

Minutes of the Fourth Impacts of Growth Subcommittee Meeting

The fourth Impacts of Growth subcommittee meeting was held on March 13, 2014 from 1 – 4 pm at the Chamber of Commerce in McHenry. In attendance were Bob Browning, Steve Green, Willie Lantz, Eric Robison, Rich Orr, Paul Weiler, Brian Greenberg and Deborah Carpenter.

The minutes were approved as submitted.

Speakers for upcoming meetings are as follows:

- April 10 – Eric Null has stated that he will attend either in person or via phone. Discussion ensued about whether to invite past lake managers in order to get an historical perspective. It was decided to invite both Carolyn Matthews and Paul Durham.

Educational Session

Guests attending the meeting included Steve Sherrard and Craig Umbel from the Environmental Health Department and Patrick Hudnall and Richard Shoemaker from the Public Utilities Division of the Department of Public Works. Rich started the conversation by asking Steve if any data existed about failing systems and if there was any kind of recommendation that they could foresee might be helpful to the watershed in relation to private septic systems. For example, are there new types of private systems out there right now that are better than what we presently have? Steve stated that any system that serves more than one household comes under the Public Utilities domain. He went on to give a general description of what his office does. The Environmental Health Dept issues the septic permits and conducts percolation (perc) tests for individual homes and subdivisions. They also issue well permits and conduct water testing. If someone drills a new well they have to get a certificate of potability and it's tied in with the use and occupancy process in the county permits office.

As it pertains to on-site septic systems there are two sets of regulations that govern the Deep Creek watershed – one is the state regulations for on-site sewage disposal and the other is the Deep Creek Lake Sewage Disposal Ordinance written in the 80s. Within that Ordinance the minimum lot size for an on-site sewage disposal system was one acre. That was amended in the early 90s to increase that to 60,000 square feet. The reason for that was that they were seeing a demand for larger homes (4-6 bedrooms instead of the typical 3 bedroom home). Septic systems are sized based on the percolation rate obtained during the perc test and the number of bedrooms in the home. They do not go by the number of bathrooms because the more bedrooms you have the more people can occupy a home comfortably. When a perc test is conducted they have to find at least 10,000 square feet available for the septic system. The homeowner must have enough room to install the initial septic system and two reserve areas. These are areas that could be used in the event of a failure of the original system, and if necessary the failure of the second system. Typically systems are good for 20 – 30 years. In the Deep Creek Lake Sewage Disposal Ordinance the area needed for the septic system was increased from 10,000 square feet to 15,000 square feet.

An acceptable percolation rate is between 2 and 30 minutes for a one inch drop. The faster the percolation rate the less amount of drain field you're required to have. There's a range from 16 – 30 minutes that will require the maximum amount of drain field for the number of bedrooms the homeowner plans to have. Within that range for a 3 bedroom home, 375 feet of drain field would be required – 2 feet wide, 2 feet deep installed in linear trenches parallel to each other on contour.

Paul asked if there is any requirement as to how far the drain field has to be from the water. Steve said yes, both the sewage disposal area and any area that it may be expanded into in the future must be 100 feet from both the lake and the well. Brian asked if Steve felt that 100 foot setback was sufficient. First Steve stated that there aren't many new lots being developed on the lakefront with septic systems. Steve then stated that there are older lots that pre-date these rules where septic systems are currently closer than the 100 foot setback. If they have to do a repair on one of those sites you're faced with a trade off. Do you repair it while closer to the lake and have the effluent in the ground or do you not

repair it and have it on the surface? Sometimes it's possible to perc an area higher up on the lot and pump back to it. The lakefront houses tend to be low because everyone wants to build as close to the water as they can. When faced with that situation the well has to be higher as it is required to be higher in elevation than the septic system. Bob mentioned requests that he had seen come before the PRB requesting systems be on the buy down. Steve said, yes, we do that, and it requires a letter of recommendation from his office to Lake Management. If they do go on the buy down they still want to keep it 100 feet from the lake. Typically they have been able to do it, since some of the buy downs are quite large. They do occasionally require a 3 foot wide trench instead of a 2 foot wide trench, but they won't do that on steeper slopes because that will sometimes require a deeper trench on the uphill side.

With the perc tests they don't just look at the rate at which the water drains from the hole, but they also look at the soil profile down to six feet. They do this because they need a 4 foot treatment zone, which means 4 feet of good soil below the bottom of the trench (typically 2 feet deep). Once the effluent is filtered through those 4 feet the viruses and bacteria are cleaned out of it. It will not remove the nitrogen and phosphorus but it does remove the pathogens. When they examine the soil profile they are looking at rock content, clay or evidence of high water table. If they can't find a treatment zone that is a typical reason why a perc test fails. There are a few properties that Steve's office has failed. They do what they can to approve them by offering alternatives, like a sand mound for example. If you don't have that 4 foot treatment zone, you can supplement with sand. So if you have at least 2 feet of good soil, you can pile 2 feet of sand on top of that to create your 4 foot treatment column. That kind of system requires that the effluent be pumped in to it so as to evenly distribute the effluent. It is a specialized type of sand and it is fairly expensive. The homeowner is looking at around \$15,000 to \$20,000 dollars for a sand mound system.

Sky Valley is a place where they have found that there is fractured bedrock, and they have contaminated wells in that development from septic systems. Water tests of the wells have shown fecal coliform bacteria. The Environmental Health Department didn't start doing deeper percolation holes until 1985. Sky Valley and a number of other subdivisions were developed prior to that. In Sky Valley and other places there is shallow bedrock, it's fractured and the effluent is getting down into the water table. Rich pointed out that the lots are smaller out there as well. Steve said they are half acre lots and they have turned down lots for septic out there. Also, not all those lots were perc tested when the subdivision was developed. His office will go out and perc test them now. In addition on these older subdivisions there used to be a 50 foot separation between well and septic. Now it's 100 feet (as of 1985). They have turned down lots because once you draw a 100 foot circle around all nearby wells as well as the proposed well, there's not enough remaining land area to meet the requirement for well or septic drain field. Brian asked if it was possible to do a statistical analysis of how many 'at risk' lots there are around the lake that were from prior to 1985. Further Brian noted that the subcommittee asked Steve, Craig, Pat and Shoey to this meeting with the assumption that problems with private or public sewer systems could be adversely affecting the water quality of the lake. Does Steve have some sort of feel, based on sample testing for example, that there is a nutrient loading problem with private systems and where they may be?

Steve noted that another task that they do is that they conduct lake water sampling May through September. About once a month, DNR supplies them with a boat, and a person from Steve's staff samples for bacteria in about 21 locations around the lake. In a select number of locations representative of zones they've divided the lake into, they also do nutrient sampling, nitrates and phosphates specifically. Steve can say he's seen a lot of wells come back with higher bacteria counts than what is found in the lake. The lake water is clean unless you happen to swim into an area with an excessive goose population. The nitrate and phosphate counts have been low; therefore there doesn't appear to be a big nutrient load in the lake. Those sampling numbers are at his office if anyone wanted to see them. If we have any algal blooms at the lake they tend to be at the head of the shallower coves.

Paul asked Steve when he does his water quality sampling, does he notice a difference between those areas that have public sewer, like in the northern end, and those that don't, like in the southern. Steve responded no, the lake seems to be typically low in nutrient load around the entire lake. If there is any difference at all Steve believes it is more attributable to the fact that the shallow coves are in the southern end. If there are any larger numbers in the southern end he feels they are more likely due to geese and the shape of the lake in the southern end. Paul followed up with 'That begs the question, why bother putting in a public sewer system?' Steve explained that there is more than one

reason for putting in a public sewer system. For example, for an area like Sky Valley, if you were to bring public sewer into there, their well water and the water table, would be cleaned up. Paradise Ridge off Paradise Road is another area that would benefit from a public system. Also lots that are currently undevelopable due to lack of Environmental Health approval, would then be developable.

Eric noted that looking at the draft Water & Sewer Master Plan, it appears that some of these areas are in the plan for service at a future date. He further wondered if any statistics had been calculated as to those areas that may be in imminent risk of failure but may not be addressed in the plan. Steve stated that if they have an application for an undeveloped lot in an area that we know has an issue with groundwater, we can require that they drill the well first. If they can't get good water, they are denied a building permit. Eric noted that takes care of unimproved lots, but what about existing lots that have failed systems? Most of the issues we have identified have come from grandfathered situations. Is there anything our subcommittee could recommend that would improve those situations?

Steve stated that they always require clean-up of a failing system. As far as his office recommending a specific system to do that, Maryland is traditionally conservative with the types of septic systems that it allows. It is now recommending BAT (Best Available Technology) systems – in fact they are mandatory on all new development in the Chesapeake Bay watershed. That system is geared toward removing nutrients, specifically nitrogen and phosphorus, but does not specifically improve the removal of pathogens. Eric asked if we have a mechanism in place to force homeowners to move to a BAT or some other system in the Deep Creek watershed. Craig noted that they have approved BAT systems at the lake. If the system is being placed on the buy down a BAT system is required. Steve noted that with the BAT system if you remove the nutrients, you get a longer life out of the drain field. Bob noted the cost of that system is pretty steep and it requires on-going maintenance. Craig noted that BAT systems are also required by their office if you are building and cannot meet the minimum area needed for the two backup drain fields. For example, if a person wants to do a rebuild on an existing lot of record and can only supply 75% of the area needed, the office will require BAT on the system, so that the original system will last longer and perform better. Eric stated that in essence, though, we have no mechanism to make an older system change to a new system. Steve & Craig stated that if the system is failing they are required to fix it. As soon as they know about it they go out and make sure it is fixed. Steve noted that there are two types of failures. The ones on the surface are the easy failures to detect and they are notified immediately. There are failures below the surface, like in Sky Valley, where effluent reaches the groundwater without proper treatment. Those are harder to detect. They will find out about it through the well water testing eventually. In the case of Sky Valley, they noted the problem in the well water and presented to the Home Owners Association a couple times about the need for a public sewer system; however the homeowners have decided they would rather treat their well water than incur the cost of a public system.

Brian asked if perhaps there was a third type of failure, where there may not be florid symptoms of failure and pathogens aren't detected in the well water, but nutrients may be entering the lake, especially on older southern lakefront properties. Are there ways we can tell if that is happening? Could there be a correlation between old septic systems in the southern end of the lake leaking nutrients and the proliferation of SAV in that area? In fact, Brian believes that if we can add up the areas that we know have a problem, like Sky Valley, with those properties that we know have 70 year old septic systems that are likely to be failing, and concentrate efforts on those areas; we may be able to form an effective recommendation. Willie noted that the Water Quality subcommittee has been obtaining education on SAVs and have learned that the nutrient loads in the lake in general are pretty low, in fact almost to the point of not being able to support the kind of conditions needed for good fishing. The WQ subcommittee has asked the experts about the shallower areas and they had not done as much testing in those areas. They've asked that the WQ subcommittee wait until they hear the presentation on the stream data, because they feel that the majority of the sediment coming in is coming in via the southern feeder streams. As for the SAV, Lee Karrh from DNR has stated that if you have more nutrients coming in to an area, you generally see more invasive species, not native. However, if you lower the nutrient levels, it will not necessarily get rid of the SAVs. The experts did tell the group specifically that they cannot identify the source of nutrients.

Steve G said that he heard that you can check for tracers in the water to check for failing septic systems; however that's an expensive test. Willie wanted to clarify that Sky Valley residents have been given the option to treat their well water,

but have not been forced to correct the septic issue. Eric asked if there is any indication that their septic problems are affecting any area outside of their development. Thousand Acres is the closest and so far Steve's office has not found pathogens in their well water. There are issues on the opposite side of the lake at Hines Drive and Clark Lohr Road – the Northglade Hills subdivision; however, there's no indication that it is linked to Sky Valley. Debbie asked Pat to verify that those two areas are noted in the Draft Water & Sewer Master Plan as areas of concern planned for public sewer hookup. Pat verified that but could not recall what time category they were placed in, but most likely within 10 years.

Eric asked Steve if he had any recommendations that he would give to us to forward on to the Steering Committee. Steve said bring service in to those areas that we've just been talking about. Brian noted that puts us in an all or none mode. Sure, for these areas of known concern we can advocate for public service, but what about these random lots of probable failure? Could these be contributing to the nutrient load in the lake? Steve S said if we could quantify the nutrient load in the lake, and then figure out how much is coming in from the tributaries, what's left might be septic or lawn fertilizers. Craig said it was important to note that when public sewer is introduced many lots that are currently disapproved, will be approved, so the amount of development could potentially increase. Bob noted that we don't want to stifle reasonable growth, but that's a tough situation. There are a lot of small grandfathered lots that could be built upon with sewer, and some that were limited to smaller houses that would then be allowed to build bigger ones. Nobody is happy when they are faced with the expense of a public system; however, for the betterment of the watershed as a whole, at some point you have to do it. Steve S thinks there a number of people opposed to the expansion of the public systems for the very reason that development would increase.

Steve G noted that during the last sewer spill, Monty made the statement that his people were telling him that private septic were inputting more into the lake than the couple sewer spills. However, based on what we've learned today it would seem that we can't quantify exactly how much impact the private septic are having. So how do we identify these failing septic? Steve stated they find them because the owners or the neighbors call. Craig noted that their office was doing lake sampling well before public sewer was brought into the watershed, and that data did not see significant changes when public systems were established. Steve G asked how long they had been testing for nitrates and phosphates. Steve S said he wasn't sure; he'd have to go back and look. However, it's been quite a while. Willie said personally he feels that the impacts of septic have more to do with groundwater than nutrient load introduced into the lake. He feels that if we were to add up all the nitrogen created by all the septic systems around the lake, the numbers would probably be fairly insignificant based on the dilution factor that happens due to the size of the lake. Steve S noted that the state has made an estimate that the standard home creates 7 pounds of nitrogen per year. Willie stated that if you buy a 50 pound bag of 10-10-10 lawn fertilizer and put it on your lawn; you've just contributed 5 pounds of nitrogen to the system. He stated that to him, that is the significance of this discussion. You can fix every system perfectly and may reduce the nitrogen load by an insignificant amount. Steve S noted that the county was faced with that when they had to submit a TMDL (total maximum daily load) plan to the state. When looking at all the numbers, the best way to reduce the load was through best management practices for extractive industries. Retrofitting every system in the Bay watershed portion of Garrett County with BAT systems would not have gotten even close to the target number we were required to reach. Brian noted that it is extremely helpful to hear Willie weight the amount of nitrogen contributed from different sources and suggested that we need more information of that nature.

Craig noted that their office regularly inspects rental houses and the lake. There are around 800 rental homes and approximately 300 are on septic. Steve S noted that the definition of bedrooms has always been a big issue, especially around Deep Creek Lake. They size the septic systems based on the number of bedrooms and restrict them to a certain number of bedrooms. In rental homes then they get 'sewing rooms', 'dens', 'offices' etc. that are probably not being used for what the office is being told they're being used for. Traditionally they've always said if you build a room and it has a closet in it, then it's a bedroom. Take the closet out and it's not a bedroom. Steve S said he's not sure that there's any solution to it, but wanted to bring it up as something his office has had some issues with. Another system for sizing septic systems may work better considering the ease with which the bedroom issue can be circumvented. Paul suggested using an index number of square feet per bathroom.

Willie asked Steve and Craig, of the wells they find with problems in them, what percentage of them are constructed using the latest requirements and standards? Steve S said they went to a 40 foot casing requirement some time ago. If

his office thinks there's a problem they can special condition the well permit for deeper casing. Brian asked if septic systems are known for contributing any salt load to the lake, which may account for the higher conductivity numbers. Steve S said no, salt is not an issue with septic systems. Willie noted that since salt dissolves in water it's not separable like phosphorus and nitrogen. The only way to reduce a salt load is by dilution or distillation. He also noted that as organic nitrogen breaks down it leaves salt, so increased nitrogen does lead to increased salt. As far as the agricultural field goes, Willie said they don't worry about salts because since salt is highly water soluble it leaches. Steve S said there are a few wells that show a seasonal fluctuation of high salt content but those are generally close to the highways. In fact, the Keyser's Ridge water system was installed to alleviate a salt problem. SHA has re-drilled wells for folks that have that problem.

Rich asked Pat and Shoey if there is anything related to the current public sewerage system that we need to be concerned about for the next 5 - 10 years. Also, we talk about the need to expand the sewer, but what actually has to be done to get that accomplished. From a public relations perspective a sewer spill that gets reported in the Baltimore Sun has a major detrimental impact on the perception of the health of the lake. Shoey said the problems they had with spills in 2011 and 2012, they spent about a half million dollars fixing that problem. We now have two sets of backups at every pump station, backup generators and backup independent diesel pumps that come on when the power is out. Eric thought one of those had failed due to faulty wiring and Shoey clarified that the transformer had gotten hit on one. Those stations are also on a satellite system, so if there is a problem they know within 5 seconds and they can respond. The spill they had not too long ago, he wasn't sure how that could have been avoided. That was a problem with a valve buried beneath a roadway. The packing material had disintegrated, so they had to excavate to fix that problem. That line was shut off immediately once they found it. There were 3 valves within 5 feet of the bad valve that were in fine shape and they were all put in the same day. The Western Conveyance project will greatly help these situations because it will create a loop system and they will then be able to reverse the flow while they work on a problem area instead of shutting down an area and maintaining it with a septic truck.

Bob noted that the valve problem was unusual. The pump stations are where the issues have always been. You'd think with 3 pumps, the backup systems and the satellite monitoring those problems are taken care of, but what if it's not? Is there any containment mechanism in those areas? Pat stated that for the volume we're talking about it would take a massive area to treat that volume of backup. The county doesn't own the amount of ground around those stations that would be needed and you're looking at a million per day flow at those 3 stations. Bob asked if this is a line dumping in to a tank and then pumped out of the tank and down a series of relays, and they said it was. Bob then asked if there was a way to seal that tank off. They said no. Eric asked if there was a system with electronic relays and gate valves that detects a problem and automatically shuts a gate. Shoey stated it would just run over at the gate that shut down. Currently they don't have a place to re-route the flow, until Western Conveyance is up and running. Shoey noted they do have storage tanks, they can relay flow to. Before the plant was built to the size it is now, the flow used to go to the storage tanks. That would last 3 days at a million gallons. Having a storage tank at every station with a million gallon capacity is the only way to accomplish what is being suggested. Pat said that's the big draw of the Western Conveyance. A storage system is not needed because it gives them an alternative way to route the flow. Rich asked how long before the Western Conveyance is ready. Pat said they are hoping to start construction this year and it's a two year project.

Bob asked about the 10 year plan to possibly get public sewer to the southern end of the lake or Paradise Ridge. Pat verified that it is in the plan but couldn't remember exactly what the time line was for those particular areas. Rich asked about the rising cost of the sewer tap. A lot of resistance to public systems is because it costs the recipients an exorbitant amount of money. Shoey stated the tap fees are the debt on the plant. Pat stated that all the systems have some sort of debt repayment associated with them. For example, the Thayerville system users have an ad valorem tax and that goes to repay the debt on the system. Rich noted that some of those areas like Sky Valley have a lot of primary residents and that fee is a huge problem for them. Bob asked if it costs the same in the other areas of the county and Pat said no. The number to recoup the cost of a system depends on the system. Eric noted that in Oakland the homeowner can buy his own grinder and save the homeowner that cost, since it's cheaper than buying one from the county. However, Shoey noted that in that case, the homeowner is responsible for the maintenance of it. Rich stated that the only way to fix the issue is for the county to come up with a new formula for calculating debt recovery. Brian asked if there was a reason why the debt costs are not spread out throughout the county. Rich asked who is paying the debt load when development is down and the county is not selling taps. The county ends up footing the difference

annually as part of their budget, according to Eric. Rich suggests figuring out a more creative way to fund the planned extensions found in the new Master Plan.

Willie asked Steve S what exactly the BAT system consisted of. Craig runs the BAT program and explained that the system runs on aeration, primarily mechanical but they have a couple that run with pumps. You get a media growth that collects at the end of your aeration. Eventually it sloughs off and drops back in to your tank. The drain fields are the same as in traditional systems. Willie asked how the BAT systems compare in cost to standard systems. Craig said the unit itself is around \$6000 just for the tank. A standard system will cost you between \$700 and \$1500 depending on the size of the tank. Currently outside of the Bay watershed and outside of the lake buy down area, you don't have to put one of those systems in. You have to be certified to install and maintain one of these systems. Deborah asked how the maintenance compared to regular systems. There is no maintenance on the traditional systems, but there is on these. The homeowner will either have to be certified or pay someone to maintain the system for them. The maintenance involves cleaning the filters and making sure the aeration is working properly every six months. Craig also noted that MD requires that every distributor provide 5 years of maintenance. After that it is the homeowner's responsibility. The state is currently trying to figure out how to ensure that those systems are maintained after the 5 year period is over.

Steve G noted that the public relations nightmare that happens when a spill happens equals dollars out of business owners' pockets. Steve S noted that really comes back to their office. Public Utilities is required to report a spill to Environmental Health who then works with them on what happens at the spill site and on public notification. Willie noted that this may be a topic of interest to the Accountability subcommittee. If they could come up with a way to be involved in the notification process somehow, it may alleviate the misconceptions. Bob noted that door to door notification of those that are affected may be more appropriate on the smaller, more localized spills that may not make it off the property they are on. Steve S suggested that doing a better job of putting out the good information about the sampling that is done that shows how good the quality of the lake water is may help as well. Willie stated that there has been discussion about putting out a report card on the lake health.

Steve G wondered if it would be a good idea to map the aging septic systems so we would have some idea of where potential problems might be. Paul noted that the septic systems may contribute little or nothing to problems in the lake and such an exercise would not serve much purpose. The issues may very well be localized and our attention may be better suited to focusing on the streams. Steve G noted that at a minimum such a study could direct sampling site locations. Bob thinks that getting the actual age of a septic system might be a difficult task.

Discussion ensued about the stream report and sedimentation report and the sheer volume of information the subcommittees are getting at this point. It may be difficult to process and have recommendations by May. Several members suggested bringing it up at the Steering Committee meeting.

Continued discussion of Objectives and Strategies pertaining to the Land Use Goal (#3)

Bob reviewed the Land Use Objectives agreed upon at the last meeting. All objectives voted upon last month were determined to be acceptable and forwarded on to the Steering Committee as written. As to the objective encouraging waterfront businesses, Bob suggested adding a strategy of tasking the think tank with looking in to methods of reducing the cost of commercial dock permits. After much discussion it was decided that it could be a topic brought up to the think tank once they are operational. It doesn't need to be written in to the strategies.

The group then discussed the proposed objective that was not voted upon at the last meeting: 'No shale gas drilling wellheads should be allowed in the Deep Creek Watershed'. Deborah had prepared a map as per Willie's request that showed wellheads located at various places just outside of the watershed. She included a buffer around the lake of 2000 feet as per current regulations and an 8000' buffer around each wellhead to depict the extent to which a drilling company can drill beneath the surface. Paul expressed concern that the map showed that there are places where companies could drill underneath the lake. Willie stated that at the depth those bores are made (8000' below the surface) it would have no effect on the lake or any surface activity. Bob noted that the issue with under the lake is that the state owns the lake and they won't allow the drilling to go on beneath the surface anyway. Willie also noted the

current regulation in the zoning ordinance that mandates a 1000' buffer from unleased properties, which cannot be depicted on the map. In order for them to drill into the watershed that regulation has to be met anyway and the odds of a drilling company being able to drill in the watershed based on that restriction are already greatly minimized. Paul asked if the map could be modified to show all the existing constraints, but we cannot predict who would be willing to lease their property and who wouldn't. Eric noted that the reason for the map was that Willie was concerned about farmers in the outskirts of the watershed that would be precluded from being able to lease their land. The map shows with a wellhead outside of the map, some properties in that area could still lease their land and reap the benefits without having any surface operations within the watershed.

Eric noted that Deborah had also included for the group some information about other industrial activities permitted in the lake. Currently the zoning ordinance states that petroleum products storage is permissible within the commercial district only and not in any of the other districts. With shale gas drilling there will be condensate tanks that hold petroleum by-products. Eric contends that since they would want those tanks at the bore head, the only areas they could look at in the watershed are commercial districts only. Bob noted that will all depend on the definition of petroleum storage. He suspects the definition is dependent on quantity and if it's less than that quantity than it would not be restricted.

Willie stated that the map does show that there is potential for a lot of property owners to still lease their properties; however, he's still concerned about the landowner that is not covered by those 8000' buffers around the wellhead. That property may have mineral rights that his family has owned for years that he cannot benefit from. He still contends that there is no difference in impact from a wellhead sitting just outside of the watershed from one that is sitting inside of the watershed. As far as water quality is concerned he feels the impact is the same regardless of the watershed it sits in and we shouldn't single out Deep Creek watershed as more important to be protected than any of the others. He would at least give the caveat that it could be done in the outlying areas with a special exception. Bob said special exceptions are really permitted uses with conditions placed upon them. As chair of the zoning appeals board, Bob said there are places that he would feel comfortable saying 'this is the worst place to put this well' and that's the only way the board can really completely turn down a special exception use.

Willie argued that the benefit an outlying property owner within the watershed receives from the lake is no greater than one of a property owner outside of the watershed. However, that land owner has greater restrictions because of the zoning ordinance. Paul pointed out that is the nature of zoning and cannot be resolved. Willie agrees with Paul but feels that establishing a zoning district based on the watershed boundary was atypical as most are based on municipal boundaries and the fact that it is based on watershed puts owners on the outskirts of the watershed in an unfair position. The owner is not getting any benefit from infrastructure that is located closer to the lake but he is getting the restrictions.

Paul believes the real issue for the drilling is not the location of the wellhead but the reach of the horizontal drilling. Eric disagrees. The issues associated with the operation are surficial and are located at the wellhead. No evidence suggests any ill effects from the horizontal lines 8000' below the surface. Eric commented that restricting drilling within the watershed is for the good of the entire watershed. Willie re-stated that if it's good for one watershed than why not apply it to the county as a whole? Eric stated that is not within our scope. Willie contends it is within our scope but not affecting the lakefront owners in this case. We have discussed what is good economically for the lakefront owner. Now we're talking about what is good economically for the off-lake owner. Willie thinks the current regulations are sufficient. He suggests making it permitted in Rural Resource or Agricultural Resource. That will prevent the tourism sector being negatively affected. Bob wanted to know if another map could be made to reflect that idea. Steve stated that the farms and the forests in the watershed are just as important to tourism as the lake. **With the caveat that this is going to go to the full committee, Eric made the motion that the recommendation that no shale gas drilling wellheads be permitted in the watershed be presented to the Steering Committee. Paul seconded the motion. The motion passed by a 6 to 1 vote with Willie opposed.**

The meeting adjourned at about 4:00. The next meeting will be held April 10th from 1 – 4 pm at the Chamber.