

ACC Aug 12, 2015 - Minutes
Approved

Meeting called to order by Chair John Harvey 7:08

Attendance: John Harvey, Bill Wichman, Bruce Beckley, Rich Hart, Jack Gleason, Anne Krantz, Alternates: Lee Gilman, Paul Indeglia, Rob Clemens – voting for Jim

Chair Comments:

John announced that membership and officers will be on the agenda at the Sept 9, 2015 meeting. John wants to focus on Partnerships with other organizations with whom we share common goals such as the current partnership with the Amherst Heritage Commission. We have worked together on several projects and educational events. Also we are working with the Recreation Commission on the Cross-country ski expansion on the Smith property. To continue exploring opportunities, John has invited Chris Wells, Executive Director of the Piscataquog Land Conservancy, (<http://www.plcnh.org/>) to the Sept meeting to discuss mutual interests. It serves communities to the north of from Mt Vernon, Lyndeborough, Bedford, Goffstown, Henniker, Deering, Francistown, and others.

July Minutes – sent by Paul

Jack - an error about the woodchip removal – Steve Desmarais did it gratis. Rich noted a correction in comments at the ACC 4th of July booth. Corrections made and minutes approved.

Treasurer – Bill: Land Account \$306,293.44 No Gift Account report Approved as received

Added Later:

Gift a/c -- \$12410.78

Budget -- \$ 8000 untouched!

Planning Board – Rich

Discussed work being done on Howe Drive in the Industrial Zone, and the PB gave conditional approval for the Community Garden Project on Courthouse Rd. on former Davis land.

Plans Permits and Interdepartmental Review – Jim in abstentia

Plans received for a deck expansion and new 12x15' shed at Map 8 Lot 23-1 on Brook Rd. The map was difficult to read to determine setbacks for Joe English Brook. The deck is not an issue as above any water, but the shed seems to be in the wetland setback. ACC requests that the siting of the shed comply with Amherst zoning setbacks.

Meadow Management - Jack

Bragdon Hay Fields - wood ash application. Jack met with Steve and a representative from Casella Organics a supplier of ash from Concord, NH. They do the nutrient testing (20 samples per field) and provide the spreader, so they are going to try this company. Steve will pay for the wood ash, and he also paid for the urea this year. Bruce asked if there might be any of this product for Lot #3 on Grater Rd. and Rich asked about Lindabury. Jack replied that he is going to do soil tests on all the fields this year which will indicate need.

Guests: Ed & Tracey Dziadek (ED.DZIADEK@GMAIL.COM)

owners of Map 5, Lot 67, which abuts ACC Smith/Patch Hill lot 5-68, at 50 Lyndeborough Rd. They are planning to do a selective timber harvest to upgrade their wood lot for a Tree Farm on their land, but

don't know where the boundary line is between the two lots. Bill acknowledged that ACC doesn't know where this line is either. Survey discussed. Bruce asked the owners if they are interested in sharing the cost of surveying this boundary. Yes, they already have an estimate for \$1,500. Bruce moved and Bill 2nd that ACC share the cost of the survey up to \$750. No further discussion. Approved unanimously. Mr. Dziadek will get several bids and work with ACC to select final bid. Whether to pay extra for a pin will be determined later. Discussion of logging operation landing and use of current ACC parking area. Need survey results to decide where it will be located. John asked Bill to prepare a sketch/diagram of the parking area along Lyndeborough Rd to be sent to members.

Heritage Commission – Will Ludt & Lisa Monesanto reported about the decaying shed in Lindabury Orchard. They got a proposal from Jeb Heaney Construction, Mont Vernon, to stabilize, reroof, new concrete, etc. for \$25,820. All thought this was beyond what is needed to resolve the issue. They will get more bids. Jack remembers when this came up years ago, Charlie Tiedeman estimated removing the structure would cost \$800 - \$1,200. Discussion of what the Friends of the Orchard want to do – divided on whether to demolish or preserve.

Will announced that the Heritage Comm. is hosting an educational program called *My Trail Guide*, to be presented by Paul Davis owner of the company tomorrow, Aug 13 at 7:00 PM at the Brick School – ACC members are invited.

Topics:

Paul – Regional Conservation Commission's letter to FERC in opposition to the proposed gas pipeline for environmental reasons. It must be submitted by Aug 31 thus ACC needs to vote to sign it tonight. Paul moved and Rich 2nd that ACC sign the letter thus joining 33 area Conservation Commissions who have signed it. Discussion; John – How consistent is this letter to Amherst's position? Paul – 'Spot on', but less technical. Rob – up to now ACC has been neutral; this letter condemns the need for the pipeline to cross through NH. Anne – can we both sign this letter and support Option #1 if the line does come through Amherst? Yes. Rich reported that he got in the FERC meeting 2 weeks ago and the entire audience was against the project as it does not supply any noticeable amount of gas to NH.

Vote: 5 Yes, 1 No, 1 abstention.

Addendum to Pipeline Environmental Assessment – Paul

Paul sent the document to members in preparation for this vote. Paul moved and Bill 2nd that ACC accept the *Addendum to Pipeline Environmental Assessment*. No further discussion – All in favor.

ACC Files and archives – Paul

He and Bill spent a morning beginning the sorting process. Members dropped off their ACC accumulations of stuff. We now have more filing space in the Town Hall basement and they organized the files into broad categories and now want to eliminate redundant documents and files. The next work session will be Tues Aug 18th from 9:00 –noon. All ACC members are welcome to help.

Water Protection Grant – Paul

Paul met with George May chair of the Souhegan River Advisory Board to discuss water protection grant ideas. George is interested in a project at the Severns Bridge canoe Port in Merrimack, while Paul would like to develop a project in Amherst. He suggested the ACC establish a Water Sub- committee to work on a grant proposal. Anne and Rich volunteered. As a result of his work with George, Paul has been nominated to the Souhegan River Advisory Board – his nomination is in process.

Public Education: *Let's Take a Walk* – Bruce

Due to technical difficulties Bruce will show his 20 min slide show next meeting. Members asked whether this could be on UTube with a link from the ACC web page – should be possible. Rich hope to do a library display and presentation.

Round Table

Rich – the Lindabury Orchard Cider Festival will be Sept 26th

John – has been working at Peabody Mill cutting down small saplings that are growing in and out of the rock walls – will continue. He reported that ACC and Rec are sharing a load of gravel that Craig Fraley needed –ACC portion is for Caesar's Brook fill. Rec brought up the idea to John of using the cross county trail on the Smith land for Frisbee golf during the summer – members agreed that this is OK as long as no additional trees would be removed.

Paul – Carlson land on Rt. 122 – He is arranging to meet with Lisa Carlson about the 30 acre property

Lee – Poison Ivy control He has removed it from the paths and shed at Lindabury – will submit invoices. He has a client who has wild sienna in her garden and has plenty of seed pods if anyone wants to try to raise this rare to NH perennial flower.

Bruce – discovered that the Mile Slip Trails in Milford are different and interesting.

Progress on the **Rt 122 Canoe Port**: Lee trimmed the overhanging trees so that Mike could get his equipment in to grade the lane and parking area. The bittersweet and forsythia have been cleared and the Mattise bench is now placed there by the River. Bruce also reported that nothing is happening at the Wheeler Lot as the contractor is busy. Bruce suggested that ACC post its parking areas "Closed at Dusk" a common practice to prevent overnight guests.....

No other business.

Meeting adjourned at 9:20

Respectfully submitted

Anne Krantz, secretary

Addendum:

Dear XXX:

As conservation commissions, we are dedicated to protecting the natural resources of our towns, and have taken an oath to that effect. New Hampshire state law (RSA 36-A:2) authorizes the creation of conservation commissions "for the proper utilization and protection of the natural resources and for the protection of watershed resources" within their respective towns. We the undersigned find that the Northeast Energy Direct (NED) pipeline project threatens to damage these resources in many ways. Furthermore, if approved in its current form, the project threatens our ability to perform our duties in the future. We therefore believe our responsibility requires that we oppose the project for the reasons described herein. Impact on future conservation efforts. As currently proposed, the NED pipeline will

cross 34 conservation properties in 15 New Hampshire towns. Most of the land being crossed by this project was acquired either by gift or by fee purchase authorized by the relevant towns. The protection of this land was made possible by citizens, voters, and donors who believe strongly that New Hampshire's natural environment is worth protecting now and for future generations. In many cases, money used to protect these lands came in part from state funds created for this purpose. In particular, the Land Conservation Investment Program (LCIP, established by RSA 221-A, since repealed) and the Land and Community Heritage Investment Program (LCHIP, established by RSA 227-M) both provide public matching funds without which some of these lands would have been lost to development. The intent of these laws is clear, as illustrated by this excerpt from RSA 227-M (emphasis added): The general court finds that in order to maintain New Hampshire's quality of life and economic vitality for its citizens, growth and development should be balanced with careful protection of the state's most important natural, cultural, and historical resources. Permanent protection of these resources, through acquisition of lands, buildings, and other physical assets, or interests in these assets, must be accomplished along with their planned long-term stewardship. ... The intent...is to conserve and preserve this state's most important natural, cultural, and historical resources...for the primary purposes of protecting and ensuring the perpetual contribution of these resources to the state's economy, environment, and overall quality of life. Going still further, both programs create a public trust that bestows upon the State of New Hampshire the responsibility to protect these lands in perpetuity (emphasis added): Resource assets acquired under this chapter through the use of the trust fund for the program shall be held in public trust and used and applied for the purposes of this chapter. Notwithstanding any other provision of law relating to the disposal of publicly-owned real estate, no deviation in the uses of any resource asset so acquired to uses or purposes not consistent with the purposes of this chapter shall be permitted. —RSA 227-M:14 Also germane is Article 12-a of the New Hampshire State Constitution which states No part of a person's property shall be taken by eminent domain and transferred, directly or indirectly, to another person if the taking is for the purpose of private development or other private use of the property. Because NED is a private development project, Article 12-a applies. This article is not specific to conservation land but rather applies to all real property within the state. Thus, unlike the LCIP and LCHIP programs, it provides some protection for lands currently being considered for conservation, or for which conservation plans are underway but not yet finalized. Several properties along the pipeline route fall into one of these two categories. Citizens of New Hampshire have a right to expect these commitments to be upheld, and could lose faith in such protections if NED is allowed to proceed as planned. The immediate destruction of this land, and the effects on adjacent land, watersheds, and wildlife habitat is bad in itself; we describe these effects in the remainder of this letter. Beyond that, we expect that the loss of even part of this land to a private (i.e., non-governmental) for-profit project by a private company (Kinder Morgan and its affiliate Tennessee Gas Pipeline) will undermine the towns' and state's ability to acquire such protected lands in the future. That is, it seems reasonable to ask why anyone would give such a gift, or authorize such a purchase, if a key justification for such acts—perpetual protection—can be so easily dismissed in direct violation of state law? Completion of this project as currently planned will send the strong message to the conservation-minded public that state laws can be ignored and protected land taken for private use if a private corporation wishes to use that land for a profit-making venture. Impact on groundwater. Groundwater is a vital resource in all areas of human habitation, and particularly so in southern New Hampshire where a large proportion of citizens rely on private wells as their sole water supply. Some towns do have public water, but those public supplies are themselves fed from in-ground wells. Approximately 18 miles of pipeline (25% of the total length in New Hampshire) lie within known aquifers, yielding 320 acres of pipeline right-of-way (ROW) within aquifer boundaries¹. Approximately 9 miles of the pipeline route (13%) is planned to pass through soils where blasting is likely to be required.^{1,2} Some of these potential blasting zones are near or within aquifers. - 2 - Additionally, the pipeline ROW will directly disturb approximately 440 acres¹ of

wetlands across southern New Hampshire. Among their many irreplaceable environmental services, these wetlands collect rainwater that ultimately contributes to aquifer recharge. Potential impacts to groundwater of NED within these critical and sensitive areas include:

- Contamination from nitrites or nitrates introduced during blasting.³
- Contamination from previously bound naturally occurring pollutants (such as arsenic) released by blasting.³
- Loss or reduction of well output through changes in bedrock channels caused by blasting. (Many private wells are bedrock wells, although the exact proportion of bedrock and aquifer-fed wells is unknown.)
- Contamination through prolonged herbicide use to control vegetation in certain parts of the ROW.⁴
- Contamination through fluids leaked from construction vehicles operating in wetlands and above aquifers, or fluids spilled during fueling or maintenance.⁵
- Direct disruption of hydrology through soil disturbance (dig and fill), particularly in wetlands where necessary soil layering takes centuries to develop and is difficult to recreate once disturbed.
- Direct disruption of hydrology through changes in topology, affecting runoff patterns and rainwater accumulation needed to recharge aquifers.
- Direct drawdown of aquifers due to hydrostatic testing that might require more water than many of these aquifers normally produce.⁶
- Erosion and sedimentation during construction of water crossings affecting fish and stream life. Of special concern is the time period between when construction ends and vegetative cover is re-established. With personnel no longer regularly onsite, the beginnings of erosion can go unnoticed and develop into serious problems that could have been prevented if caught early. [REF NEEDED]
- Increased ground temperature in the vicinity of the pipeline, changing the thermal characteristics of traversed water bodies and potentially affected associated biological communities. [REF NEEDED]

In summary, the cumulative effect on surficial waters and groundwater of temporary (during construction) and permanent (postconstruction) disruption within these areas is potentially great, yet difficult if not impossible to predict. In our view, the potential (and unproven) benefits of the project are insufficient to justify the risk involved.

Impact on wildlife habitat. 24 miles of the proposed pipeline route, nearly one-third of its total length in New Hampshire, passes through wildlife habitat rated by the New Hampshire Wildlife Action Plan as “highest ranked” within New Hampshire or our biological region.⁷ This habitat is outstanding for its high-quality streams, productive wetlands, and unfragmented forests that sustain a great variety of wildlife species, some of them rare, others threatened or endangered. Healthy fish and wildlife populations that support traditional activities such as fishing and hunting depend on New Hampshire's highest-ranked wildlife habitat. In total, the proposed pipeline will directly (i.e., within the planned ROW) affect 421 acres of this important resource (the area of indirect affect will be much larger), destroying forest buffers that shade trout streams, obliterating vernal pools needed for amphibian reproduction, disrupting natural wildlife corridors that connect feeding with breeding areas, choking streams with sediment from long stretches of exposed soils, diminishing the wetlands’ ability to function by compacting wetland soil with heavy equipment, threatening the health of wetland species with the use of herbicides for ROW maintenance, and introducing invasive species that out-compete native wildlife foods.

Impact on air quality. Potential adverse effects on air quality come in two forms: 1. Direct release of methane into the atmosphere, and 2. Additional air pollutants released at compressor stations as a side effect of burning hydrofractured gas to provide power. Regarding the first point, methane is a potent greenhouse gas. When burned it produces about half as much CO₂ as coal or oil, but when released in its raw form, the effect is far from benign. According to the Environmental Protection Agency, methane has a “global warming potential” twenty times that of carbon dioxide over 100 years⁸. Methane loss has been measured in distribution systems, and at compressor stations (via leaks and deliberate “blow downs”), valve stations, and metering stations along supply lines. Methane loss from leaks in production, storage, and transmission systems is well documented, and recent studies show the amount lost due to leaks is greater than previously thought.^{9, 10, 11, 12, 13}

3 - The exact amount of methane lost to “fugitive emissions” remains an elusive figure (although estimates on the high end approach 8% of total

annual shale gas production volume¹⁴, and loss from a single compressor station blow-down releases on average 15,000 cubic feet of methane¹⁵), but no study of the problem finds the amount is zero. Of course, predicting how much gas will escape from the NED pipeline in particular is almost impossible. But given what is known about gas leaks in general, it is unrealistic to think that NED will not contribute to this problem in some way. As a charter participant in the Regional Greenhouse Gas Initiative (RGGI), New Hampshire has a demonstrated commitment to addressing this issue. Supporting projects like NED would make a contradictory statement that seems difficult to defend. Regarding the second point (air pollution at compressor stations), numerous reports exist of air pollution near compressor stations (where “near” means as far away as one to two miles). Some pollutants (most notably nitrogen dioxide, which contributes to ground-level ozone production) are produced by burning natural gas. Others (known as “air toxics”, some of which are known carcinogens) such as benzene, toluene, ethylbenzene and xylene are presumed to be mixed with the methane as a byproduct of hydraulic fracturing¹⁶ and are released along with fugitive emissions of methane. Collectively, these and other pollutants contribute directly to adverse health effects such as asthma and other respiratory illnesses, eye, ear, and throat irritation, headaches, cognitive complaints, and many other maladies. ^{17, 18, 19, 20} Adding to our concern is the fact that a portion of the proposed pipeline route lies within a region already identified as a “nonattainment area” (NAA) which fails to meet ambient air quality standards defined by the U.S. Environmental Protection Agency.²¹ Introducing a known source of air pollution under these circumstances seems unconscionable. Given these data, we think it’s clear that NED has the potential to adversely and measurably affect air quality at both a local and a global level. As with our previously stated concerns about impacts on water quality, the precise degree of impact is impossible to predict—although we know it won’t be zero—but the lack of proven benefit from NED to potentially affected communities seems poor reason indeed to proceed with the project given these very real risks.

Other Impacts

Construction Impacts. In addition to the construction-related issues already described, construction activities can trigger additional adverse affects including:

- Removal of biological material along the ROW leaving bare mineral soil, a habitat conducive to establishing invasive plants such as Japanese knotweed and oriental bittersweet.
- Introduction of invasive plants through plant materials inadvertently brought to the site on construction equipment or within fill material.
- Fugitive dust and diesel exhaust from trucks and heavy equipment on roadways (southern New Hampshire has many miles of dirt roads which are often the only means of access to planned construction sites). Both pollutants contribute to or exacerbate respiratory problems. ^{22, 23}

Indeed, according to the Environmental Protection Agency, diesel exhaust is already a concern in New England: “Pollution from diesel engines is a widespread problem across New England and it significantly contributes to air pollution...”²⁴

Farmland Impacts. Some evidence suggests that increased ground temperature in the vicinity of natural gas pipelines (gases in general release heat when pressurized) contributes to long-term yield reductions.[REF NEEDED] The proposed pipeline route includes almost 28 miles that cross important farmland soils within New Hampshire.²⁵ Not all this land is currently under cultivation, but a potential for agriculture exists on these sites that is worthy of protection.

Noise Impacts. Federal guidelines establish a maximum day-night average noise level for compressor stations of 55 dB at the closest noise-sensitive area[REF NEEDED] and we have no doubt that NED compressor stations will comply with this nominal statutory requirement. However, averages can be misleading. For this particular impact, we believe that peak noise level is a more relevant and important metric because the loudest noises at compressor stations occur sporadically (such as during blow downs), not continually. Peak noise levels of 100 dB have been measured in the vicinity of compressor stations.²⁶ For comparison, the nominal requirement of 55 dB is roughly equivalent to the sound produced by a modern dishwasher. In contrast, 100 dB is about as loud as a snowmobile. Noise alone is sufficient to cause health problems including hearing impairment, cardiovascular and physiological effects, mental health effects, and sleep disturbance. ²⁸ Here, sleep disturbance is of particular concern. Because compressor stations operate 24 hours a day, the potential

exists for nighttime sleep disruption. Inadequate sleep is a proven cause of many health problems, and chronic sleep loss “has serious consequences for health, performance, and safety.”^{27 - 4} - Evidence suggests that the difference between a loud noise and the ambient noise level is a more important factor in sleep disturbance than the absolute magnitude of the loud noise^{28, 29, 30} This fact is another reason we believe peak noise is more important than average noise in this case. Much of the pipeline route in New Hampshire passes through decidedly rural areas where the typical nighttime noise level is around 35 dB. In these circumstances, a nighttime noise of 100 dB would be jarring indeed (being perceived as roughly 90 times louder than the background noise) and is easily loud enough to disturb sleep in most people. ^{29, 30} Also of concern is the low-frequency noise (LFN) produced by compressor stations.³¹ Low-frequency noise (below 100 Hz) has been linked to numerous psychological, emotional, and physiological complaints.^{28, 32, 33} In some ways, it can be worse than noise at higher frequencies. In particular, LFN need not be considered “loud” to cause annoyance and irritation, and is found to be more difficult to ignore than higher frequency noise.³⁴ In addition to the potential emotional and psychological effects of loud noise on humans, evidence suggests that some wildlife populations also respond badly to frequent loud noise. [MORE INFO AND REF NEEDED] In conclusion perhaps it’s true that New England needs more energy. However, New Hampshire, being a net exporter of electricity, does not. NH's recently completed Ten Year Energy Strategy identifies what the state does need to prepare for the future, that being (among other things) electric grid improvements (including increased use of sustainable energy sources such as wind and solar power) and improved energy efficiency. Efficiency improvements in particular yield the cheapest, cleanest, most plentiful energy source with no adverse environmental effects. And New Hampshire has much room for improvement here; it lags behind neighboring states in adopting energy efficiency measures. ³⁵ What New Hampshire does not need is the over-sized multi-billion dollar natural gas pipeline proposed by Kinder Morgan, a project that could cause over-dependence on distant and limited energy sources for electric generation, risk the security of NH's energy supply and energy future by diverting investment to ill-advised short-term plans, and, to the point of this letter, significantly degrade the quality of our state's natural environment as we have documented here. Energy unquestionably contributes to our quality of life. But the natural environment is the source of that life. Surely nothing is more important than protecting the source.