

Bristol Mills Dam *ad hoc* Advisory Committee

Minutes of Meeting Tuesday, February 28, 2017

Committee members present: Jim Albright, Pam Allen, Claire Enterline, John Freburger, James Hatch.

Also present: Chris Hall, Slade Moore, Rick Poland; Danielle D'Auria, Department of Inland Fisheries and Wildlife.

The meeting was called to order by chair Enterline at 6.05 pm with a quorum present, and the Pledge of Allegiance was recited.

1. Minutes:

Moved by Hatch, seconded by Albright, to accept the Minutes of January 24, subject to a number of amendments presented by Freburger based on Enterline's notes. These will be incorporated into the record maintained in the Committee binders and online. Passed unanimously.

2. Amendments to the Agenda:

Enterline stressed that this meeting was primarily to hear the presentation by IF&W wildlife biologist, Danielle D'Auria. There would be time afterwards to discuss future presentations and the scope of work.

There were no amendments to the Agenda.

3. Press release – members complimented Enterline on the article which was published in entirety in the Lincoln County News. She thanked members for their candid and speedy feedback on her draft. The sense of the Committee was that it was a good representation of the Committee's work.

Hatch expressed disappointment that the article had not brought more members of the public to tonight's meeting. After discussion it was agreed to send short, 2- to 3-paragraph press releases after each monthly meeting.

4. Danielle D'Auria delivered a slide presentation and talk on the ecology of the wetlands in the Bristol Mills Dam impoundment. D'Auria is a species specialist covering freshwater wetland birds at the Maine Department of Inland Fisheries and Wildlife, where her work includes identifying important habitat. This presentation is available in the Committee binders and is incorporated herein by reference.

In discussion D'Auria stressed that the wetland scored 15 out of a possible maximum 18 on IF&W's scale for evaluating Inland Waterfowl and Wading Bird Habitat (IWWH) – the Bristol Mills wetland is very high-rated habitat.

Criteria for rating the importance of wetlands include:

- (i) Size – Bristol's is circa 140 acres;

- (ii) Diversity of wetland types – Bristol's includes inland freshwater marsh, shallow open water, scrub swamp, and some wooded swamp.
- (iii) The dominant wetland type – the highest value is inland freshwater marsh, which is the largest category present in Bristol.
- (iv) Interspersion – Bristol has a good mix of open water interspersed with other wetland types.
- (v) Percentage of open water – the highest-rated is around 35%, though a valuable 'hemi-marsh' can go to 50% emergent cover and 50% open water in an interspersed pattern.

Wetlands such as Bristol's are important for pairing, nesting and brood rearing of a wide range of birds. The surrounding uplands, too, are important for nesting of some species (e.g. wood ducks and herons); as a disturbance buffer offering protection from human and predator activity; as an important base for the food chain (leaf litter and particulates support microinvertebrates which in turn feed birds); and they provide connectivity between adjacent wetlands. The Department considers uplands within 250 feet of a wetland as critical habitat.

There was considerable discussion of the effects of water depth and fluctuations on species. Both bird species, and the plant life that supports them, vary with depth: waterfowl and wading birds can be categorized by decreasing water depth, into (i) diving birds such as loons and pied-billed grebes (needing at least 25 cm. of water depth); (ii) upending birds such as the gallinule and coot; (iii) waders, like herons and bitterns; and (iv) probing or pecking birds, which feed at the surface. Water level fluctuations change habitat diversity over time, and can be an ecological trap for nesting birds – although some surface nesters are well-adapted to changing water levels.

D'Auria stressed the variables of vegetation and topography on wetland value, and presented recordings of the calls of common and not-so-common wetland birds. All Maine wetland birds are seasonal migrants; in her work tracking herons, she had observed one that flew nonstop from Massachusetts to Georgia in a 29-hour period.

In the following discussion, Allen asked which species fed upon alewives. D'Auria pointed out that while herons, ospreys and other large birds feed on adult alewives, their fry are eaten by smaller birds and invertebrates.

D'Auria asked about the nesting boxes placed in the wetland. Albright and Hatch reported that these were no longer maintained, and many had fallen off their posts. Nevertheless, members reported continued sightings of wood ducks and hooded merganser, species that formerly used the boxes.

Albright asked which regulatory bodies have to be dealt with when a project impacts a wetland. D'Auria indicated this is the Department of Environmental protection's responsibility, though they may consult with IF&W.

More stressed that the Committee would be unlikely to recommend any option that altered the wetland's water levels. If the dam was removed it would have to be replaced with an alternative structure to maintain the base water level in the wetland. Allen asked if a 12-inch drop would be significant. Moore referred to D'Auria's discussion of the changing plant ecosystems within one foot of water surface and the largely flat topography of the wetland – it appeared that such a change if sustained would be very significant and would favor the expansion of woody vegetation, i.e. shrinking the wetland.

Hatch observed that while the Committee had assumed that opposition by riparian landowners would be a major reason not to alter water levels, this presentation now gave an important additional reason. Enterline pointed out that despite the dam, water levels do fluctuate within a range determined by rainfall in the watershed; this would likely continue under every scenario.

D'Auria offered to send an electronic copy of the slide presentation, and a high-resolution version of the map of the Bristol wetland included in it. She was thanked and applauded for her presentation.

5. Other business:

Albright asked whether we have accurate data on what has been spent on the dam over the last 20 years. Moore indicated that whatever the amount was, it is not a good basis for future planning as it was clearly insufficient.

Hall asked whether the Committee wished to have a table presenting their findings to date, at the Town Meeting on March 21. The members will discuss this by email. Hall reported that he was exploring renewable energy generation options for the town, and would be exploring whether hydropower production at the dam was viable given new technologies. He would report to the next meeting whether to recommend inviting a hydropower speaker to a future meeting.

Hall also indicated that if the dam is retained, an Emergency Action Plan would be required as a condition for certain sources of funding – if major expenditure on the dam was to be pursued, he would request members of the Committee to participate with Bristol Fire & Rescue in preparing an EAP.

6. A motion to adjourn was proposed by Albright and seconded by Freburger at 8.17 pm; passed unanimously.

C. Hall
Town Administrator