Park Street, Easthampton

Mark Reed of Heritage Surveys, Jeff Tannatt and Charles B. McCullagh of the Williston-Northampton School, and John Perry, Dynamic Energy attended to present on the solar array proposed for 5 acres of land abutting the White Brook Middle School. The 650 kilowatt system,

will entail installation of 2,000 solar panels that will cover about 2.5 acres of land. Remaining acreage will stay in its current state.

Other key aspects of the development mentioned by project proponents include:

- Plan to install a 6-foot high perimeter fence that will be set 6 inches off the ground to allow movement of terrestrial creatures.
- Facility will be owned by the Williston-Northampton School.
- Planting of low growing grasses so that mowing need not occur more than twice each year. No fertilizers will be used.
- Transformer will use a mineral oil that has no carcinogens and carries no toxicity.
- Planning Board has been given a proposal for decommissioning for their consideration. Sense is that amount of money needed to decommission in 20 years is so nominal, likely less than \$40,000, which is significantly less than value of the land itself. Proponents referred to a 2.4 megawatt facility in Walpole sited on a landfill, the decommissioning for which is about \$150,000. They said that given the low value for decommissioning bonding is not really needed.
- Panels are fabricated by Jinko Solar and are composed of poly crystalline silicon. Project proponents provided toxicity test results run for the panels that showed no leaching of 1 contaminants from the panels and junction box when subjected to 18 hours of a 1:20 sample to solvent mixture of acetic acid and sodium hydroxide.

The Conservation Commission has provided approval with an Order of Conditions that establishes a 50-foot buffer for resource areas. The Easthampton Planning Board was holding its second hearing on the project that evening.

Given the tight time frame for the public hearing (and assumed to be the last opportunity to comment), BAPAC provided a pre-prepared letter and comments to the Planning Board on the project that are in keeping with BAPAC comments on other solar projects.

Utz Building Addition, 225 Root Road, Westfield

Ben Hildebrand of Sage Engineering said that land owner Frank Demarinis is proposing to more than double the size of his existing facility, with a 11,760 square-foot addition. The project site is located within Westfield's Water Resource Protection Overlay District and within the Zone II of Southampton's water supply well. The building addition will be a pre-engineered metal structure supported by a conventional slab-on-grade foundation. Half of the addition will be used by Utz for office space and dry storage of pre-packaged chips, pretzels, and snack foods, as is the existing building. The other half of the addition is to be used by a "high-end" woodworking shop, Grains of Thought. Mr. Hildebrand said that the woodworking shop does not use or store any toxic substances, that it works with low VOC materials.

The project will also include an expanded parking area, amounting to approximately 20,000 square feet of new impervious cover. For stormwater management, the proposal is to enlarge the existing system. Roof drainage at the back will connect to an existing swale system, while roof drainage at the front will connect to a pipe system running along the front of the building to outlet at the detention basin. Parking lot drainage will go to an existing catch basin and pass through the existing Stormceptor unit before flowing into the forebay within the detention basin.

To handle increased storm flows, the project will involve enlarging the existing "detention" basin. (Note that in talking with Mr. Hildebrand, it became apparent that the basin is designed to "retain" flows as most stormwater infiltrates into the soils.) Mr. Hildebrand said that the existing Stormceptor unit can accommodate the increased flows from this expansion to pretreat stormflow before entering the basin. He also noted that there is an existing emergency shutoff valve to use in the event of any spills to keep polluted flow from the parking area from reaching the Stormceptor and entering the retention basin.

BAPAC members noted that the applicant may not be in compliance with the special permit issued for the original project on this site. There is no curbing along the drive and parking area, increasing risk for contamination of groundwater, and there are serious erosion issues.

BAPAC members had the following four recommendations to protect drinking water supply:

- Ensure that the Stormceptor unit is in good working condition and has the capacity to adequately treat additional flows, and that there is regular maintenance of the unit. Also make sure that the emergency shut off valve is highly visible and that existing spill response procedures specify shutting off the valve.
- Require that the project includes curbing of all bituminous surfaces on the property so that in the event of a spill, contaminated material can be contained on the impervious area.
- Ensure that locations for snow storage and dumpster pad are within the curbed parking lot in order to avoid problems in basin functioning and to minimize risk of groundwater contamination. On the proposed plan reviewed by BAPAC, these facilities are shown near the basin and outside of the curbed area.
- Stipulate in the operation and maintenance plan that no synthetic chemical fertilizers or pesticides be used for landscaping work associated with the project. Also for winter de-icing, use ecologically friendly alternatives to sodium chloride to prevent salt contamination of drinking water supplies.

4. Updates

Cook Road land protection - Marla reported that on August 31st Forest & Land Policy Director for the Massachusetts Executive Office of Energy & Environmental Affairs Bob O'Connor walked the Cook Road land with officials from Easthampton and Southamptton and Kestrel Land Trust. This site visit is part of the LAND grant review process. Marla said that comments during the 2.5 hour site visit were generally very positive, but it was noted that the state has received 27 applications under this program.

Marla said that she believes Kestrel Land Trust was working with the City of Easthampton on a grant request to the Drinking Water Supply Protection program. Also, Easthampton City Planner Jess Allan submitted request to her Community Preservation Committee to collaborate in funding for this land protection. Barbara LaFlam said she is very glad to see things moving along.

Salt

Patty noted that she had received an inquiry about one of the Southamptton wells from the Southamptton Water Commissioners. She relayed the question to Bob Newton and also

provided links to MassDOT materials indicating their process for addressing wells contaminated by road salting practices.

Marla noted that there needs to be some education around winter road conditions. She sees increasing pressure in Southampton for improved winter conditions on roads by new "city" people who are moving to Town.

Drought

Southampton has a voluntary outdoor watering restriction and has avoided going mandatory because it would place more restrictions on what the municipality could do. Westfield has a mandatory restriction and the City is exploring where to get additional water given the closure of Wells 7 and 8. Mike said that Easthampton has a mandatory ban, but that supply still seems fairly good. That may change though if drought continues, he noted.

Tom said Southampton is looking for a permanent connection to Easthampton. This will require a pump station to reach entire service area. A redundant source is required by MassDEP in any case.

5. Annual Report and Work Plan for FY2017

Patty walked members through the draft Annual Report and work plan, asking several questions and showing where there are still a few remaining gaps. She will finalize the report for the next BAPAC meeting.

6. Next Meeting

October 4, 2016 @ 3:30 p.m.
50 Payson Avenue, Easthampton

**MEETING NOTES OF
BARNES AQUIFER PROTECTION ADVISORY COMMITTEE**

DATE: 10/4/16 LOCATION: Easthampton Municipal Offices, Easthampton, MA

MEMBERS AND DESIGNEES PRESENT:

<u>X</u> M. Czerwiec, Easthampton	C. Seklecki, Easthampton	
D. Conti, Holyoke	<u>X</u> J. Burkott, Holyoke	<u>X</u> A. Smith, Holyoke
<u>X</u> T. Gaughan, Southamton	<u>X</u> M. Hanc, Southamton	James Labrie, Southamton
<u>X</u> Heather Miller, Westfield	K. Leigh, Westfield	Jay Vinskey, Westfield
<u>X</u> R. Newton, Smith College	<u>X</u> P. Gambarini, PVPC	

Others present: Mary Ann Babinski, Westfield City Council; Marla Hanc, Southamton Conservation Commission; Barbara M. LaFlam, Southamton resident; Daniel Desrochers, Westfield News; John Masuck, R Levesque Assoc., Inc.; John Richardson, 104 FW Westfield ANG; Jean Carpenter; Westfield resident; Barbara Rokosz, Westfield resident; Louise Sullivan, PVPC

TIME OF CALL TO ORDER: 3:32 p.m. TIME OF ADJOURNMENT: 5:12p.m.

Action Items from Meeting:

PVPC

- Louise to write up 10/4/16 meeting notes
- Review meeting notes and distribute
- Write MET grant request
- Follow up with MassDEP on Westfield well contamination and BAPAC concern
- Advise Westfield Aviation Museum proponents that need more informed representative at next meeting

BAPAC members

- Heather to distribute notice sent to Westfield residents about well contamination
- Bob to prepare update on salt study and advise on what municipalities ought to recommend to affected residents
- Marla to continue working with Kestrel Land Trust on Cook Road land protection

1. Adoption of September 6 meeting notes

Patty suggested that everyone review the meeting notes of the September 6, 2016 BAPAC meeting and bring their comments to the next meeting at which time the meeting notes will be finalized.

2. Citizen Speak

Mary Ann Babinski reported she has two motions related to the Barnes Aquifer to present to the Westfield City Council on Thursday. Ms. Babinski indicated that the first motion concerns revisiting water resources zoning. She explained that BAPAC made recommendations a few years ago, but recommendations were watered down. This time the motion will be sent to the Natural Resources Subcommittee in an attempt to obtain stronger language.

Motion 1: Motion by Councilors Babinski, Onyski and O'Connell, to review Article III, Section 3-170 – The Water Resources Protection District. Specific attention to but not limited to Section 3-170.3, 3-170.5 and Section 3-170.6 and refer to Natural Resources.

Ms. Babinski explained that Motion 2 is concerned with what we can do to help protect the Barnes Aquifer and the water resource district better than we're doing now. She said the second motion will be sent to public health and safety.

Motion 2: Motion by Councilors Babinski and Allie to review options needed to implement additional safeguards for protecting the Barnes Aquifer water resource. Refer to *Public Health and Safety*.

Patty said she could review zoning for the Water Resource Protection Overlay District with an eye toward the new stormwater permit, along with MassDEP groundwater protection guidance relative to impervious cover raised by Andrew Smith. BAPAC will need to decide how this will fit into the work plan.

3. Developments of Regional Impact

Airport Aviation Museum, Westfield

John Masuck of R Levesque Associates displayed a map showing the location of the 5 acre parcel proposed for development along Airport Road. Mr. Masuck said that this is the same location as proposed in the original 1999 lease. Key elements of the Museum proposal include:

- a 16,800 square foot museum building
- two smaller 7,200 sq. ft. buildings for storage
- 106 parking spaces between all three buildings
- storm flow will be directed to a retention basins located north of the proposed museum building

Mr. Masuck explained that stormflow will be filtered in a water quality unit and discharged adjacent to the depression which is handling the runoff from the taxiway and the roadway. Mr. Masuck then pointed to dotted lines on the displayed map which reflected the location of the catch basins and storm pipes that will be constructed.

Robert Newton asked if all the aircraft will be traveling on paved surfaces or are any to be stored on grassy surfaces. Mr. Masuck replied that storage of aircraft will be on paved surfaces given that the entire site will be paved except for traffic islands.

Mr. Newton asked if there were to be any curbs around areas where air craft will be stored because these are older airplanes with rotary engines that leak oil. Mr. Newton added that usually it's preferable to run such airplanes on grassy surfaces. Mr. Masuck replied that curbing will be found only around the public parking areas. He stated that the parking area is graded to slant down to a catch basin which will pick up stormwater from this parking area leading to a drain man hole to reach the water quality unit.

Marla Hanc asked how we know if someone actually hauls away the stormwater containing oil that has leaked out of the air craft and is floating on top of the water. Mr. Masuck responded these are licensed haulers who have to comply with the Massachusetts State Environmental Code. Ms. Hanc asked how the City of Westfield knows for certain that this has been done. Mr. Burkott responded that the City of Westfield will have a receipt for the hauling away of the stormwater, but someone has to remember to ask for the receipt. Ms. Hanc asked where the oil goes after it's been filtered out. Mr. Masuck replied that it stays within the chamber of the water quality unit. Ms. Hanc stated that the original plan called for increased catch basin inspections and for the inspection schedule to be adjusted thereafter. Heather Miller stated that there should be no problem with snow removal; however, she felt that a shut-off valve should be placed on the stormwater treatment unit in the event of an oil spill resulting from air craft.

Mr. Newton asked Mr. Masuck if aircraft maintenance work was going to be performed in the two smaller buildings. Mr. Masuck replied that he wasn't familiar with what will be taking place but that he believed that aircraft maintenance work would not be done in these two buildings.

Mr. Newton noted that preflight preparations often involve fuel sump drainage that produces waste fuel. While it is not a lot of fuel, the cumulative impact to improper disposal can be great. He asked what provisions there might be to manage this waste fuel.

Mr. Masuck replied that waste gas is outside the prevue of our site plans and that there weren't any provisions for management of waste fuel. He was then asked to obtain a written statement explaining how waste fuel will be drained from the tanks and handled.

Patty asked about recommending curbing for the parking areas and Mr. Masuck agreed. Ms. Hanc inquired about the size of the public parking area and Mr. Masuck stated that there are 107 parking spaces. Patty asked what the size of the impervious area was but Mr. Masuck replied that he didn't know.

Ms Hanc inquired of Mr. Masuck the identity of the site that is being proposed to be swapped for a hanger. Mr. Masuck noted that it's the same site they've been proposing to be swapped for a hanger for over 17 years now but he didn't know its identity. (*Notetaker's research: the proposal is to swap 20 Airport Road for hanger 3 currently leased by Paul Dion, Treasurer of the Westfield Aviation Museum.*)

Mr. Newton interjected that his concern was that the advisory committee members don't know very much about what's happening and he asked if there was anyone else available from the Westfield Aviation Museum that could have come and answered some of these questions. Mr. Masuck responded that he had only found out he was coming to this meeting two hours ago and he again apologized for his lack of familiarity with the specifics.

Members asked to postpone BAPAC comments on this project until someone more informed can come and talk about the project.

Westfield Wells Update

Environmental Compliance Officer for the Air National Guard John Richardson began by saying that Westfield's wells 7, 8, and 2 are showing contamination for PFOA and PFOS

(Perfluorooctanoic Acid and Perfluorooctane Sulfonate). He said that the Air National Guard is doing an investigation and will begin with a kickoff meeting scheduled with their consulting engineer for next week.

In early spring the Air National Guard will be digging holes in the ground to find out if any contamination is present in certain sites and then “chasing it to see if has impacted the wells directly.” Mr. Richardson reported that the Guard is reopening some former cleanup sites that they had previously closed.

Mr. Richardson stated that this type of contamination is an Air Force-wide issue -- it’s huge. He reported that any *A Triple F* (“Aqueous Film-Forming Foam” or AFFF) in stock, on fire trucks or on site is being replaced with material on site. Mr. Richardson reported that any *A Triple F* on site will be incinerated at a cost of approximately \$40 million to be borne by the Air Force. Mr. Richardson reported that there were two fire training areas and the Air National Guard stopped using one in 1987 and no *A Triple F* has been used on the ground since except for a few emergencies, the last being a few years ago by Route 202.

Mr. Richardson explained that as part of a Massachusetts contingent emergency plan cleaning process last fall, a preliminary assessment was done which resulted in 5 sites being reopened. He reported that of the sites: one was a former fire training area; one was RFP Site 4; another where the fire station was located; another site on the east side of the airport near the main runway; and one near an old runway on the south side of the airport.

Mr. Richardson was asked if active sampling of the ground is being done and he replied that monitoring was going to be advanced because when 7 RFT sites were closed and all wells destroyed, new wells had to be advanced into the ground in designated areas. Mr. Richardson reported that 15,000 tons of soil were removed from the fire training area in 2000 when it was cleaned up. He indicated that obviously, this was not a chemical concern so the soil was not tested. Mr. Richardson was asked where the removed soil was placed and he responded that the soil was removed to Ondrick’s (Ted Ondrick Company in Chicopee) where the soil was recycled and used in the making of pavement. He added that was the usual procedure followed with petroleum-contaminated soil.

Jeff Burkott asked, “Is the Air National Guard taking total responsibility for the well contamination at this point.” Mr. Richardson responded, “the Air National Guard is part of the Air Force and yes, the Air Force as a whole knows this is a huge issue.” Mr. Burkott asked, “Regarding water filtration to address contamination, is the Air Force taking responsibility for the payment — the millions of dollars it’s going to cost to put the water filtration units into making the water safe again?” Mr. Richardson replied, “I can’t give you a definite answer, but I know the Air Force is committed. So if it’s found that there’s a direct connection between the former fire training areas and the city’s wells, the next step will be to negotiate with the Air Force.” Mr. Burkott asked, “Is there any type of reporting on the airport that would have to account for there being oil present in the building?” “Yes”, Mr. Richardson replied, “There are 2 reports annually that I submit to the Massachusetts CERCLA (Superfund) program, the City of Westfield electronically and to the local Emergency Planning Commission as well.”

Mr. Burkott asked Mr. Richardson, "Will the Air National Guard be supplying any water filters or bottled water?" Mr. Burkott underscored that the letter sent to all residents sounded very serious because it stated that the water shouldn't be given to babies or pregnant mothers. Mr. Burkott asked, "Is it the Air National Guard's responsibility to pay for water for residents?" Mr. Richardson responded, "Yes, if there's a direct connection between the Air Force and the contamination of wells." Mr. Burkott replied, "But not currently going on." "No," said Mr. Richardson. Mr. Burkott underscored, "So this could be six months out; those people are still using the water." "Mr. Richardson replied, "right."

Patty interjected asking, "Do you know when that substantiation of direct connection will be made?" Mr. Richardson said, "The next step is preliminary assessment — the site investigation which we're working on right now. And they know the urgency of this, the Communities' concern and we're concerned as well. As soon as we get the results, they'll have to make the connection whether it's chasing wells or finding water direction or whatever. When that enters the determination between our activities and the contamination, then we'll take the next step."

Mr. Burkott asked, "How many wells are you anticipating drilling?" Mr. Richardson replied, "I haven't seen the site investigation plan; I couldn't tell you; probably several; it's pure speculation. As part of the site investigation, they need to do the work plan; that gets approved by the DEP, and then from there we know how many wells they're going to advance." Mr. Burkott asked, "Do you still have active wells by the helicopter?" Mr. Richardson replied, "We gave those to the City; so we have about 30 wells left."

Andrew Smith asked, "Do we know about the folks in Holyoke living in the same general area of concern? Is there any information being shared with other towns? What's being done to guarantee homeowners in an adjacent town that their drinking water is safe since their community hasn't tested their water?"

Heather Miller responded that it's a very uncertain issue as a whole, right now. There is a general sense that groundwater is moving from the north to south. So we are not anticipating that there would be concern with water moving north into Holyoke. She said that testing exposed that the hottest concentration of chemicals is right where they expected it to be. It was consistent with what the Air National Guard reported regarding their activities. Ms. Miller noted there are only 4 labs in the country that can analyze for these chemicals. Testing is very tough because it is in the parts per trillion. It is not practical for a private well owner to do this kind of testing.

Robert Newton said that there could be cones of depression that pull contaminants in another direction. This is a good question. Mr. Newton then asked, "When did the Air Force begin using this material?" Mr. Richardson replied that it was in 1970. Mr. Newton stated that he believed that the contaminants could have traveled further than wells 7 or 8. Patty asked about well #1. Patty said, "My understanding is that if 7, 8, and 2 are affected then one would think 1 must also be affected as well. What happened to #1?" Ms. Miller stated, "So the results for well #2 were 82 parts per trillion which is 12 parts per trillion over the EPA's lifetime health advisory limits, but they were revised from 100s of parts per trillion previously down to 70 parts per trillion combined. Well #2 was at 82 parts per trillion and well #1 was at 54 parts per trillion so it was below that lifetime health advisory limit. 70 parts is the lower limit released in May 2016.

Previously, it was at about 600 parts per trillion for PFOA and PFOS. Part of the difficulty is that this is not a regulated contaminant. The EPA doesn't require testing for it. They're still learning about it. The first time we tested for PFOA and PFOS was in 2013 so we don't have earlier data back to the 1970s when the fire fighting contaminants was used."

Mr. Richardson stated that the time frame for use was 1970 to 1987, at which time the EPA ordered the National Air Guard to stop using the contaminants. Then the fire training area was abandoned and then remediated in 2000. He said that the entire cleanup dates are documented on the MassDEP website. Patty asked when the area was fully remediated and Mr. Richardson stated in 2000.

Patty asked if the Air National Guard could include a sampling well in Holyoke to understand whether private wells in that jurisdiction are impacted. Mr. Richardson indicated on the map that testing would be confined to an area that does not include any sampling toward Holyoke or north of the fire training area.

Mr. Newton proposed the Air National Guard think about doing some modeling as part of their investigation. "I would think a solid transport phase model/simulation would be of great value. Has contaminant traveled past Wells 1 and 2? Are there contaminants being pulled north? This might be the first thing to do. You could use Mod-Flow models from Zone 2 delineations. This will give you an idea of how big a problem you have."

Mr. Richardson said that modeling is a great idea. They have drilled 100 monitoring wells through time and still cannot ascertain direction of flow. Modeling would help us understand where to put monitoring wells. Ms. Miller noted that the City has data from its own monitoring wells. Mr. Richardson asked Ms. Miller to supply him with her testing results and he said the next step will be a work plan and once it's approved by the DEP, they'll do a field study. He said that the next phase will be a remedial investigation which expands the study and after that feasibility cleanups.

Heather noted that the science for this contaminant is still really developing. There is not a really clear understanding of impacts on humans. EPA is saying 70 PPT for pregnant and nursing mothers, but she is having trouble finding information on the science and technical information to understand. There are studies on rats and mice, but there does not seem to be a clear correlation to humans. Patty noted that the EPA scientist who visited with BAPAC in June seemed to have a clear sense of human impact. She will pass that contact information to Heather.

Westfield is working with MassDEP to get pilot treatment of its water supply from affected wells before can go to full treatment facility. The City is also exploring an interconnection with Holyoke. The Springfield Water and Sewer connection to Westfield is on the south side. That's why the City needs a source to supply the north side.

Fortunately, the water restrictions at the end of the summer led to significant shifts in use. In July use was at 9 million gallons per day. Now it is 4 million gallons per day. The City worked with MassDEP on issuing the notice to residents about well contamination. There were some

robo calls as well. Mary Anne Babinski asked how the City was notifying private well owners. Ms. Miller replied that she is not sure what the Board of Health has done in this regard.

Mr. Richardson recommended contacting him if there are any questions and he underscored that he had received a lot of good information at today's meeting to bring back to the contractor. Mr. Richardson reported that a kickoff meeting on the phone is scheduled for Tuesday or Wednesday on the phone to talk about the scope of the site investigation.

4. Water Management Act Permitting

Patty asked advisory committee members if there were any topics they would like covered in today's meeting regarding the Water Management Act permitting. The committee members stated that they didn't have any topics and Patty said that next year we should do a joint proposal to help with permit requirements for the Water Management Act Grant. Patty added that she would send the committee members the reports generated for Southwick and West Springfield for mitigation/minimization.

5. Updates

Ms. Hanc reported that the CPA of Easthampton would be voting on the Cook Road land acquisition on October 20th with a final vote by the City Council on November 16th. Patty said she would attend on November 16th with Ms. Hanc.

There was no update on the salt study.

Patty called everyone's attention to the draft document entitled *MET Grant Request* and explained she wanted to submit this funding request to launch an engagement camp for the public in order to protect the aquifer. She briefly described some of the project components and members agreed it was a good idea.

6. Finalize Annual Report for FY2016 and Work Plan for FY2017

A discussion of this topic was postponed until the next meeting.

7. Other Business

There were no topics brought up.

8. Next Meeting Date

November 1, 2016 @ 3:30 p.m.

**MEETING NOTES OF
BARNES AQUIFER PROTECTION ADVISORY COMMITTEE**

DATE: 11/1/16 LOCATION: Easthampton Municipal Offices, Easthampton, MA

MEMBERS AND DESIGNEES PRESENT:

<u>X</u> M. Czerwicz, Easthampton	C. Seklecki, Easthampton	
D. Conti, Holyoke	<u>X</u> J. Burkott, Holyoke	A. Smith, Holyoke
<u>X</u> T. Gaughan, Southamton	<u>X</u> M. Hanc, Southamton	James Labrie, Southamton
<u>X</u> Heather Miller, Westfield	K. Leigh, Westfield	Jay Vinskey, Westfield
<u>X</u> R. Newton, Smith College	<u>X</u> P. Gambarini, PVPC	

Others present: Mary Ann Babinski, Westfield City Council; Barbara Rokosz, Westfield resident; Heidi Leonard, Westfield resident; Meaghan Kwiecinski; Rob Levesque and Jon Goddard, R. Levesque Associates; and Paul Dion, Westfield Aviation Museum

TIME OF CALL TO ORDER: 3:33 p.m. TIME OF ADJOURNMENT: 5:43p.m.

Action Items from Meeting:

PVPC

- Write up and distribute 11/1/16 meeting notes
- Follow up with MassDEP on Westfield well contamination and BAPAC concerns
- Draft letter to Westfield Planning Board re: recommendations for Westfield Aviation Museum
- Continue to provide assistance to Kestrel Land Trust on Cook Road land protection

BAPAC members

- Bob to prepare update on salt study and advise on what municipalities ought to recommend to affected residents
- Marla to continue working with Kestrel Land Trust on Cook Road land protection

1. Adoption of October 4 meeting notes

Meetings notes for October will be reviewed at December 6 meeting.

2. Citizen Speak

Barbara Rokosz reported that there is tremendous citizen concern about the activities at the Roots Athletic Center and that the subdivision of this area may not be entirely in keeping with concerns expressed some time ago by the Natural Heritage program. There has been some effort to get a land trust to take on management of part of the lands here for conservation.

3. Developments of Regional Impact

Airport Aviation Museum, Westfield

Paul Dion of the Westfield Aviation Museum and engineering consultant Rob Levesque of R. Levesque Associates said that the entire museum project, including the related stormwater retention facility, are located on a parcel that the City has leased to the Museum. Proposed

development will entail construction in three phases: three buildings, a large parking area, and taxiways that connect buildings to each other and connect the Museum to the Barnes Airport's taxiways and runways. The three development phases as described are proposed as follows:

- construct 1st 7,400-square-foot building to serve as equipment storage facility
- construct 2nd 7,400-square-foot building to serve as maintenance facility
- construct 16,800-square-foot museum building, parking lot, and taxiways

To handle increased storm flows from the developed site (parking lot, taxiways, and metal roofs of the buildings), the project proposes three catch basins (CB) with CB1 to be located on the north side of the equipment storage facility, CB2 to be located on the south side of the parking lot, and CB3 to be located on the north side of the parking lot. Though there is no curbing in the taxiway area on the north side of the facilities, CB1 is to be located at a low point so that drainage from all paved surfaces in this area should drain to it. There will be curbing throughout the parking area to direct storm flows to CB2 and CB3. All three catch basins will be piped to a stormceptor unit that then directs flow to a stormwater infiltration basin on the northwestern side of the project.

BAPAC members asked about the impervious cover for this development, which appears to even exceed the 70% special permit limit in the City's zoning ordinance. Mr. Dion indicated that he felt the impact on this site is "a drop in the bucket" compared to other uses at the airport. Mr. Levesque said that the City calculates impervious based on the entire airport area, not the development on one leased parcel. (Patty later confirmed this with Jay Vinskey.) Bob Newton noted that soils in the Airport area tend to be well draining and contaminated flows can more easily reach groundwater.

Members had several other recommendations, summarized as follows:

- ☞ Ensure that locations for snow storage and any dumpster pad are within the curbed parking lot area to ensure maximum treatment of melting flows and minimize risk of groundwater contamination.
- ☞ With aircraft maintenance occurring on this site, specifically in building #2, be sure that quantities of stored hazardous materials are always below thresholds stipulated in the City's water protection overlay district ordinance.
- ☞ Install an emergency shut off valve to keep contaminated flows, should there be a spill, from reaching the stormwater infiltration basin.
- ☞ Ensure that there is a clearly articulated Emergency Spill Response Plan that addresses how the plan itself will be maintained and updated over time and who will have that responsibility. Spill response practices should include regular testing of emergency shut off valve procedures as well as containment of spills so that fuel remains on the paved/bituminous surfaces and does not reach the stormwater infiltration basin
- ☞ Require that the Operation and Maintenance Plan include the following stipulations:

- No outdoor storage of aircraft
- Procedures for parking and storing aircraft that have radial engines as these are known to leak
- Procedures for proper disposal of fuel sump drainage generated during pre flight preparations
- No use of synthetic chemical fertilizers or pesticides for landscaping maintenance associated with this site
- For winter deicing of paved areas, use of ecologically friendly, non toxic alternatives to sodium chloride

Roots Athletic Center

BAPAC members looked at an early plan of the athletic fields to identify where might be the best location for a monitoring well location. Some asked whether anyone knows how the developer actually constructed the fields and whether the plans show what is being constructed. Did the developer install an impermeable liner? Heather Miller indicated that she understood the field is porous. Did the developer put in perforated instead of solid wall drainage pipes? What did they actually build? One person attending the meeting said that the developer did extensive topsoil removal, about 10 feet.

There was some discussion about site inspection and the need for enforcement in Westfield.

Bob Newton recommended that the monitoring well be placed on the downgradient side of the field. He noted also that analysis should be done at the top of the water table. In determining what constituents to sample for, Patty found a study that may be helpful. She will send to Bob and Heather so that they can provide input so Patty can include in letter to Westfield Planning Board.

Westfield's Wells

Heather reported that Westfield drinking water supply issues have been further compounded by the drought. The Granville Reservoir is down 11.6 feet, historically double what has been previously recorded. If the Reservoir does not recharge, we could be in big trouble. The Springfield Water and Sewer Commission is located near wells 3 and 4 where we already have good supply. An interconnection with Holyoke is not feasible because they treat their water with fluoride and chloramines, different from how Westfield finishes its water.

Contaminant sampling results at wells 1 and 2 were not accurate as the consultant had combined PFOS and PFOA, putting the numbers over the allowable threshold. So while Well 1 remains closed, Well 2 is open. This is based on new sampling done on September 16. The City continues to work with MassDEP and cycling recommendations through the chain in that agency.

Bob Newton asked if the City had any other results. He said it would be good to understand if levels are going up or down. He recommended sampling every month. Based on a question from Bob, Heather said that summer sampling had been done by Geosphere and fall sampling had been done by City water personnel.

Mary Ann Babinski noted that Vermont has had the same contamination issue and they started to sample all private wells in the area of release. Heather noted that the cost for each sample is \$700. Someone asked why MassDEP couldn't cover the cost of sampling municipal and private wells.

Jeff Burkott asked, "What about Holyoke?" There are about 1,000 private residences that never got notice. He expressed concern that other member municipalities do not seem to stand with Holyoke in concern for private wells in West Holyoke. At the meeting with the ANG in October, Jeff said he did not feel that anyone backed him up when he was asking about private well testing in West Holyoke. He also took issue with wording of the e-mail message Patty had sent to MassDEP: "Would BAPAC have an opportunity to comment on this (*ANG Immediate Response Action*) plan? I'm thinking specifically that some of our members from Holyoke were concerned about possible groundwater movement northward from the site and impacts to private wells within their jurisdiction..." Jeff said that all BAPAC communities should be concerned about these private wells, not just Holyoke.

Mary Ann said that the Westfield Board of Health issued letters to private well owners and noted that letters would have reached only those whose wells are registered. Jeff asked for a copy of this letter and Heather indicated she would send this along to him.

4. **Finalize Annual Report**

This was tabled until the December meeting.

5. **Updates**

Cook Road

Marla reported that the next step is to apply to the Drinking Water Supply Protection program for funding

MET grant

Patty distributed the draft project concept paper she is preparing for submission to the Mass Environmental Trust. Jeff Burkott said he could not support this request. He indicated that the grant seeks to use Holyoke for its demographic, but does not provide any real benefit. He said that BAPAC should be finding money to do well testing at private wells instead of seeking \$15,000 for a video on the Aquifer, \$6,000 for speakers, etc.

Patty and other BAPAC members explained that this project concept for MET comes out of two years of conversation around the table about the importance of getting people more activated in protecting drinking water supply, and how BAPAC might work most effectively in this vein. Members noted too that the ANG needs to assume responsibility for the costs of testing private wells and that BAPAC can work to insist through the MassDEP process on this testing.

Patty asked Jeff what he would like to see included in this grant request that would be of benefit to West Holyoke in particular or whether he would like her to remove Holyoke from

the request. He said he could not say at that moment, but would let Patty know the following day. Jeff's response the following day:

At this point Holyoke agrees to be part of the MET grant as proposed. I feel it is important that BAPAC have complete support of the member municipalities. Should the application be invited to advance, BAPAC members will definitely need to review the budget line items and further understand what the deliverable(s) at each step will be.

6. Finalize Annual Report for FY2016 and Work Plan for FY2017

A discussion of this topic was postponed until the next meeting.

7. Other Business

Jeff Burkott also brought up the issue of equity within BAPAC:

- Holyoke has had BAPAC review of only 3 development projects in the past 20 years when other communities have had many more. Also, the reviews are not even handed. He mentioned a two-lot subdivision in Holyoke some time back that elicited BAPAC comments that were equivalent to what BAPAC had issued for development of a big box project in Westfield.
- Membership dues are not described in BAPAC's 1989 Memorandum of Agreement and do not seem equitable with all communities paying \$2,000. Patty proposed that BAPAC members talk about this at the December meeting since when this came up, the meeting was running way over time.

8. Next Meeting Date

December 6, 2016 @ 3:30 p.m.

**MEETING NOTES OF
BARNES AQUIFER PROTECTION ADVISORY COMMITTEE**

DATE: 1/10/17 LOCATION: Easthampton Municipal Offices, Easthampton, MA

MEMBERS AND DESIGNEES PRESENT:

<u>X</u> M. Czerwiec, Easthampton	C. Seklecki, Easthampton	
D. Conti, Holyoke	J. Burkott, Holyoke	A. Smith, Holyoke
<u>X</u> T. Gaughan, Southamton	<u>X</u> M. Hanc, Southamton	James Labrie, Southamton
<u>X</u> Heather Miller, Westfield	K. Leigh, Westfield	Jay Vinskey, Westfield
<u>X</u> R. Newton, Smith College	<u>X</u> P. Gambarini, PVPC	

Others present: Mary Ann Babinski, Westfield City Council; Barbara Rokosz, Westfield resident; Heidi Leonard, Westfield resident; John Keich, Westfield resident; Cynthia Pawloski and Eva Tor, MassDEP; Daniel Desroches, Westfield News

TIME OF CALL TO ORDER: 3:33 p.m. TIME OF ADJOURNMENT: 5:10p.m.

Action Items from Meeting:

PVPC

- Patty to write up and distribute 1/10/17 meeting notes
- Patty to draft letter to Westfield Planning Board re: Roots Athletic Center and problems with well sample and results
- Patty to mark up Westfield Water Protection Overlay District Zoning with recommendations

BAPAC members

- Bob Newton to pull together materials to help with advising MassDEP on private well sampling strategy

1. Adoption of November 1 meeting notes

Adoption of the November meeting notes was recommended by Tom Gaughan, seconded by Bob Newton, and unanimously approved.

2. Mass DEP Notice of Response Action letter issued to Air National Guard and follow up

Eva Tor, Deputy Regional Director of the Bureau of Waste Site Cleanup, and Cyndi Pawloski, MassDEP/Bureau of Waste Site Cleanup, Section Chief, Brownfields and Enforcement, talked with BAPAC members about the status of action relative to PFOA/PFOS contamination. Following are highlights from the conversation:

- Based on proximity of the Air National Guard (ANG)'s firefighting area to the incidence of well contamination, MassDEP considers the Air National Guard (ANG) as the potentially responsible party and issued a Notice of Responsibility in October.
- The ANG was to have provided a Response Action Plan within 30 days to evaluate whether there are impacts on private wells. As the ANG has not provided a plan, MassDEP issued a Notice of Response Action to them on December 21. ANG issued a letter to MassDEP, which they received on Friday, indicating that they plan to undertake a site investigation first before evaluating private wells. As such,

MassDEP will consider the use of state funds to pursue a program to understand impacts on private wells so that there is no further delay.

- The ANG will issue scope of work for its site investigation in early February. Their plan is to explore whether there is indeed a direct connection between their activities and the contamination.
- There is no decision yet at MassDEP as to who will do the private well sampling and there is not a date yet established. MassDEP is in the process of gathering private well information. Bob Newton suggested contacting the state geologist as he has a system of recording private well locations. Eva noted they are also working with private well data from the earlier TCE contamination.
- PFOA/PFOS were in use by ANG long before Holyoke shut down its municipal wells. It is conceivable that given how hard these wells were pumping, they could have influenced movement of contaminants and pulled them northward (despite the general sense that groundwater tends to flow south in this area). It is important to look more broadly at private well impacts, including to the north.
- Bob Newton will work with BAPAC to make recommendations to MassDEP for private well sampling
- Right now the City of Westfield is bearing the cost for all the work they are doing relative to the contamination of the public wells. The hope is that they will be reimbursed by the responsible party. Eva Tor recommended looking at Chapter 21 E for guidance on legal means to recover costs for assessment and treatment.

3. Citizen speak

Mary Ann Babinski, Westfield City Council

- Mary Ann noted that Kristen Mello contacted MassDEP and EPA and got a lot of data relative to Westfield's groundwater. She is working to collate this data.
- The City Council Ordinance Committee will revisit the Water Resource Protection Overlay District and is hoping to get BAPAC comments. Patty indicated that she would try to provide a marked up copy with some thoughts and suggestions for the next BAPAC meeting.

John Keich of 354 Root Road, Westfield

John is very concerned about the contamination of stormwater and groundwater flows from the Roots Athletic facility. He said that the Roots developers admitted that they did not follow manufacturer's recommendations on the crumb rubber field installation. He distributed a brochure entitled, *12 reasons why synthetic turf fields pose a health risk*.

He reported that he has been talking with researchers at Yale University who are confirming that these fields pose human health threats. He noted that field upkeep requires spraying of chemicals to keep algae, bacteria, and viruses at bay. Reapplications of the crumb rubber (to keep the field in playing condition) also present repeated leachings of toxic compounds. He

said that his contacts at Yale say that time is of the essence because we are only going to see increasing contamination of groundwater going forward.

On Long Island, they are removing crumb rubber fields. Other communities have put a moratorium on the use of these materials for athletic fields.

The location of these fields over an aquifer and near a wetland are especially problematic. All drainage through the crumb rubber should have gone to one location.

Others got involved in the conversation, indicating that there is no clear understanding of how these fields were built.

- Heather noted that private on-site stormwater systems not Water Department jurisdiction. Planning Board has site review function and delegates typically to DPW for site inspections.
- Mary Ann said that in Westfield, one department points to another and nobody knows for sure. It is easy to get confused.

4. Developments of Regional Impact

Roots Athletic Center, Westfield

Patty passed around a report from Roots Athletic Center regarding groundwater testing results at their site. Members noted several problems with the report:

The results are presented without critical pieces of information about the monitoring well:

- map showing actual monitoring well location on the property
- well log that shows drilling information for the monitoring well, and
- quality assurance information that indicates the sample was taken from the surface (the top) of the water table as recommended by BAPAC

Though results show that analysis was performed by a certified laboratory, it appears the sampling was done by the property owner and not by a certified laboratory as recommended by BAPAC.

BAPAC members expressed continuing concerns about the crumb rubber material at this facility and its potential for contaminating drinking water supply. Members are not convinced that the use of this materials represents a responsible approach to development over the Zone 2. Members also wanted to be sure that sampling at the monitoring well occur once each year in August, and within 2 weeks of applying any supplemental crumb rubber material.

Someone attending the meeting noted that some in Westfield reported that BAPAC approved use of the crumb rubber material. Several BAPAC members responded saying there have been continued concerns from BAPAC about this material and that BAPAC can really only provide recommendations. BAPAC is not in the business of approving or rejecting projects.

5. Updates

Cook Road

Marla reported that we would likely hear back from the Drinking Water Supply Protection some time around Easter.

MET grant

Patty reported that MET has invited BAPAC to come back with a full proposal due in March. The one comment the MET board has was that they would like to see some measurement of education and outreach effectiveness. Patty is thinking about the possibility of starting the project with a baseline survey and following up at the end with a final survey to gauge how much the program has impacted attitude and behavior. Patty asked if Water Departments might be willing to put flyer in with billing that provides information on how to access survey. Marla suggested that the survey itself might be put on the BAPAC website.

Lead and copper rule

Bob noted that he is starting a project to look at the lead and copper rule in Springfield and Holyoke.

Porous paved lot at Smith College

Bob reported that the porous asphalt parking lot has been installed at Smith. As part of the project they have installed lysimeters and a groundwater well to gauge water levels and infiltration rates. They will also be comparing groundwater ambient chemistry to infiltrated water chemistry. They are measuring at the level just below the asphalt layer and not using any filter layers, such as gravel or sand.

6. Next Meeting Date

February 7, 2017 @ 3:30 p.m.

**MEETING NOTES OF
BARNES AQUIFER PROTECTION ADVISORY COMMITTEE**

DATE: 2/7/17 LOCATION: Easthampton Municipal Offices, Easthampton, MA

MEMBERS AND DESIGNEES PRESENT:

<u>X</u> M. Czerwiec, Easthampton	C. Seklecki, Easthampton	
D. Conti, Holyoke	<u>X</u> J. Burkott, Holyoke	A. Smith, Holyoke
<u>X</u> T. Gaughan, Southamton	<u>X</u> M. Hanc, Southamton	James Labrie, Southamton
<u>X</u> Heather Miller, Westfield	K. Leigh, Westfield	Jay Vinskey, Westfield
<u>X</u> R. Newton, Smith College	<u>X</u> P. Gambarini, PVPC	

Others present: Mary Ann Babinski and Mary O'Connell, Westfield City Council; Kristen Mello, Westfield resident; Daniel Desroches, *Westfield News*; and Caitlin Ashworth, *Hampshire Daily Gazette*

TIME OF CALL TO ORDER: 3:32 p.m. TIME OF ADJOURNMENT: 5:15p.m.

Action Items from Meeting:

PVPC

- Patty to write up and distribute 2/7/17 meeting notes
- Patty to draft letter to MassDEP with private well testing recommendations
- Patty to make recommendation on Westfield Water Protection Overlay District Zoning

BAPAC members

- Bob to check in with MA State Geologist Steve Mabee on private well data he may have.

1. Adoption of January 10 meeting notes

Adoption of the January meeting notes was recommended by Tom Gaughan, seconded by Bob Newton, and unanimously approved with minor corrections to be made as discussed:

- addition about MassDEP to consider the use of state funds for understanding impacts on private wells
- insertion of Kristen Mello's name where blank left
- insertion of specifics on what testing for at Smith College porous paved lot

2. Citizen speak

Mary Ann Babinski, Westfield City Council

Chemist Kristen Mello did presentation at Westfield City Council meeting about the ANG well contamination and the crumb rubber material being used at the Roots Athletic Facility. The matter was referred to the Natural Resources committee which will consider this at their meeting on Thursday. The Public Health Department may also be involved. At their meeting this evening, the Planning Board will be discussing well monitoring results and procedures at the Roots Athletic property.

With respect to her request for BAPAC review of Westfield's water protection overlay district ordinance, Mary Ann said that she believes the timing is good: people are really concerned about drinking water supply given the recent well contamination issues and City Council membership is somewhat different than previously.

Kristen Mello, Westfield resident

She went to Westfield's Mayor to ask what she can do as a resident in protecting drinking water supply. He recommended she talk with the City Council. So she attended next City Council meeting and specifically asked members to:

- Stop the ongoing contamination of the Barnes Aquifer, including instituting a moratorium on firefighting training and calling for removal of the crumb rubber athletic fields at Roots Athletics
- Require that MA ANG, as a tenant, pay fines to cover testing and treatment of private wells in the plume area. This should not be paid by residents as they did not cause contamination.
- Create a drinking water conservation plan now and enact it soon, including enforcement of the water ban, and rain barrel installations.
- Understand that there may be more variables than previously thought, including the drought, flaws in EPA's testing methodology for PFOA concentrations, contamination from fuels, pesticides, herbicides/defoliators, and illegal dumping

3. Developments of Regional Impact

Oleksak Revocable Trust, 798 Airport Industrial Park Road, Westfield

Heather Miller provided a quick update, indicating that the developer had responded to BAPAC's December meeting comments by adding a sand filter to pretreat stormflow from the facility's metal roof before it moves to the drywell. The City Engineer was concerned about two things specifically in the revised design: capacity of the sand filter and the potential for erosion between the sand filter and the drywell. Heather reported the developer was working to address these concerns.

Roots Athletic Center, Roots Road, Westfield

Patty mentioned that BAPAC's comment letter regarding monitoring well results and procedures has been sent the Planning Board. Tom Gaughan asked whether it is worth asking for the developer to change out what they have installed for their athletic fields given all the new information about the hazards associated with crumb rubber. Mary Ann Babinski and Mary O'Connell said that the current litigation relates only to the installation of lights. They mentioned that the plan for the indoor field is also to use crumb rubber. Kristen Mello noted an EPA study from December that states that to cut down on the static with crumb rubber fields, they need to be sprayed with surfactants. Mary Ann will forward study to Patty for distribution to BAPAC members.

4. PFOS and PFOA Contamination and Recommendations to MassDEP for Private Well Sampling

Bob Newton distributed ortho maps showing several private well locations in and around the Air National Guard base in Westfield. Patty laid out some working maps, showing the general area to help in the discussion and for members to mark showing locations for recommended private well testing. Some of the major points made during the discussion:

- The most vulnerable domestic private wells are directly east of the Air National Guard firefighting training area
- There is no one complete source of information for private wells. Board of Health has some information, but there may be quite a few that were done without a permit, before

permit as required. USGS may have some data and Bob will check in with Mass State Geologist Steve Mabee on this.

- Domestic well testing should not be limited to the area presumed to be hydraulically downgradient of the contamination site. PFOA/PFOS can migrate by diffusion, with movement occurring more randomly. Other factors that could pull contamination in unexpected directions include: recent historic drought and the withdrawal pumping action of other nearby wells.
- Three wells should be tested in each of the following five areas:
 1. Along Buck Pond Road, between Char and Schumann drives, and including Schumann Drive, Westfield
 2. Dox Road and Hunter Slope, Westfield
 3. Northeast and northwest of intersection of Route 202 with Old County Road, Southampton and West Holyoke
 4. Ridge Trail Road and Blue Sky Drive off of East Mountain Road, Westfield
 5. Jaeger Drive off Route 202, near the Westfield/Southampton line

5. BAPAC Memorandum of Agreement and Dues

Jeff Burkott said he wanted to talk about the BAPAC MOA and dues because of the few number of projects Holyoke has reviewed generally (and the rigor that is applied to small versus large development proposals) and the fiscal constraints the City faced a couple of years ago when they did not pay BAPAC dues and hence did not feel they could attend meetings. Jeff noted that the MOA under which BAPAC operates dates to the 1980s. Bob suggested that maybe it is time to reconsider and take another look to see if there is a way to better meet the needs of all communities, possibly take a more expansive view of water. Members agreed that rather than try to cover this topic in a regular meeting, it would be best to have a meeting devoted to this topic, perhaps this summer. Patty will organize for a meeting on this topic over the summer months when BAPAC does not hold its regular meetings.

6. Updates - *MET grant*

Patty reported that she will be working on the proposal to MET for a public engagement campaign. She said that the project work for the campaign requires a larger budget than can be covered by a typical MET grant so she will explore other sources or figure out a way to cut back on costs in the existing budget. Members suggested that the logo might be one element that could be done outside of the grant, perhaps through a competition in the schools. Patty noted that there would be costs associated with running such a competition.

7. Next Meeting Date

March 7, 2017 @ 3:30 p.m.

**MEETING NOTES OF
BARNES AQUIFER PROTECTION ADVISORY COMMITTEE**

DATE: 3/7/17 LOCATION: Easthampton Municipal Offices, Easthampton, MA

MEMBERS AND DESIGNEES PRESENT:

<u>X</u> M. Czerwiec, Easthampton	C. Seklecki, Easthampton	
D. Conti, Holyoke	<u>X</u> J. Burkott, Holyoke	<u>X</u> A. Smith, Holyoke
<u>X</u> T. Gaughan, Southampton	<u>X</u> M. Hanc, Southampton	James Labrie, Southampton
<u>X</u> Heather Miller, Westfield	K. Leigh, Westfield	Jay Vinskey, Westfield
R. Newton, Smith College	<u>X</u> P. Gambarini, PVPC	

Others present: Mary Ann Babinski, Westfield City Council; Kristen Mello, Westfield resident; Kelsey Whiting-Jones, Toxics Action Center; Daniel Desrochers, *Westfield News*; and Caitlin Ashworth, *Hampshire Daily Gazette*

TIME OF CALL TO ORDER: 3:35 p.m. TIME OF ADJOURNMENT: 4:45p.m.

Action Items from Meeting:

PVPC

- Write up and distribute 3/7/17 meeting notes
- Draft recommendations letter on Westfield Water Protection Overlay District Zoning
- Complete and submit MET grant

BAPAC members

- Bob to check in with MA State Geologist Steve Mabee on private well data he may have.

1. Adoption of February 7 meeting notes

Adoption of the February meeting notes was recommended by Tom Gaughan, seconded by Marla Hanc, and unanimously approved.

2. Citizen speak

Mary Ann Babinski, Westfield City Council

Mary Ann reported that the City Council's Natural Resource Committee met on February 28th to discuss 3 items, 2 of which pertain to the Barnes Aquifer:

- revisions to the water resource district zoning ordinance; and
 - concerns raised at City Council meeting by Chemist Kristen Mello on ANG well contamination and the crumb rubber material being used at the Roots Athletic Facility
- DPW Director Dave Billips joined the group. Public health and safety is talking about public education. Mary Ann also indicated she was hoping to have BAPAC's recommendations for improving the water resource protection district zoning. Patty indicated that this could be addressed under the next agenda item.

3. Developments of Regional Impact

Westfield Water Resource Protection District

Patty noted that among the elements where protection of drinking water supply could be strengthened are:

Applicability section - Ensure that where a parcel is partially within the water resource district that the standards apply to the entire lot and remove the possibility of a special permit exemption, which weakens protections.

Definitions - Better definitions for Zone 1 and particularly Zone 2 could help people better understand the nature of these zones and protections afforded to drinking water supply.

Prohibited uses - aircraft related activities and aviation fuels are excluded from prohibitions, but standards are not clear

Permitted uses - single family dwelling shave 2-acre minimum lot area, but BAPAC has seen several variances from ZBA that did not seem warranted

Special permits and dimensional and coverage requirements - set up special permitting process to allow for up to 70% impervious cover on any lot or common development.

On the last item, Patty noted that a number of development projects have been before BAPAC now that are at 70% impervious cover. She asked, what is the evidence that this threshold is safe for protecting drinking water supply? She noted that the Center for Watershed Protection established that stream health starts to degrade when impervious cover exceeds 10%. Patty recommended that the City do some research of the literature to determine whether drinking water supply can be adequately protected when allowing 70% impervious cover.

There was some follow up discussion about:

- Language allowing lot development within a "common development" project to essentially exceed the 70% threshold. BAPAC had seen this at the airport where a project was exceeding 70% on a lot, but because the airport is regarded as a "common development," impervious cover can actually be even higher than 70%.
- Does this level of impervious actually damage the aquifer based on water quality concerns and how does this level of impervious relate to the new stormwater standards in the MS4 permit?

Mary Ann noted that the work is not only to strengthen the ordinance, but to make sure it is enforced. Earth removal protections are in the standards, for example, but then we have the "golden example" of Roots Athletic violating this standard. There is no one responsible for zoning code enforcement. Jeff Burkott asked, once the planning board approves a project, who follows it? Mary Ann said it is not clear. The City Planner has said that if it is under construction, the planning board can weigh in; once it is built and before a certificate of occupancy is issued, the building inspector can take complaints.

Patty asked BAPAC members if they would be amenable to her drafting a letter of recommendations rather than preparing a line by line review of the Water Resource Protection District zoning for Westfield. All agreed that that would be fine and there were no objections.

Kristen Mello said that it is important to use language that does not leave room for people to lay blame with BAPAC. She noted that the City Planner had indicated that he felt BAPAC approved of the Roots Athletic facility because the letter of recommendation had read, "if this, then that..." Kristen recommended that things be stated with far greater certainty. Mary Ann said it is not BAPAC's fault. As a city councilor, I know BAPAC is advisory and not in a position to approve or reject projects.

Andrew Smith said it is unfortunate that we have a regional water supply in the Barnes Aquifer and there are stakeholders in West Holyoke and Southampton that can't do anything about what is going on in Westfield. Jeff Burkott suggested that BAPAC might be setting itself up for failure. Mary Ann replied that fortunately more people in Westfield are involved now with the contamination of the wells and the problems at Roots Athletics. Each community needs to do what it should to protect supply and she will do what she can to protect BAPAC from becoming a scape goat in Westfield.

4. PFOS and PFOA Contamination

Patty distributed the BAPAC letter that went to MassDEP recommending locations for testing of private wells. She checked in with MassDEP and there is no update to report.

Heather Miller noted that the City is working with MassDEP to identify homes on private wells through cross referencing the list of those homes with accounts for municipal drinking water, those homes where it is known there is a private domestic well. Those homes not captured by either are then assumed to be on private domestic wells.

5. Updates

MET grant request

Patty said that she is working on the MET grant submission due in a week's time. She indicated she was trimming the budget somewhat, but not a lot was changing from the concept submitted to MET in November. She asked committee members about public events where the drinking water information and "tasting" booth might be used. Those present from Westfield mentioned: Taste of Westfield, Arts Walk, YMCA events, Westfield State community involvement days. Those present from Easthampton mentioned: Winterfest, Cultural Chaos, Arts Walk, and Millside Park concerts.

6. Other business

Unregulated Contaminant Monitoring Rule

Patty said she had asked Kristen Mello, a chemist, if she would be willing to look at results from the various rounds of drinking water sampling conducted under EPA's Unregulated Contaminant Monitoring Rule and give BAPAC members an idea of what the results may be indicating. Kristen said that there have been three rounds of this sampling and that there is a fourth round this year. She has UCMR data and is willing to look at this for BAPAC communities and report back.

7. Next Meeting Date

April 4, 2017 @ 3:30 p.m.

**MEETING NOTES OF
BARNES AQUIFER PROTECTION ADVISORY COMMITTEE**

DATE: 4/4/17 **LOCATION:** Easthampton Municipal Offices, Easthampton, MA

MEMBERS AND DESIGNEES PRESENT:

<u>X</u> M. Czerwiec, Easthampton	C. Seklecki, Easthampton	
D. Conti, Holyoke	J. Burkott, Holyoke	A. Smith, Holyoke
<u>X</u> T. Gaughan, Southamton	<u>X</u> M. Hanc, Southamton	James Labrie, Southamton
<u>X</u> Heather Miller, Westfield	K. Leigh, Westfield	Jay Vinskey, Westfield
R. Newton, Smith College	<u>X</u> P. Gambarini, PVPC	

Others present: Mary Ann Babinski, Westfield City Council; Gail Bean, Jean Carpenter of Westfield Concerned Citizens; Kristen Mello, Westfield resident; Daniel Desrochers, *Westfield News*

TIME OF CALL TO ORDER: 3:32 p.m. **TIME OF ADJOURNMENT:** 4:55 p.m.

Action Items from Meeting:

PVPC

- Write up and distribute 4/4/17 meeting notes
- Finalize recommendations letter on Westfield Water Protection Overlay District Zoning
- Prepare one-pager for use on soliciting match for public engagement campaign

BAPAC members

- Bob to check in with MA State Geologist Steve Mabee on private well data he may have.
-

1. Adoption of March 7 meeting notes

Adoption of the March meeting notes was recommended by Tom Gaughan. It was noted that name spellings needed to be corrected for Daniel Desrochers and Mary Ann Babinski. The motion was seconded by Heather Miller, and unanimously approved pending the corrections discussed.

2. Citizen speak

Mary Ann Babinski, Westfield City Council

Mary Ann reported that the Natural Resources subcommittee had met on March 27th and she mentioned the points raised at the last BAPAC meeting about improvements to the Water Resource Protection Zoning. Several issues arose, including a question about zoning ordinances in the other BAPAC communities. Mary Ann gave Patty one page of notes from the meeting.

3. Developments of Regional Impact

Westfield Water Resource Protection District - Review draft recommendations

Patty circulated the draft recommendations letter to the City Council Natural Resources Committee chair. The letter reflected discussion from the March BAPAC meeting. Patty had tried to combine some of the discussion under impervious cover and development of the airport as a common area, but admitted that it was a bit confusing to read. For the final letter she will work to clarify.

PFOS and PFOA Contamination

Heather reported that the City of Westfield has been meeting with the Air National Guard and MassDEP. The ANG is finalizing its plan and MassDEP is working with the City to identify private domestic wells for testing. Phase 1 of private domestic well testing will focus on a few areas. If results indicate the need for more testing, then they will move to a Phase 2. Private well testing for Phase 1 will stay within the jurisdictional limits of Westfield based on a 1 mile radius around Wells 7 and 8. Patty asked whether there had been any consideration of BAPAC's recommendations around private well testing (which advised testing of wells within 1 mile radius of contamination site, not the wells) and Heather noted that BAPAC's recommendations had not been mentioned.

Kristen Mello said that she had made a request to Mass Department of Public Health, Bureau of Environmental Health to reopen the cancer cluster study done in 2007 relative to TCE. That study concluded that the identified cancer cluster could not be conclusively tied to TCE contamination. Kristen noted that the study left the door open, however, stating that should additional environmental data become available in the future, the study could be revisited. She has asked that MDPH consider offering voluntary blood testing of residents impacted by the PFOS and PFOA contamination.

4. MET grant request and match for public engagement campaign

Patty reported that the MET grant request has been submitted. She distributed the scope of work with summary budget figures. Patty pointed to the need for \$16,000 in local match. She has been working with a representative from Easthampton Savings Bank to prepare a proposal. Patty asked if anyone had connections to any other potential sources of local match. BAPAC members and others did not have specific connections, but suggested a range of possibilities, including: WalMart, which sells filtered municipal supply in its Westfield Store, Big Y, Hannoush, Westfield Bank, Chamber of Commerce. Those gathered said it would be helpful to have a one-pager describing the project.

5. Other business

Patty asked if it would be okay to hold the BAPAC strategic planning meeting at the regular June meeting since she is so low on project hours and unable to organize a summer "retreat" type meeting as had been previously discussed. Members indicated that this will be fine.

6. Next Meeting Date

May 2, 2017 @ 3:30 p.m.

**MEETING NOTES OF
BARNES AQUIFER PROTECTION ADVISORY COMMITTEE**

DATE: 5/2/17 **LOCATION:** Easthampton Municipal Offices, Easthampton, MA

MEMBERS AND DESIGNEES PRESENT:

<u>X</u> M. Czerwiec, Easthampton D. Conti, Holyoke	<u>X</u> C. Seklecki, Easthampton J. Burkott, Holyoke	A. Smith, Holyoke
<u>X</u> T. Gaughan, Southamton	<u>X</u> M. Hanc, Southamton	James Labrie, Southamton
<u>X</u> Heather Miller, Westfield	K. Leigh, Westfield	Jay Vinskey, Westfield
<u>X</u> R. Newton, Smith College	<u>X</u> P. Gambarini, PVPC	

Others present: Mary Ann Babinski, Westfield City Council; Gail Bean, Jean Carpenter of Westfield Concerned Citizens; Kristen Mello, Westfield resident; PJ Niver, Easthampton resident; Daniel Holbrook, Westfield State University intern; Jean Christy, Tighe & Bond; Jon Goddard R. Levesqu Associates; and Daniel Desrochers, *Westfield News*

TIME OF CALL TO ORDER: 3:34 p.m. **TIME OF ADJOURNMENT:** 4:55 p.m.

Action Items from Meeting:

PVPC

- Write up and distribute 5/2/17 meeting notes

BAPAC members

- Bob to check in with MA State Geologist Steve Mabee on private well data he may have.

1. Adoption of April 4 meeting notes

Adoption of the April meeting notes was recommended by Bob Newton, seconded by Marla Hanc, and unanimously approved.

2. Citizen speak

Mary Ann Babinski, Westfield City Council - Mary Ann reported that the Natural Resources received BAPAC's comments and will discuss them on May 9 at their next meeting.

Kristen Mello, Westfield resident – Kristen reported that the Mayor had held a public meeting April 25th on perflourinated compound contamination and the testing at private wells that MassDEP will be conducting. She noted that one of the farmers near Root Road had done testing of his own wells for these compounds and determined that chemicals had not reached his water. She noted too that it seems to be that when it comes to impervious surface and stormwater, the authority in Westfield is the Stormwater Coordinator, but when it comes to infiltration, the authority is the building inspector.

3. Developments of Regional Impact

Valley Road Solar Project, CG Southamton Energy Development, LLC

Jean Christy of Tighe & Bond reported that the property owner at 41 Valley Road is leasing land to a solar energy developer for installation of a 2.0 megawatt ground-mounted solar array on approximately 11.7 acres of a 92-acre site. Ms. Christy noted that the 11.7 acres will need to be clear cut of the trees that currently forest the site. Moose Brook runs south-north along the western edge of the site.

Access to the site will be gained via a newly constructed gravel road from Old County Road, located southeast of the site. Components of the system will include 7,344 solar panels with footings, and an equipment pad on which will be housed inverters, switchgear, and a transformer.

Ms. Christy reported that all soils on site have been identified as well draining (in Hydrologic Soils Group A). She indicated that stormwater will not be increased with development given the soils and runoff curve numbers used for cover types. She indicated that land cover post development will improve/lower the runoff curve number.

For solar projects, BAPAC members had several standard questions and recommendations to groundwater contamination with some notes particular to this project:

- Obtain assurances that the solar panels contain no hazardous materials. The industry has been moving away from the use of toxins, but Ms. Christy said that she "believes" that the panels are non toxic, but did not seem to know for sure.
- Require that only non-toxic materials are used in transformer(s).
- Ensure that there will be no oil, hazardous materials, or other potential contaminants stored on-site.
- Stipulate that no fertilizers or pesticides be used for vegetation management to avoid potential groundwater contamination.
- Stipulate that should there be any need to clean photovoltaic panels, only non toxic cleaning products (such as a water and vinegar solution) will be used. Ms. Christy indicated that this would be the case.
- Ensure that there is a plan for properly decommissioning the photovoltaic panels and 100% funding for decommissioning secured through a bond or through a dedicated cash account. The average life of photovoltaic panels is 20 to 30 years. Special arrangements will be necessary for recycling, reusing or disposing of the panels so as to prevent problems with any associated hazardous materials within the panels. Best practice seems to be that the operator, land owner, and municipality should all be party to the bond with a review every 5 years to ensure that the funding amount adequately covers the costs of decommissioning. It should also be stipulated that the bond be automatically renewed every year and that any notice of nonrenewal by the bonding company be issued 120 days in advance to provide the parties time to establish another source of security or to draw on the bond.

Continental Cablevision (Comcast) proposal for 1110 East Mountain Road, Westfield

Engineering consultant Jon Goddard of R. Levesque Associates reported that Comcast is proposing to relocate and expand its generator and diesel fuel tank capacity. The project site is located within the Zone II of Westfield's water supply wells 1, 2, 7, and 8. There are also private domestic wells in this area.

Mr. Goddard noted that the building at 1110 East Mountain Road serves as Comcast's Customer Service and Operations facility. Generators and fuel tanks will be located at the back of the building on the north side, above ground on a new concrete pad. Facilities will include a relocated generator with a 2,800 +/- gallon fuel tank and a new second diesel generator with a +/- 1,763 gallon fuel tank. Mr. Goddard explained that the tanks will be double walled and housed with an 18" high concrete tertiary containment vault.

BAPAC members had several questions about the project and Mr. Goddard could not answer these. Answers to these questions are critical in evaluating the degree to which drinking water supply protection considerations are addressed in this proposal. Questions included the following:

- How often will tanks be refueled?
- Where are the refueling hookups relative to containment of the diesel fuel?
- Is there a curbed asphalt area to contain possible spills during refueling? If yes, how would these be contained? What would spill response be?
- What are the specific connections within the tertiary containment?
- Does the diesel fuel need to be treated with a biocide? If yes, how will this be managed?
- Will the generators be tested at specific intervals? If yes, what is the protocol?

PFOS and PFOA Contamination Update

Heather reported that the City of Westfield should have bench scale testing results within the next few weeks. Bench scale testing will help determine the sizing and type of the treatment units to be used as well as help project the frequency of backwashing and carbon change out. City officials also did a site visit to a smaller scale Granular Activated Carbon Plant in Pownal, Vermont, where they talked about the different carbons that had been used for treatment of perflourinated compounds. This plant was very different scale from what Westfield is talking about. The City is actively pursuing design and construction to treat water from Wells 7 and 8 as this is the highest priority. How the treatment plant gets paid for is being dealt with by others. From what she understands the Air National Guard has not offered to pay noted Heather.

For the Air National Guard (ANG) investigation, they are currently limiting their work to just the known locations of contamination around the firefighting area. She noted that MassDEP has some ability to influence the ANG investigation, but not beyond the federal framework being used at contaminated ANG sites.

Kristen Mello noted that Fire training site #1 where the ANG used to set planes on fire for their training is City owned so it is not a part of the evaluation.

There was some discussion about MassDEP's investigation of private wells. Bob Newton asked if this is the only approach taking place, if there is any modeling of groundwater flows to understand where contamination could have gone. He noted that the Air Force has lots of people capable of doing ground water modeling. Bob said that he thought the private wells should be more under BAPAC's purview. It is worth another conversation with MassDEP.

4. Work by Daniel Holbrook, Westfield State University Intern

Patty introduced Daniel Holbrook, who has been investigating over the past few months two things for BAPAC:

- best practices on snow and ice management in drinking water supply areas; and
- K-12 resources on drinking water supply to post on BAPAC's website

Daniel walked BAPAC members through his review of snow and ice management practices and recommendations. Members noted that MassDOT seems to be a big problem in Southampton in particular with the salt contamination of wells along Route 10.

Daniel noted that the practice that seems best suited to protect water supply where you need snow and ice management is a product called "Magic Minus Zero," which is a magnesium chloride blend often sprayed onto rock salt. Bob Newton asked what the proportion of this product to rock salt. Daniel indicated he would look into proportion and add it to the report. It was noted too that usages for Granby should be expressed in terms of per lane mile.

Bob asked if there is anyone using calcium chloride based salts. Daniel said it seems that magnesium chloride seems to be what people are using. Bob noted that it is important to understand the exchange reaction between salt and the organic materials in soils, which can produce hydrochloric acid where you have acid soils. So the question becomes, which is most likely to cause this reaction: magnesium chloride or calcium chloride?

Daniel also shared the list of resources he had found on aquifer and groundwater curriculum for Grades K-12. These resources will be posted on the BAPAC website.

5. Updates

Cook Road grant

Marla reported that the Massachusetts Drinking Water Supply Protection grant program has awarded a \$___ grant for purchase of the Cook Road property. Kestrel Trust is working to make sure that both Southampton and Easthampton municipal officials follow up on their respective actions to secure the property.

6. Format for June meeting

Patty distributed a handout outlining a series of questions for BAPAC's June meeting which will focus on the operation of the organization going forward. The idea is to find a way to work more effectively and equitably together.

Marla noted that even if it is difficult, we need to get other BAPAC representatives to show up at this June meeting.

Bob said the equity issue is a good one to bring up, but he is not sure if we will solve it. Heather recommended looking at goal setting and prioritization. Also need to determine whether the budget is adequate. If BAPAC is wanting to become more effective, it may need more resources. We also need to think about demonstrating benefits of BAPAC's work.

7. Next Meeting Date

Tuesday, June 6, @ 3 p.m.