

**Town of Hinesburg  
Planning Commission**

**January 25, 2012**

Approved Feb 8, 2012

**Members Present:** Jean Isham, Joe Iadanza, Carrie Fenn, Johanna White, Ray Mainer, Tim Clancy, Tom Ayer, Bob Linck, Kyle Bostwick

**Members Absent:** None

**Also Present:** Alex Weinhagen (Planning/Zoning Director), Freeda Powers (Recording Secretary), Bill Marks, Dave Hirth, Chuck Reiss, Andrea Morgante, Visiting Presenters Jessica Louisos and Roy Schiff from Milone & MacBroom.

Joe Iadanza chaired the meeting, which he called to order at 7:32pm.  
Jean Isham arrived late, joining the meeting at 7:52pm.

**Village Area Stormwater Study – Presentation by Milone & MacBroom**

Alex W arrived and introduced presenting guests, Jessica Louisos and Roy Schiff from Milone & MacBroom, Inc. Jessica and Roy presented a slide demonstration along with a 10pg excerpt (including parts of the Introduction and Executive Summary) of a final project report from a municipal planning grant funded Hydrology Study of the LaPlatte River and subwatersheds in the Village Growth Area. This project builds on a previous study done by the LaPlatte Watershed Partnership.

Roy spoke in reference to several hydrographs and pointed to the correlation between % impervious cover and storm water burden. Through the use of slide images, he showed this correlation and explained that entering the Village, the % of impervious cover is already rather high (10%-14%). He suggested that by applying the information in the model offered, the town has the opportunity to take a broader look at village area growth rather than individual development projects, and see how a cumulative impact might look.

Jessica spoke in regards to runoff and began by orienting the board to slide maps of Hinesburg. She discussed runoff as it correlates to development and different soil types. Existing runoff is high in the village area, as the soils tend to be more dense clay than other subwatersheds located upstream of the Village Growth Area.

Jessica and Roy both spoke to the importance of a “Green Infrastructure Network” (i.e., stream buffer zones, flood plains, wetlands and reservoirs) which they say a previous study found the area has naturally available. They agree such areas should be of high importance when considering a centralized plan for development. Existing infrastructure is available for retrofitting in quite a few areas. The modeling can be used to develop regulations for future development which result in desired development patterns that address and encompass some level of storm water treatment.

Jessica and Roy proposed an example of a “rain garden” which could potentially be located near the intersection of Silver St and Rte 116. Such a project would consist of several (in this model 3) “catchment” or containment areas which would serve as a simple yet effective storm water treatment area. This idea stimulated some queries. Bob L asked who would maintain such a project. Jessica answered that such clean up efforts would best be undertaken by local road or debris clean up crews sometime after the spring runoff and suggested this would be sufficient to maintain the gardens effectiveness. She did acknowledge that long term maintenance may come to encompass a larger effort perhaps in replacing the sediment that collects or replacing filtration fill (i.e., sand or gravel) with clean or “fresh” material.

Roy added that rain gardens need time to get established in order to fully benefit an area. He suggests that the first year be dedicated solely to the planting and establishment of plants, grasses, etc.

Kyle B asked for clarification on exactly *how* a rain garden works. Jessica explained that through infiltration, mechanical filtering and settling in basins, a significant portion of “solids” and phosphorus are removed by the rain garden.

Kyle B then followed up asking what can be done with the impervious soils found in the Village Growth Area. Roy suggested options which include more long-term detention, including something called a “recharge gallery” in which water slowly perks through gravel material into a series of underground holding areas. Jessica added that indeed, Shelburne just put a “recharge gallery” in place under a soccer field. She added that the project was very expensive but that grants are available to help off set the costs. Jessica also addressed soil concerns with Kyle B, saying that modeling shows that there are some “B” soils in the Village Growth Area (good infiltration rating).

Alex W asked Jessica about phosphorus removal and pointed out that he was impressed with the models showing up to 34% total phosphorus and up to 87% of suspended solids/sediments removed from treated water using the rain garden method. He said the state requirements for storm water treatment only apply to 10 or 100yr flood levels and asked what size storm level was the proposed model based on? Jessica stated that the model used reflected regular (2 times per year) storm expectations. She noted that the proposed rain garden would look nice, fit into the existing landscape and would not stand out a great deal. Alex W clarified then, that the proposed rain garden would be mainly to improve water quality, not necessarily control the flow.

Jessica said it is not intended as flood control, but rather it would primarily be a treatment to the “first flush” of storm water runoff. Jessica agreed that about 90% of storms that would be expected to hit in a given year this model could handle.

Alex W stated that he sees a lot of frustration from contractors who complain of the inflexibility in state regulations regarding detention for 10 or 100yr storms. He wonders if there are options for creative alternatives such as what we are learning about through these models.

Roy stated the importance of thinking about growth broadly, as individually, people are not always held responsible for treating the runoff they create. Ultimately, he says, if you fail to

understand how growth affects flood volume, you end up with a flooding river, erosion, habitat destruction, etc.

Joe I asked if there is any rule of thumb to use in determining or estimating the cost of treatment per a given area? He also inquired on the average or expected cost per square meter or some other way of calculating a cost estimate on such treatment projects as the rain garden. Roy said yes, you can approximate the cost of a given treatment plan and suggests you can and should also calculate and consider the cost benefit analysis. Joe I asked what should the town be prepared to put aside for such projects?

Joanna W said what struck her on the slide images was the evaporation rate from trees. Roy agreed and pointed out that a big advantage of this area is our forest lands for just that reason. He also says the same is true for our swales, and reiterates the importance of maintaining the natural “green infrastructure” that already exists.

Carrie F asked for clarification of what is a Swale? Roy and Jessica gave an example of a swale located by Lyman Park (behind Lantman’s).

Carrie F asked how we go about disposing of soiled sediments. Roy responded that typically they are disposed of in upland areas. Jessica suggested perhaps the town gravel field. Roy suggested that sediments could be used as clean fill (not used on food crops), on town roads, etc. He acknowledges that if the sediment is dirty (i.e., too high in road salt, phosphorus, etc) disposal does become more of a challenge.

Tim C said you would think the higher run off would be found in slopes of the hills/mountains rather than in the relatively flat area of the village where the models show runoff is the highest. Andrea M pointed out that this is due to the fact that “before water goes *off*, it goes *in*.” In other words, the rugged terrain, the texture of the forest/hill areas has more ability to absorb water before it has a chance to become runoff. The village area is flat, with a higher percentage of impervious cover (i.e., roads, roofs, driveways, less trees), on clay based soil and therefore the water has less opportunity for absorption and more quickly becomes runoff and results in higher runoff volume as well.

Tim C suggested then that perhaps it appears the town chose the wrong place to develop and that ironically the proposed village growth area sits in a rather difficult area when it pertains to storm water runoff, the soil types available and topography at play.

Joanna W clarified that roofs count as “impervious cover” and therefore play a role in the runoff volume in the village area. Roy said the forested areas have a very high infiltration rate and that also explains why the runoff volumes are lower in those areas.

Jessica said that currently much of the village center runoff goes directly into the river, untreated.

Alex W reminded the board that Milone & MacBroom had modeled areas upstream as well, not just the Village Growth Area. He encouraged the commissioners to think about more than just

the Village Growth Area, and to look at what is happening upstream as well because what happens upstream will also impact the Village Growth Area. This is something to keep in mind as the area experiences growth. Storm water treatment for future development is a priority across the watershed, not just in high density development areas.

Andrea M pointed out that as in the example of the underground recharge gallery in Shelburne, it is important to remember that storm water treatment projects that cost a large sum of money can become necessary in the long run from a failure to regulate individual or smaller scale development. We have an opportunity by applying the proposed model information to develop regulations for future development that could contribute to potential flooding.

Chuck R asked to clarify the treatment process; the runoff goes into the “recharge gallery” but what removes the contaminants? Jessica explained that first through the process of settling and then through the detainment process, most solids and a good deal of phosphorus are removed. Roy expanded on that saying that the phosphates and salts are mainly absorbed onto/in the solids. Using a long, rough flow path, low velocity and settling, most of that can be manually removed.

Joanna W asked if that means someone has to at some time scoop out the settled debris. Roy said “yes, basically like a septic.” Again, systems may need replacement of gravel beds in long term maintenance.

Alex W reminded the board that these models are just that, models, and should be used in a relative sense. We can run other scenarios for future project proposals.

Carrie F asked if, given the higher % of infiltration in forested areas, it would be advantageous to encourage forest growth or tree planting in some of the other areas currently reflecting low infiltration levels. Jessica cautions that while that makes sense logistically, a balance should be maintained through out the entire region and that careful considerations should be made regarding the best use of differing soil and topographical features. For instance, it would not behoove one to plant trees in a field in order to increase that area’s infiltration rate if currently that field is ideal for growing hay or other grains which could not grow well in steep slopes or forested land.

Kyle B asked Jessica and Roy if the model offered accounts for development happening with storm water control treatment systems. Jessica said the model does not factor in treatment systems.

Chuck R wanted to be clear on what facet of storm water runoff should be regulated to best insure the end goal of preservation and balance of the natural area. He wonders if Volume or Flow should be considered the main focus for regulation. Roy said that is a very good question to pose and suggested a consideration would be to regulate in such a way that results in a “no net volume increase.” In other words, expectations would be that pre and post development peak flow rates align.

Roy concluded the presentation by again stating the importance of creating and maintaining a “green infrastructure” and of protecting and working with existing networks to lessen impact and cost of future treatment projects.

Alex W thanked Jessica and Roy and the presentation ended at 8:45pm. Alex W told the board that the full report from Milone & MacBroom is available from him upon request. He encouraged the board to think about ways the town can be proactive (i.e., building plans for a rain garden, advocate for the Select Board to go after grant money, etc) Andrea reminded them to consider that the models offered apply too, to the Rural Area Zoning.

### **Rural Area Zoning – cont’d from 1/11 meeting**

Joe I called the meeting on to further business, picking up the Jan 11<sup>th</sup> discussion on Rural Area Zoning Revisions.

Alex W said the board had left off on page 3 addressing Objective #1: Expanding Allowed Uses. When the discussion ended, the board was considering a definition of “small” in regards to two aspects of the proposed language in Small Scale Agribusiness. One concern is the definition of “small” in regards to the scale of the business and another concern is the definition of the term in regards to the impact of proposed agribusiness on surrounding properties and public services.

Carrie F suggested the term “small” in regards to the business itself could be determined by the number of employees (i.e., max of 8).

Jean I asked what do we currently use for regulations with home occupation?

Alex W said that was a good question for reference, and found that currently, there are three “categories” of home occupation and that the range of allowable persons (nonfamily members) is from 2-5. He also said the regulations allow up to 7 people (nonfamily members) for a large home occupations and Cottage Industries.

Jean I addressed traffic impact as a concern in considering “size” of proposed agribusinesses.

Kyle B added that perhaps “small” might refer to the physical structure. Space could therefore help determine the # of employees at a give site as well. He feels that the impact of a business should be more important when it comes to regulations than the number of people employed there. Joe I debated that idea by saying you could find a small building that had a big impact. Tim C agreed and gave the example of Champlain Orchards who came into conflict when their trucks were considered a larger impact on surrounding properties and public services (i.e., road maintenance) than was expected.

Carrie F said on the other hand, we don’t want to end up with a giant building with only two employees running it. She feels that being small in scale is equally as important as having a small impact.

The board noted that in examples offered, most depict products or services coming from somewhere other than the farm. Jean I points out that the state already regulates most of those instances.

Alex W asked the board to also consider the language proposed as “surrounding communities” and try to come to an understanding/agreement of what that means.

Ray M asked about controlling the amount of traffic allowed. Kyle B agreed that this was one way of regulating the “size” of an agribusiness.

Alex W stated that current Conditional Use standards deal with that to some degree and cited Section 4.2.2. They are general, but could define “small” impact.

Bill M asks then, if it makes sense to keep the language general?

Alex W asked how comfortable is the board and the community in opening up additional uses? Jean I said it seems that Agribusiness needs to be a Conditional Use.

Carrie F referenced Section 4.2.1 which addresses issues such as lighting, etc.

Alex W said that is just referring to the information required by the applicants, that the Development Review Board then filters those proposals according to the review standards in 4.2.2.

Tim C reminded the board that Agribusiness is important. He cited the new Mad River Food Hub (MRFH), a small scale processing center recently opened in Waitsfield. He said to him, it’s enabling, we just need to know how to define it so that it’s viable. We want a *working* agricultural landscape. Carrie F said in reference to the example given of the MRFH, such a proposal in her mind would be better suited for a site like the Saputo plant, not on a hillside. Tim C said if small scale farmers use it, should it not be considered a small agribusiness venture?

Joe I said that the example given sounds to him more like an “incubator” or pooling of small scale processes and that overall, the impact would be higher in regards to such things as traffic and therefore he would agree such a proposal would be encouraged to locate at a Saputo Site or something similar. He says it’s clearly more than a farm stand, and as such the language should limit such aspects as footprint, number of employees, traffic etc. The idea should be to preserve the rural character. Don’t let the language allow for dismantling of that natural, rural character.

Jean I offered another example: what if the owners of Full Moon Farm were to rent out a portion of their barn for another purpose? Alex W said that Integrated Ag would cover that. If they subdivide a parcel and go into a joint venture with a separate business, then they are no longer covered by Integrated Farming and at that point, the Small Scale Agribusiness might apply.

Bill M said “Appropriate size...” might be a better way to phrase it rather than “small.” He voiced concerns about the language “*supports the agricultural economy of Hinesburg and the surrounding communities...*” he feels that should not be stated to sound as if a responsibility lies with the agribusiness to support other town’s economies. He has no issue with the idea of “serving” other communities, but feels it should be left at that, without the need to “support...the...economy” of other areas.

Tim C feels it is important to leave Agribusiness in and says in his opinion, there is already enough in current Conditional Use regulations to cover appropriate integration into a given area. He suggests that the board not try to restrict the number of employees or the square footage.

Alex W reminded the board to keep the impact on surrounding areas in consideration.

Carrie F said in her estimation, traffic remains the biggest consideration.

Jean I agreed and said in her opinion, the biggest concerns are noise & traffic.

Tim C reiterated his example of Champlain Orchards and agreed (truck) traffic needs to be considered.

Bob L said he has a hard time making these broad restrictions on proposals he can not visualize. Alex W suggested the board consider looking at proximity as a guide for regulating size. (i.e., proximity to roads, other property lines, etc)

Joe I suggested working with thresholds to determine scale/size.

Alex W said the board should work on narrowing down the issues to the 2 or 3 most obvious impacts of concern. Decide on whether to keep current language general or come up with specific standards for those impacts (i.e., decibel levels, trip limits, etc). He suggested to the board that more specific standards might help guide the Development Review Board (i.e., *paved* roads vs. *unpaved* roads).

Bob L took issue with the perceived pressure in the proposed language which he interprets as making applicants “pushed to serve a bigger area,” thus requiring a bigger scale operation. So in that sense, the language is countering out, as it states “small” but encourages supporting surrounding communities.

Carrie F tried to define the sense of scale; larger than a dairy barn? She also feels that coming up with a comprehensive list of examples will be difficult.

Alex W again referenced the old regulation language which acknowledges “Cottage Industries” in which a building must be able to be converted into usable space if/when the business ever fails or leaves.

Ray M proposed using Performance Standards in considering regulation language.

Joe I said Permitted Uses allows for i.e., composting from a chicken farm. Tim C clarified that such uses are also state regulated. Alex W stated that composting in particular is regulated by state Ag.

Joe I said that either way, the language should be prepared to cover what you didn't expect.

Bob L said he is generally in agreement with the intent. He feels that the language gives a sense of the goal of small impact; but finds it hard to imagine what wouldn't fit as written. Perhaps adding more examples would help.

Ray M asked if the ultimate purpose is to keep the land open. Alex W replied that the purpose is to keep development appropriate for the surrounding area. Also, this is in *addition* to farm use; we want to encourage and support the entrepreneur.

Kyle B does not like the idea of a list of examples. He says we (the board) can not think of every possibility. He suggests the board create a list of what we know for certain we do not want, and allow the Development Review Board to be the catch basin for everything else.

Alex W suggested the term "including but not limited to..." and allow for the discretion of the Development Review Board. He cautions that an inclusive/exhaustive list puts applicants in line back to the PC for clarification/questions.

Bill M said he feels that the list puts the pressure on the Development Review Board on whether or not to allow proposals based on impact.

Kyle B reminded the board that there is still a Conditional Use review process.

Tim C said he approves of the language as written in general, but has concerns about the term "small." Joe I offered to take time to wordsmith the proposed language and try to define "small scale." He then moved on to Outdoor Recreation Facilities (minor/major). The issue with this language seems to be around the term "extensive lodge facilities." Joe I suggested that minor facilities (permitted use) should allow for what is needed to serve customers (perhaps 1-2k sq ft).

Jean I asked do we need examples? How do we clarify sq ft on a storage shed, or barn?

Ray M said yes.

Joe I said without facilities, an outdoor recreation operation can't be financially viable.

Tim C suggested a maximum sq ft threshold. Any proposed projects beyond that threshold would go to Conditional Use and be vetted by the Development Review Board.

Bill M said different businesses require different facilities (i.e., riding stables vs. biking trails).

Ray M clarified that the businesses have to be trying to make an income, support a business. Traffic needs to be considered.

Alex W said perhaps the board should consider using & expanding current regulations; add a sq ft criteria or collapse into one category (dismiss major vs. minor) and go by current regulations.

Tim C agreed.

Carrie F suggested the board take time to review existing examples and revise the lists to reflect what we currently want (i.e., currently hospital allowed in AG District).

**Minutes from January 11<sup>th</sup>, 2012 Meeting:**

Ray M MOVED to approve the January 11th, 2012 minutes as amended. Jean I SECONDED the motion. The motion PASSED 9-0.

**Other Business:**

Alex W said there were no new correspondence to share and no other business. He reminded the board of the current bond vote for the new proposed development of a community center/fire station and police station and encouraged them to take part in the process.

Bob L brought in a definition of “agriculture” as used with the VT Land Trust, as the Jan 11<sup>th</sup> meeting revealed that there is no definition of the term in the current regulations.

Joe I MOVED to adjourn. Ray M SECONDED the motion. The motion PASSED 9-0. The meeting adjourned at 10:25pm.

Respectfully Submitted,  
Freeda Powers  
Recording Secretary