FRPB MEMBERS
Joan Rockwell, Clerk – Colrain At-Large; Thomas Hutcheson, Conway Select Board; Joe Strzegowski, Conway Planning Board; John Baronas, Deerfield Planning Board; John Ward, Gill Select Board; Jerry Lund, Chair - Leyden At-Large; Sam Lovejoy, 1st Vice Chair- Montague At-Large; Wayne Hachey, New Salem At-Large; Tracy Rogers, Northfield Select Board; Chuck Washer, Shelburne Select Board; Tom Miner, 2nd Vice Chair – Shelburne At-Large; Jennifer Gross, Wendell Select Board; Nan Reibschlag, Wendell Planning Board; David Travers, Heath Select Board.

FRCOG STAFF
Peggy Sloan, Director of Planning & Development; Rebekah Boyd, Admin. Services Coordinator; Kimberly Noake MacPhee, Land Use and Natural Resources Program Manager

PRESENTERS/GUESTS Charlie Levesque, Charlie Niebling & Eric Kingsley of Innovative Natural Resource Solutions, LLC; Richie Davis, Recorder; Dwayne Breger, UMass Clean Energy; Nathan L’Etoile, MFA.

1. Introductions

Jerry Lund, FRPB Members

J. Lund convened the meeting at 6:04 p.m. A round of introductions followed.

2. Review and Approval of January 28, 2016 FRPB Minutes

Joan Rockwell

S. Lovejoy moved to adopt the minutes of 7/23/15. T. Miner seconded the motion, which passed with 4 abstentions.

3. Presentation on the South River Watershed Project

Kimberly MacPhee

Kimberly Noake MacPhee presented “Mitigating Fluvial Erosion Hazards Using a River Corridor Approach” to FRPB members. She described FRCOG’s efforts to assist Conway and Ashfield in piloting this science-based approach (the first application in MA) to assess sensitive areas and complete GIS mapping of the watershed/river corridor for possible future protection and restoration of sensitive areas and wildlife habitat. This will help town to better manage the health of the highly manipulated, heavily eroded and destabilized South River. (See handout and copy of presentation slide.)

Following the slideshow, T. Miner asked about how to mitigate the perennially problematic Conway section of the South River that continually blows out upstream of the bridge (first slide) and has been treated with riprap in the past. Kimberly reported that those working on the project want to initiate discussions about this particularly complicated site with the landowner, the Town, and MassDOT. We
have a conceptual design for the site. K. MacPhee said that the crossing bridge is undersized and a new structure is needed.

S. Lovejoy asked if the river corridor plan implementation fell under the purview of Conservation Commissions. K. MacPhee explained that some components could be initiated by the Conservation Commission but a river corridor management overlay district would be part of the town’s Zoning Bylaw. S. Lovejoy asked if a corridor management overlay zone would fit within the flooding criteria delineated by FEMA and if homeowner’s insurance rates would rise. K. MacPhee responded that in Vermont, insurance companies have not recognized river corridor hazards yet the way they do the mitigation and repair work done under the National Flood Insurance Program (NFIP). Further investigation needs to be done to see how Massachusetts homeowners’ policies may be affected.

J. Lund noted that debris jamming up bridge passages can cause some of most severe damage. He asked if the boulders, logs, and root wads used to jam and deflect river in restorative ways would move with a flood event. K. MacPhee said that concern has been raised, but that root wad installations have been highly engineered, driven into the banks, and anchored using hydraulic analyses and other engineering methods and therefore it is quite unlikely that they will be removed or somehow compromised. The devil is in the details, she added, sound engineering oversight is needed all day and every day during the construction of restoration projects.

K. MacPhee concluded that next steps will involve piloting the plan and sharing it with other towns in the region. She noted that the Long Island Regional Conservation Partnership Program (Farm Bill money) has earmarked $1.4 million for the Deerfield River Watershed.

Members and guests applauded K. MacPhee’s efforts and presentation. K. MacPhee reported that another presentation regarding this work could be heard on March 29th at 6:30 at the Ashfield Town Hall.

|---|---|

Dwayne Breger of UMass clean energy extension (formerly DOER director of the renewable energy project) introduced the Renewable Wood Heat Sustainable Supply Study presentation on behalf of the absent Rob Rizzo. He explained that the presentation and talk represent the first in a series of studies by DOER to evaluate potential opportunities for using low grade wood for heat. The presentation will summarize a report prepared by Innovative Natural Resource Solutions, LLC. DOER is looking at the availability of low grade wood in the 21 town region to support wood heat and potentially a wood pellet manufacturing plant. Additionally, DOER will study potential demand for wood heat in the region and possible air quality impacts including greenhouse gas emissions. A final study will explore the feasibility of a community scale wood pellet manufacturing facility, different business ownership models (e.g. a local cooperative) and a regional economic analysis to estimate the benefits of jobs and income, and ways to keep fuel dollars working locally.

The consulting team from Innovative Natural Resource Solutions, LLC (INRS) gave their presentation, *Mohawk Forest Resource Assessment: Availability of wood fuel for wood energy in northwestern Massachusetts* (See Powerpoint slideshow document).
Following the presentation/talk, J. Rockwell asked about whether the study referred to natural forestry vs. planting trees. The consultants explained that in this area, we are fortunate that trees easily repopulate naturally and that tree planting is rarely done.

N. Reibschlager asked about costs. Consultants referred to a chart in the study with estimated costs at $40 to $55 dollars a ton for raw wood, plus cost of manufacturing pellets at $50 or approximately $100+ per ton; and with repayment on principal, etc., a supplier might sell a ton into market wholesale at between $195 to $200 per ton.

J. Ward asked about energy return vs. energy investment. Consultants explained that refined dry chips (another possible option for the region) require less manufacturing and energy. The Consultants can provide some examples of life cycle analyses for wood pellets. Charles Niebling of INRS said that producing pellets requires 1 unit of energy input for every 5 units of energy output in the pellets as compared with corn ethanol at 1 unit in for 2 units out.

Charles Levesque of INRS said depletion of nutrients in the soil is a concern, but that in the Northeast partial harvesting is practiced and research has shown little in the way of soil nutrient depletion as a result of harvesting. P. Sloan noted that one of the MTWP projects proposed is conducting research to support sustainable forestry practices and hopefully make the region a model working in partnership with the US Forest Service’s Research & Development branch.

 Consultants said 50% of the branches of any harvest is typically left in the woods, along with dead and dying trees which have no commercial value. S. Lovejoy asked if a new style of harvesting is suggested by this model. The consultant answered that additional infrastructure would likely be needed to convert to more wood heat than is currently sourced within the region although some of this equipment infrastructure already exists. J. Baronas asked how large of an area is needed to build a community scale pellet manufacturing facility. Consultants said between 6 and 10 acres is required.

J. Lund expressed concern about whole tree harvesting done with giant hydraulic machinery like that which is used on the west coast. The Consultant noted that for wood heat using pellets, whole tree harvesting is not used since tops are not used in pellets but that mechanized harvesting, where a tracked feller-buncher or a cut-to-length processing machine is used instead of chainsaws, is fairly common.

P. Sloan asked how new wood pellet heating systems compared to gas or oil in terms of air emissions. The Consultant noted that wood fuel creates ash, a mineral particulate, some of which is emitted as a result of burning. If a system combusts completely and efficiently, particulate emissions are very low in comparison to a typical wood stove but are higher than most propane or oil.

<table>
<thead>
<tr>
<th>5. Update on FERC Relicensing of the Northfield Mountain Pumped Storage Facility</th>
<th>T. Miner</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. Miner reported that GDF Suez, the corporate parent of First Light, is divesting its energy facilities worldwide. The Northfield Mountain Pumped Storage facility and hydroelectric facilities on the Turners Falls Dam are being purchased by PSP Investments. The new owner has stated its intent to continue the same consultant team that has served First Light from the beginning of the relicensing process. T. Miner noted that TransCanada, owner of the hydro facilities on the Connecticut River in NH and VT, and on the Deerfield River, has just announced that it, too, is divesting. Tom could not address the</td>
<td></td>
</tr>
</tbody>
</table>
question of whether the companies are hedge fund companies, but recalled that when he started this work, Western Mass Electric Co. was the owner — a local company with roots in the region. The locals are gone, he said.

Under the agreed upon integrated licensing process, First Light will file its final license application on May 2, 2016. This is two years in advance of the current license expiration.

A number of First Light’s studies will not be completed until October 14. Tom believes these will include the “causation study” that will report what First Light and its consultants contend are the causes of bank erosion. He said possible causes to be studied will be natural riverine actions, boat wakes, high flow events like Tropical Storm Irene, and the operation of the pumped storage facility, which raises and lowers river levels on a daily and weekly basis.

T. Miner said the CRSEC, a subcommittee of the FRPB, is very concerned about this study and how it will present what’s happening on the river. Some erosion sites are not listed in study. CRSEC is working to obtain expert testimony so they can confidently support or rebut their findings. In May 2018, when the old license expires, the process will conclude and a new license will be accorded, or annual renewals will be required.

6. Update on the Proposed Kinder Morgan/TGP Pipeline Project

P. Sloan reported that the FRCOG filed a petition for a formal evidentiary hearing with FERC to evaluate the need for a pipeline. It is unclear as to whether or not FRCOG will get a hearing, but FRCOG’s Consulting Attorney feels there is a strong case for calling into question the need for the NED pipeline. Kinder Morgan (KM) now has only 41% of capacity gas committed in the market path portion of the pipeline proposed to traverse Franklin County.

Recently, KM-TGP issued a Motion for Leave to Answer Intervenor’s statements in their requests for Intervenor status. P. Sloan noted that KM-TGP wanted to go on record that it disagreed with Intervenors’ statements that call into question the need for the pipeline. FERC has also issued a request for more information from KM-TGP, some of which has been asked for previously but still has not submitted. FERC will need the requested information before a Draft Environmental Impact Statement can be prepared.

Related to the NED pipeline, P. Sloan handed out the MA Department of Public Utilities (DPU) hearings schedule. The Franklin County hearing will take place at 7 p.m. on March 30th at the Greenfield Middle School. The focus of the DPU hearings is to consider whether the DPU should grant access to privately owned land for surveying by KM. Copies of another handout briefing FERC’s environmental review process were distributed as well. FERC will issue a timeline related to the development of the Environmental Impact Statement.

7. Topics Not Reasonably Anticipated 48 Hours in Advance

Jerry Lund, FRPB

Tom Miner moved to adjourn the meeting. Joe Strzegowski seconded. Adjourned at 8:09 p.m.

Documents Distributed/Presentations Viewed:
- Agenda
- Minutes of January 28, 2016
• Mitigating Fluvial Erosion Hazards (FEH) Using a River Corridor Protection Approach (presentation and handout)
• Mohawk Forest Resource Assessment: Availability of wood fuel for wood energy in northwestern Massachusetts.
• FERC’s Environmental Review Process
• Schedule of Public Comment Hearings to be held by the Massachusetts Department of Public Utilities for: Northeast Energy Direct (NED) Survey Petitions Tennessee Gas Pipeline Company, D.P.U. 16-01/16-02/16-03

The next meeting will be held on April 28, 2016.

Copies of all documents are available. Please contact Rebekah Boyd at admin@frcog.org or 413-774-3167 x100.