

Hanover Conservation Commission

September Minutes

September 14, 2011

Regular Meeting: In attendance: Athos Rassias, Michael Mayor (scribe), Ruth Bleyler, Doug McIlroy, Ray Hogue, Ed Chamberlain, Judith Reeve, Anne Morris, Vicki Smith (staff)

1. Current Business

Recommendations to ZBA regarding the Friends of Hanover Crew (FoHC) Dock Proposal

Peter Kulbaki's memo of 14 September 2011. Items 1 thru 5 were reviewed. His points are summarized as follows:

1. Existing dock must remain as a motorboat dock
2. Cleats should not be installed on the river-side edge as mooring of boats is not desired.
3. Location is preferred regarding currents, etc, and it has been permitted
4. Existing road width should be adequate for slow foot and vehicle traffic.
5. There is no town response to the FoHC proposals as they affect Fullington Farms property. The town agrees with the NHDOT regarding the desirability of a double curb-cut driveway.

Commission members used Section 702.7 Special Exception Standards from the Zoning Ordinance to evaluate the potential impact to water body and buffers.

Avoidance/Minimization: It was determined that there was no way to avoid impacts to the River and buffer as a dock by necessity must go in the River and be attached to the bank. A "one dock" scenario where the crew dock could replace the existing dock was suggested. A straw poll seeking support for a "one dock" proposal elicited only two affirmatives out of eight. A formal vote to support the one dock proposal was taken on a motion by McIlroy, seconded by Hogue. Public comment and Peter Kulback's memo supported two dock installation as safer than just one. FoHC offered support for the two dock solution as the two docks are significantly different, especially regarding height above the water-line. This point was contested by McIlroy, who measured the existing dock at 8" when afloat. Public concerns were expressed about flotsam doing damage. Structural components exist as designed to constrain even a damaged dock breaking up. The motion did not carry with six votes against the one dock proposal and two votes in favor.

Ray Hogue requests that a statement be submitted to the ZBA regarding avoidance of impact of the rowing programs through the use of the Chieftain's facility for both Lebanon's program and Hanover's. The Hanover Selectboard supports the application that is currently before us, as a town application.

Ray Hogue revisited the issue of boats carried, oars carried and vehicles moving all at the same time on the roadway. Commission admonished that this meeting has to focus on the wetlands issues at hand. Dock location is not being argued, thus addressing Kulbaki's concern #3.

Minimization: Regarding proposal at Wilson's Landing for the dock location: no additional voiced commission concerns.

Function and Value of the wetlands and the impact of the project on the shoreline or water in the vicinity: The analysis must consider whether the proposal "will not result in unreasonable and significant adverse effect on the water-body and/or the buffer." McIlroy observed that the early morning human activity will have an effect on local birdlife, whether unreasonable or not. Disturbance of waterfowl is likely during brooding and migration. Anne Morris asked about current motor technology viz old 30% fuel losses into the water. FoHC stated the motors will be 4 cycle and fueled by sealed canisters that will be filled at a distant, secure location. FoHC also stated that the hull design of Dartmouth's chase boats are wakeless to minimize wake generation, which will protect the shoreline. FoHC described the refueling process that will be accomplished in the concrete bunker, with the tanks remaining sealed thereafter. A member of the public asked if there would be a ceiling on the intensity of use. Ed Chamberlain voiced concerns that intensity of use will be significant and difficult to police. Hogue pointed to the commercial aspects of the enterprise, but that issue is beyond the scope of the current discussion

Wild-life impacts were described by consultants Tracey Tarr and Cynthia Balcius with findings presented with graphics. Tracy Tarr presented wildlife assessments. Her survey is contained in both volumes distributed, including heard, seen and potential avian and other "users" of the Wilson's Landing area. Recreational activities were assessed in real-time on site observations. Proposed dock over laps minimally with downstream shoreline that is suitable for nesting and foraging, etc. These shoreline assets are well down-stream and offer more dense cover with less canine disturbance. These observations suggest placement of the dock in the already intensely used area of shoreline is an appropriate minimization. Function and values were assessed.

Sediments: Propeller effects and dock installation and removal impacts were recognized without major concerns expressed. Carol Weingeist pointed out that Dartmouth and Chieftain docks are on shoreline that is dramatically different, resulting in likely very different impact, especially on filtration/sedimentation events.

Water quantity, flow and recharge: No comments solicited.

Erosion/sedimentation: No comments solicited.

Doug McIlroy notes that unsolved issues remain: why are there three docks? Failure of minimization seems to be extant now that Wilson Landing is being proposed in addition to the Chieftain facility. DES changed its stance in resistance to adding the Wilson's Landing dock to the riverine facilities.

Martha Solow added emphasis on the inclusion in our minutes that reflect the public's expression of concern and opinion.

Ray Hogue requests that a statement be submitted to the ZBA regarding minimization of impact of the rowing programs through the use of the Chieftain's facility for both Lebanon's program and Hanover's. The Hanover Selectboard supports the application that is currently before us, as a town application.

Three special exception criteria, minimization, functions & values, impact on wildlife, water spoilage due to spillage, wakeless launches, localizing fueling steps that might spill restricted to areas that are not sensitive, esthetic concerns, altered flow patterns trapping debris, sediment disturbance during installation/removal (safety issues notwithstanding [near in-shore boat traffic at night impacting the ramp system]), water quality regarding filtration functions cannot be assessed.

Zoning board will be in receipt of CC perspectives as follow:

Comments regarding minimization

The Commission suggests that the effect on the water resources could be minimized by FOHC not installing a crew dock at Wilson's Landing, but by instead by FOHC using the existing Chieftain crew dock for their crew program. The Lebanon High School Crew uses the Chieftain facilities at a different time of the day than the FOHC teams plan to use the proposed dock at Wilson's Landing, so there would be no conflict in scheduling. The Commission considers this to be a reasonable and feasible alternative to minimize the impacts on the flora and fauna in the Connecticut River and its shoreline.

Comments regarding functions and values

The Commission did not determine that potential impacts from the proposed crew dock would have significant adverse effects on the natural function of the Connecticut River and its buffer. However, any impacts of the proposed crew dock are uncertain, and the Commission wanted the above comments conveyed to make the ZBA aware that any uncertainty in impacts could be avoided by focusing all of the high school crew activities at one site.

Sediment control/shoreline stabilization

The Commission suggests the chase boat fleet be upgraded to wakeless launches to minimize wave action at the shoreline. Wakeless boats would reduce impacts of waves generated on the shoreline and river bottom sediments. This could help to minimize destabilization and loss of sediment, to maintain water quality and to protect wildlife and their habitat.

Wildlife habitat

Debris caught around the dock that might otherwise flow downstream will negatively affect invertebrate and bird habitat. The sheer increase in volume of activity will make the area less attractive to wildlife nesting, resting and feeding activities. The intensity of launching, mooring and rowing activities by more

than 140 rowers and their coaches in the early morning will have a negative effect on wildlife and habitat at Wilson's landing, especially during nesting and water fowl migration seasons.

Visual quality/aesthetics

The dock is 80 feet long and negatively impacts the view from Wilson's Landing and the view from a boat to Wilson's Landing. The natural character of the site, while impacted now with relatively moderate use, will be much further impacted by the proposed intense use. Wilson's Landing will be transformed from a relatively quiet single dock with no boats moored at it to a site that is more like a marina, with nine chase boats moored at the dock and intense crew and chase boat traffic.

Comments regarding water quality

The Commission notes that there will be adverse impacts on water quality from activities associated with the use of the crew dock. There is currently insufficient information to quantify these impacts. They are:

- 1) With the intensification of use of Wilson's Landing by chase boats, there will be an increase in petroleum product spillage. The amount that might be spilled is not quantified, and therefore it is impossible to know the degree of deterioration of the water quality that could be expected. However, even the most careful boater cannot avoid losing a small amount of gasoline each time the fuel line is detached from the fuel container. The operational controls suggested by the Friends of Hanover Crew with regard to fuel handling should be institutionalized as a condition prohibiting fuel transfers in the boats, on the dock or on the Wilson's Landing peninsula.
- 2) With the concentration of chase boats, there will be increased, but unknown amount of, turbidity due to propeller and wave action.
- 3) Lastly, the installation and removal of the proposed dock each year will dislodge sediments resulting in increased turbidity.

Recommendations to ZBA regarding the Friends of Hanover Crew(FoHC) Storage Shed Proposal

FoHC is the sole identified applicant representing the town of Hanover. Space will be leased to individuals using singles or pairs to be housed in the sheds. The Upper Valley Rowing Foundation is not an active partner to this application. Constraints that apply to the FoHC also apply to other users.

Boat Sheds: Re special exception criteria; First exception will be excepted. Outdoor recreation on Fullington Farm with regard to wetlands set-backs. Regarding the alternative location of the boat sheds, if chosen, the need for a special exception becomes moot. Several scenarios were presented for shed location, including a shed design that uses a single roof configuration. Walking times were calculated for the shed location furthest removed from the wetlands setback. [E3.7, 5/13/2011] CC recommends locating the boat sheds outside of the water resource buffer. Visual quality and aesthetics also promote the location farthest from the water-body setbacks.

Water quality: Infiltration called out in the design is desirable, if outside of the buffer

Water quantity: No major impact, given the infiltration system designed.

Erosion: Controls specified are critical, and the impact of shed placement will be important. Extensive excavation will be required around the barn. Siting the sheds at remove is a benefit in reducing the excavation in constructing the sheds. The farthest removed site would also be served by paths that result in minimal impact while still keeping the foot traffic off the road as far as possible.

Zoning board will be in receipt of CC perspectives as follow:

Comments regarding avoidance

The Commission commends the Friends of Hanover Crew on their presentation of alternative locations for the storage sheds that are outside of the water-body buffer [sheets E3.5 and E3.6 of the plans]. The applicant showed on these plans several alternative locations for the boat sheds outside of the water-body setback, each of which add only marginal distance and time for carrying the boats to the dock. Based on that presentation, the Commission finds that the proposed storage sheds can be reasonably located on a portion of the lot lying outside of any water resource buffer.

To further that argument, the Commission noted that the crew boats could be stored in the barn. However, the applicant stated that the barn cannot be configured to conveniently accommodate the FOHC's boats. The chair of the Commission questioned this statement as he has a nearly identical barn on his farm, and it has significantly more storage space than the proposed boat sheds will have. The applicant stood by their statement, but did not provide any detailed drawings to substantiate its argument .

The ZBA should take note that the Commission is concerned about the precedent that would be set if FOHC's proposal to place one boat storage-shed entirely within the wetlands buffer and a second shed partially within the wetlands buffer were approved. To our collective memory, we cannot remember reviewing an application for a special exception to place a structure 'entirely' within a wetland or water-body setback when there were alternative locations available completely outside of the setback.

Comments regarding minimization

The Commission suggests that the effect on the buffer could be minimized by not installing the sheds in the buffer and instead locating them as shown on Sheets E3.5 or E3.6 entirely out of the buffer. These locations offer reasonable and feasible alternatives with the least adverse impact on the water buffer.

Comments regarding functions and values

The Commission did not determine that the impacts from the shed proposal will be unreasonable and have significant net adverse effects on the natural function of the Connecticut River buffer. However, because the potential damages to the natural environment from locating the boat storage sheds within the water body buffer are not easily quantified, and because there are reasonable alternatives to place

the boat sheds outside of the water body-buffer, the Commission advises that the water-body buffer not be violated. The following comments supporting our recommendation are communicated to the ZBA for your consideration.

Sediment/shoreline

The soils at Fullington Farm are highly erodible. If the sheds are allowed in the water body buffer, there will be considerable amount of excavation, grading and filling within the water body buffer for the construction of the foundations for the storage sheds. [The foot print of each shed is 75-ft by 29-ft , with one shed proposed to be completely within the water-body buffer and the other partially within the buffer.]

The Commission is pleased that an infiltrative solution for stormwater management was proposed by the applicant to handle rain-water shed from the new impervious surfaces introduced by storage sheds. However, the Commission is concerned about soil saturation and subsequent soil instability so close to the River within the protective buffer. Were the sheds to be moved out of the buffer, the Commission would support the continued use of an infiltrative stormwater management design.

Visual quality/aesthetics

The Commission finds great value in the sweeping view of the field and brushy field edge from the Wilson's Landing access road. This view will be eliminated by the sheds if placed in their proposed location within the water-body buffer. The Commission observed during our site visit, that during portions of the year when there are no leaves on the trees, the view from the Wilson's Landing access road and from the Creagh residence to the river will be blocked by the boat sheds if they are located in the wetland setback. Testimony given by neighbors and users of the Wilsons Landing access road reinforced this observation.

Note that FOHC argues that locating the sheds close to the river protects the views. The FOHC argument conflicts with the observations made by the Commission, the Creagh family and other users of the access road to Wilson's Landing.

Comments regarding water quality

Fuel storage should not occur in the boat sheds if they are placed in the water-body buffer. Accidents of spillage can happen, especially when there are 140 or more young persons active in the boat sheds each morning. The Commission suggests a requirement that there be no transfer or storage of fuel within the River buffer. All fuel storage and fuel tank movements, excepting for those directly related to the connection of the fuel tanks to the fuel lines in the chase boats, should be outside of the 75-ft water body buffer that protects the Connecticut River from contamination.

The operational protocol for fuel handling proposed by the Friends of Hanover Crew should be institutionalized as a condition which prohibits fuel transfers in the boats, on the dock, on the Wilson's Landing peninsula or within the water resource buffer.

The Commission is concerned about soil instability due to saturation from the infiltrative storm-water management system. Slope failure and sediment deposits in the River could result. Failure of slopes in similar sensitive soils along Girl Brook in Hanover have led to erosion gullies along the brook and a sediment delta at its terminus at the Connecticut River. Furthermore, not more than a mile distant [behind the old the Rivercrest residential area] from FOHC's proposed boat sheds, in similar sensitive soils, massive failures of the slope were precipitated by operations to clear the area of structures, the exposure of raw soil and changes in the patterns of surface and subsurface water flow. Requiring that the sheds and stormwater management system be located outside of the buffer will minimize the potential of this problem.

Comments about erosion control

As explained above, the siting of the storage sheds within the buffer would require extensive excavation very close to the River. Thus, erosion control during and after construction is very important. Excavation would be immediately adjacent to a conservation easement for a trail maintained and monitored by the Commission. Furthermore, the trail and the woody plants and trees separating it from the proposed boat shed need to also be protected from mechanical damage during placement of the erosion control fences, and the excavation and construction operations.

Regardless of where the boat sheds are located, the storage of all excavated material should occur outside of the water-body buffer.

Moved by Reeve, seconded by Morris to forward the communication regarding the dock and the sheds on to the ZBA, after final review by the chair. Vote to approve unanimous.

Baum Goss Road Property Portable Toilet

Tim McNamara presents. Earlier privy design was judged inadequate in contemporary terms, and instead the option to use a contemporary portable sanitary facility serviced by a professional on a regular schedule was proposed. Is this change supportable? Plan and cut-sheet were referenced. Previously sited privy has been removed. Dark green color lauded. Move to support the request by Mayor, seconded by Bleyler. We discussed the quarterly servicing schedule. Possible need for roadway maintenance to assure access to the facility was raised without action. Voted in favor: Unanimous.

2. Resource Stewardship

Moir/Holland & Dartmouth College Swim Dock, no comments

Balch Hill Plan & kiosk/signage was referred to the Open Space group for Oct 4. Financial questions were deferred. An October 29th meeting in quarters and on site planned. Kiosk at Trescott and Grass is proposed, funded by the Conservancy through grant resources. Rinker/Steel signage needs also to be deliberated.

3. Administrative Business

Anne Morris is the October minutes taker

Ray Hogue is the November minutes taker

4. Committee Reports

Open Space: meetings await.

Trails Committee: Smith site visited Ricker Tract. Fresh mountain bike tracks evident on trails where mountain bikes are not supposed to be ridden. Significant widening is occurring with erosion potential. Suggest moving track to the ridge top across the fence onto Dartmouth terrain. Sept. 12 letter from UVMBA calls for continuing trail use once it is properly cut to make it usable without side slip or erosion. Discussion of the UVMBA's requests led by McIlroy followed. Proposal No. 2 seems most supportable. Mark Buck solicited for his perspectives, which includes signage to dissuade those who might disregard the proposed changes while allowing the UVMBA to assume appropriate responsibility for effecting a solution. McIlroy asks for a time-table to establish route flagging by October. Site visit proposed before the second Wednesday. (Tuesday, 11 Oct. at 4PM before the 12 Oct. meeting) Cellar Hole Walk this Sunday at 2 PM. Moose Mt. Road apex, and onward. Several trees have fallen across the road and Doug needs a chain sawing companion. Finally, Corey Road has been improved by Hurricane Irene by scouring the plugged culvert to polished perfection.

Biodiversity needs a CC representative to attend. Decision deferred until new member is appointed or a response returns from John Trummel.

Chair proposes skipping the minutes review till Oct.

Farewell to Judy Reeve with presentation of signed card followed by dinner out.

Adjourned at 8:10PM