

**DECISION OF PLANNING BOARD  
REGARDING  
FPL ENERGY'S APPLICATION FOR PARTIAL REMOVAL OF THE  
FORT HALIFAX DAM**

**Procedural Background**

At the February 27, 2003, meeting of the Planning Board, it determined it had jurisdiction to hear FPL Energy's application under the following Winslow Ordinance provisions:

Temporary Use Permits: 12-63 C

Shoreland Zoning, Section 14, Table 1, Items 15 c and d.

Shoreland Zoning, Section 14, Table 1, Item 17

Shoreland Zoning, Section 14, Table 1, Item 21 - Essential Services

Shoreland Zoning, Section 14, Table 1, Item 26 - Roads and Driveway

Construction

Flood Plain Management Ordinance, Section 5-D-8.

On May 15, 2003, the Planning Board voted to postpone consideration of FPL Energy's application until the federal and state permitting process was completed. This decision was affirmed by the Board of Appeals on July 15, 2003. No appeal was taken of this decision.

Thereafter, FPL Energy obtained both federal and state approvals for partial removal of the dam. The Planning Board held a public hearing on the application on November 15, 2007, and held meetings considering the application on November 8, 2007, November 30, 2007 (Site Review), December 13, 2007, January 10, 2008, January 24, 2008, February 14, 2008, February 28, 2008, March 13, 2008, and March 17, 2008. On March 17, 2008, the Planning Board, by a unanimous vote of 5-0, verbally approved the application, subject to numerous conditions. The decision was made pursuant to the eight (8) criteria of the Shoreland Zoning Ordinance, Section 16 D (Page 21), Temporary Use Permits, and Flood Plain Management Ordinance.

After the verbal decision was made, Kenneth Fletcher, on behalf of Save Our Seabasticook (SOS), presented a petition requesting another public hearing. A motion to reconsider the Planning Board Decision, which would allow further public input, was made and seconded, but failed on a 3-2 vote. The decision of the Planning Board follows.

**DECISION**

1. **Will the Proposed Use Maintain Safe and Healthful Conditions?**
  - A. **Safety to the Public of the Remaining Dam Structure.**

### Findings of Fact

After FPL's proposed removal of an 87 foot section of the dam, there would remain a section over 200 feet in length extending to the southerly shore. The height of the dam above the rock ledge would be approximately 11 feet on both the upstream and downstream side at the point closest to the southerly bank and that distance would increase proceeding northerly to a drop of approximately 20 feet on both the upstream and downstream side at the point where the breach is proposed. The angle of the upstream slope of the dam is 45 degrees and the angle of the downstream side is 45 degrees in part and vertical in part. The top of the dam is approximately 2 feet in width. The water depth at the point where the breach would occur is approximately 6 inches during the summer months.

The only deterrents to access to the top of the remaining southerly dam structure being proposed by FPL Energy are "no trespassing" signs and a gate which would block direct access to the top of the dam at the southerly shore. Children and others will easily be able to scale the dry 45 degree angle slope of the dam at almost any point along its upstream or downstream side. At present, access on the upstream side is discouraged by placement of a line and buoys across the stream upstream from the dam. On the downstream side access is discouraged because the surface is wet and slippery from water flowing over the top of the dam. Also, a fall from the top of the dam on the upstream side would only be into water which is at the approximate same height as the top of the dam itself. The Planning Board accepts Police Chief Grindall's assessment that, based on his experience, children will want to climb the remaining dam structure, and this would produce a very dangerous situation. With a partial removal of the dam, and increased ease of access, the result is an "accident waiting to happen". A fall from 20 feet onto rock ledge below would likely produce serious injury or even death.

### Conclusions of Law

Based on the foregoing Findings of Fact, the Planning Board finds that the applicant's proposal regarding safety to the public on the remaining southerly portion of the dam is inadequate and disapproved. The Board further concludes that if FPL will remove the entire southerly portion of the dam, safety will be assured and this aspect of the Application is approved.

#### **B. Safety of the Remaining Northerly Portion of the Dam**

### Findings of Fact

The two remaining bays on the northerly side of the dam will have recessed areas, above a water depth of six to seven feet, that people can climb into and possibly get stuck or injured, thus increasing the risk of drowning. At present, water flowing over the top of the dam at this point discourages entrance into these recessed areas. When the dam is removed water will no

longer flow over the top, which will encourage people to access these areas. Also, the recessed areas become more accessible by watercraft when the dam is removed since watercraft will then be able to freely access this area from upstream.

#### Conclusions of Law

FPL Energy's proposed leaving of the two northerly bays intact does not meet the safe condition requirement and is disapproved. This aspect of the Application is approved if the two northerly bays are removed.

#### C. Safety of the Powerhouse and Related Areas on the Northerly Side

##### Findings of Fact

Upon removal of the dam, the powerhouse will be surrounded on three sides by water and the walls of the powerhouse structure are vertical, which greatly restricts the ability of anyone to gain access from these points. On the land side of the powerhouse there is fencing with barb wire strands at the top designed to prevent access. FPL has agreed that any of this fencing that has been damaged will be replaced or repaired and maintained in good condition to prevent access to the powerhouse. Additionally, if the lowering of the water level requires additional fencing to restrict access, such additional fencing is necessary to maintain safe conditions.

When the draw-down is complete, recessed areas on the west side of the powerhouse are exposed and accessible, which presents a danger to the public. To protect the public, permanent gates of suitable materials must cover the entry points on the west and south faces of the powerhouse.

#### Conclusions of Law

With the repair or replacement of damaged fencing and the addition of fencing as may be necessary to restrict access when the water level is lowered, and with permanent gates of suitable materials covering entry points on the south and west faces of the powerhouse, this aspect of the Application will maintain safe conditions and is approved.

#### D. Stability of Powerhouse and any Remaining Portion of the Dam Structure

##### Findings of Fact

The engineering reports submitted by FPL Energy indicate that the powerhouse and any portion of the dam remaining are structurally stable. As the powerhouse and any remaining portion of the dam will exist indefinitely into the future, repairs to the remaining structures may be necessary and must be made to keep them safe.

## Conclusions of Law

With the requirement that necessary repairs will be made in the future, the remaining structures will maintain safe conditions and this aspect of the Application is approved.

### E. Dallaire Street Slope Stability

#### Findings of Fact

Taken together, the three reports of Sebago Technics, and the testimony of Mr. Recker of Sebago Technics, establish that the risk of a major slope failure with the drawdown of the Fort Halifax Dam impoundment is very low but not totally impossible. The safest way to determine the possibility of potential slope movement is through monitoring the potential for movement, rather than conducting test borings. While the possibility of major slope failure may be very low, the consequences of such a failure produce risk of damage to the homes at 5,7, 9, 11, 13 and 15 Dallaire Street and injury or death to the occupants therein.

Small differential soil movements will occur prior to slope failure. The use of inclinometers and piezometers on the Dallaire Street slope during the entire draw-down process will allow for the detection of these small soil movements. The inclinometers and piezometers will be monitored electronically 24 hours a day by Sebago Technics.

If the inclinometer readings indicate a developing risk of possible slope failure, as determined by Sebago Technics, draw-down should be halted. The draw-down may resume when Sebago Technics determines it is safe. There are devices that FPL Energy can use to halt the draw-down.

If soil conditions remain stable for 24 hours after completion of the draw-down, residents may then safely re-occupy their homes, but to be cautious, monitoring will continue for two (2) weeks after completion of drawdown. If Sebago Technics detects developing slope problems during this two (2) week period, the residents will be promptly notified.

Testimony of several Dallaire Street residents establishes that they do not have the means to pay for substitute accommodations during this precautionary evacuation period. FPL Energy's offer of \$250.00 per day per family for substitute accommodations during the precautionary evacuation period is sufficient to allow these residents to obtain substitute accommodations in the immediate area.

In the event of a slope failure that damages or destroys homes on the south side of Dallaire Street, the residents may have homes that are uninhabitable or have no homes at all. Several residents testified that they have no insurance coverage to protect them from such a loss. To protect the residents from such tragic consequences requires that they have the financial ability to either have their homes promptly repaired, or purchase substitute properties.

The permit issued by MDEP to FPL Energy contains a condition requiring FPL Energy to monitor and remediate significant bank erosion and slumping. The March 14, 2008, report of Sebago Technics indicates that monitoring for possible erosion or slumping of the Dallaire Street slope for two years is prudent. To meet the terms of the MDEP permit, and meet the requirements of maintaining safe conditions, require that FPL Energy promptly remediate the effects of any slumping or erosion of the Dallaire Street slope resulting from the drawdown that occurs within two (2) years after dam removal.

### Conclusions of Law

With the addition of the following conditions, this aspect of the Application is approved:

- i. The pre-dam breach draw-down of nine feet will occur over a period of two weeks at a time of low groundwater conditions;
- ii. The final draw-down of fifteen feet following dam removal will be scheduled to occur over a seven day period;
- iii. Sebago Technics will install and monitor inclinometers and piezometers on the Dallaire Street slope and draw-down will be halted whenever Sebago Technics detects a developing slope failure risk. Sebago Technics will determine when draw-down may safely be resumed;
- iv. FPL Energy will give a minimum of seven days advance notice to the residents of 5, 7, 9, 11, 13 and 15 Dallaire Street of the anticipated date of dam breach;
- v. These residents will be urged to evacuate their residences prior to the breach of the dam;
- vi. The precautionary evacuation will end when Sebago Technics determines the residents may safely return to their homes;
- vii. FPL Energy will pay \$250.00 per day per family unit to the residents of 5, 7, 9, 11, 13 and 15 Dallaire Street who actually evacuate, from the date of evacuation to the date Sebago Technics indicates they may return;
- viii. To facilitate the ability of residents to promptly return to their residences, residents are urged to leave with the Town office telephone numbers or other means by which they can be reached;
- ix. FPL Energy will pay Sebago Technics for the cost of installation and monitoring of the inclinometers and piezometers and related work; and
- x. In the event slumping or erosion occurs in the Dallaire Street slope area within two (2) years of dam removal, and this event is determined by Sebago Technics to be related to the draw-down, FPL Energy will promptly remediate that slumping or erosion at the direction of Sebago Technics. The cost of Sebago Technics services is to be paid by FPL Energy.
- xi. If for some reason Sebago Technics does not perform the work described above, it will be performed by another geotechnical engineer selected by the Town and paid for by FPL Energy.
- xii. FPL Energy will obtain a bond, irrevocable letter of credit, or other suitable financial guarantee in form satisfactory to Town Counsel for an amount equal to the fair market value or replacement cost, whichever is greater, of 5, 7, 9, 11, 13

and 15 Dallaire Street, to be drawn upon by the Town to the extent there is damage or destruction of any of the homes due to a slope failure caused by the drawdown. Said financial guarantee to be cancelled one (1) year from completion of the dam removal and the sewer line project, with said date to be determined by the Code Enforcement Officer.

Replacement cost and fair market value will be determined by the Town Assessor at or before the time of the draw-down, independent of the impact on value that is produced by slope failure publicity.

**F. The Truck and Traffic Safety**

Findings of Fact

The dam removal and sewer line repair will generate large amounts of traffic, which if not regulated, will be hazardous to motor vehicles and pedestrians. The traffic control plan recommended by Police Chief Grindall, which is contained in the following Conclusions of Law, will insure traffic safety.

Conclusions of Law

With the following traffic safety plan in effect during the period of time when the dam is being removed and sewer line repair work is being performed, safe conditions will be maintained and this aspect of the plan is approved:

- i. Trucks used during construction shall be no larger than ten to twelve cubic yard dump trucks with a load limit of 72,000 pounds;
- ii. The Applicant's access road adjacent to Pleau's Market shall be limited to one-way travel only at a maximum rate of four dump truck round trips per hour;
- iii. No dump trucks may enter or exit the site between 4:00 p.m. and 6:00 p.m.;
- iv. All left turning dump trucks shall have at least two traffic flaggers (one for eastbound traffic and one for westbound traffic) to assist dump trucks turning left from the site; and
- v. Signs shall be posted to warn vehicles approaching in all directions that trucks will be entering and turning in the area.

**G. Pleau's Market**

Findings of Fact

The access road for dam removal and sewer line repair work runs immediately adjacent to one side of Pleau's Market. The effects of heavy truck traffic could potentially damage Pleau's Market. Pleau's Market and FPL Energy have reached an agreement to protect Pleau's Market from damage caused by dam removal and sewer line replacement work.

### Conclusions of Law

If the following conditions are met, the Application pertaining to Pleau's Market will maintain safe conditions and is approved:

- i. Any drainage or surface improvements to the access road shall not adversely affect drainage on Pleau's Market property;
- ii. No equipment staging may occur near Pleau's Market; and
- iii. Compliance with the terms and conditions contained in the February 14, 2008, Agreement between FPL Energy and Pleau's Enterprises during dam removal and sewer line construction work.

#### **H. Public Roads and Bridges**

##### Findings of Fact

A condition of the permit granted by MDEP is that FPL in consultation with the Maine Department of Transportation, the agency charged with protecting public roads and bridges, shall take appropriate measures to monitor and protect the Garland Road, Mile Brook Bridge, Route 201 Sebasticook River Winslow Bridge, and Sebasticook River Railroad Bridge from damage due to bank erosion and scour from increased stream velocities resulting from dam removal. The requirements that will be imposed by Maine Department of Transportation will be sufficient to protect public roads and bridges.

##### Conclusions of Law

Provided that FPL Energy follows the recommendations of the Maine Department of Transportation for the protection of public roads and bridges, safe conditions will be maintained and this aspect of the Application is approved.

#### **I. Public Safety During Removal**

##### Findings of Fact

The permit issued by FERC includes a condition requiring FERC review and approval of (i) a public safety plan for the decommissioning/dam removal, (ii) a Construction Quality Control Inspection Program (CQCIP), (iii) a Temporary Construction Emergency Action Plan, (TCEAP), and (iv) a blasting plan, at least 60 days prior to the start of construction activities. With these conditions being followed public safety during dam removal will be maintained.

### Conclusions of Law

Provided the conditions contained in the FERC permit pertaining to public safety during dam removal are followed, safe conditions will be maintained and this aspect of the Application is approved.

#### J. Sewer Line

##### Findings of Fact

Applicant has proposed protecting Town's sewer line in accordance with the MDEP Permit. That permit requires FPL Energy to protect the sewer line from damage due to soil erosion and ice. The MDEP permit does not require FPL Energy to protect the inside of the sewer line from freezing. The testimony of Engineer Al Hodsdon establishes that one of the two sewer lines will have little flow during the winter months. His testimony also establishes that after draw down approximately 570 feet of the sewer line will be close enough to the surface to potentially freeze. If freezing occurs, the sewer may split, discharging untreated sewage onto the land and into Sebasticook River. To prevent water pollution and a health risk, approximately 570 feet of the sewer line will need to be replaced and reburied to a depth to avoid freezing.

##### Conclusions of Law

The portion of the Application relating to protecting the Town's sewer line is inadequate and is disapproved. With the following condition, this aspect of the Application is approved:

Without assigning ultimate financial responsibility, FPL Energy, in consultation with a Town selected engineer, will replace the approximately 570 feet of sewer line referenced in Engineer Albert Hodsdon's March 12, 2008, report to the Town, in a manner to protect the sewer lines from freezing or damage caused by soil erosion or ice.

#### 2. Will Not Result in Water Pollution, Erosion or Sedimentation to Surface Waters

##### Findings of Fact

The Maine Department of Environmental Protection (MDEP) and Federal Energy Regulatory Commission (FERC) have imposed detailed requirements on FPL Energy to prevent water pollution, erosion or sedimentation to surface waters. Compliance with these conditions is necessary to prevent these problems. Additionally, the Soil Erosion and Sedimentation Control Plan dated December, 2007, has been approved by MDEP, and by Mark Mitsch of Weston and Sampson Engineers, who additionally found that the drawdown would not produce un-stabilized soil conditions. Mark Mitsch was a town employed reviewing expert.

There has been some conflicting evidence presented by Peter Newkirk, who is both a member of SOS and head of the Surface Waters Resources Unit of DOT. In recent testimony Mr. Newkirk reiterated some of the objections noted in his 11/27/07 submission to the Planning Board, but did note that the December 2007 FPL Energy plan did at least require timely monitoring of the re-growth of vegetation.

Effective re-growth has been noted by both Mr. Mitsch and Mr. Newkirk to require a significant portion of the growing season to occur after the actual breach. Based on the March 17, 2008, report of Mark Mitsch, completion of the draw-down should occur no later than August 15<sup>th</sup>. Additionally, to allow adequate re-growth, the decision to actively re-seed the area should be made within two weeks of completion of the draw-down.

During construction of the access road certain trees will need to be removed. Any tree measuring six inches or more in diameter 4.5 feet above the ground will need to be replaced.

The MDEP order indicates that those residents with overboard discharge systems should be able to extend their discharge lines, if they wish, at minimal expense, to the Seabasticook River. To accomplish this FPL Energy needs to grant permission to these property owners to cross FPL Energy property to the river.

To protect the Fort Hill Cemetery from irreparable harm, FPL Energy should closely monitor the slope adjacent to the cemetery and promptly remediate any slumping or erosion.

### Conclusions of Law

Conditions imposed by MDEP and FERC to prevent water pollution, soil erosion and sedimentation to surface waters are adequate, and with the following added conditions, this aspect of the Application is approved:

- A. All trees six inches or more in diameter, measured 4.5 feet above ground level, that are removed during construction of the access road shall be replaced following completion of dam removal activities, at a time when tree survival is optimized;
- B. Replacement tree shall be substantial nursery stock of at least four to six feet in height;
- C. The completion of the draw-down must occur on or before August 15<sup>th</sup>, and the decision on active re-seeding should be made within two weeks of the completion of the draw-down.; and
- D. FPL Energy will allow those with overboard discharge systems to extend them across its property, provided that discharges are in compliance with applicable permits.

- E. FPL Energy shall closely monitor the slope adjacent to the Fort Hill Cemetery and promptly remediate any slumping or erosion that may occur related to the drawdown.

3. **The Proposed Use Will Adequately Provide For the Disposal of All Waste Water**

Findings of Fact

The proposed use will not create any waste water.

Conclusions of Law

Since the proposed use will not create any waste water, this aspect of the Application is approved.

4. **Will Not Have an Adverse Impact on Spawning Grounds, Fish, Aquatic Life, Bird or Other Wildlife Habitat**

Findings of Fact

MDEP and FERC have imposed detailed requirements upon FPL Energy to prevent an adverse impact on spawning grounds, fish, aquatic life, bird or other wildlife habitat. Compliance with these conditions is necessary to prevent an adverse impact in these areas. There has been much discussion about whether FPL Energy has to obtain a variance under 12-M.R.S.A. §12806 due to the recent addition of an eagles nest adjacent to the impoundment area. IF&W and Mark Randlett, Assistant Attorney General advising IF&W, have indicated that no variance is necessary.

Conclusions of Law

The conditions imposed by MDEP and FERC to prevent an adverse impact on spawning grounds, fish, aquatic life, bird or other wildlife habitat are adequate, and this aspect of the Application is approved.

5. **Will Conserve Shore Cover and Visual, As Well As Actual, Points of Access to Inland Waters**

A. **Shore Cover**

Findings of Fact

The de-watering will not remove any existing shore cover, so it is being conserved. Additionally, shore cover will be increased as vegetation fills in the de-watered area. To insure the expansion of shore cover in a natural manner, FPL Energy shall remove any visible man-made objects in the de-watered area.

### Conclusions of Law

With the condition that FPL Energy will remove visible, man-made objects from the de-watered area, this aspect of the Application is approved.

#### **B. Visual and Actual Points of Access**

##### Findings of Fact

There will be no restrictions of visual access.

FPL Energy has agreed to allow abutting land owners to cross FPL Energy's property to access the stream. Regarding carry-in boat access, FPL Energy has made two alternate proposals. Proposal A is an extension of the existing carry-in access. FPL Energy has not established that it has clear title to this property, so use of this access cannot be guaranteed. Proposal B is across FPL Energy property, and with it carry-in access can be guaranteed.

FPL Energy has agreed to allow parking to continue in the existing area as noted in the map outlining the A & B alternatives. Additionally FPL Energy has agreed to develop access from any Town owned land to the water if the Town wishes.

### Conclusions of Law

This aspect of the Application is approved with the following conditions:

- i. FPL Energy will allow abutting land owners to cross its property to access the stream;
- ii. Within one (1) year of dam removal, carry-in boat access, Proposal B will be constructed, and the Town will be provided with a surveyor's map to scale depicting the access and existing parking area, and parking in the existing parking area will be allowed to be continued; and
- iii. FPL Energy will allow development of an access from any town owned land to the water if the town wishes.

#### **6. Proposed Use Will Protect Archeological and Historic Resources As Designated In the Comprehensive Plan**

##### Findings of Fact

FPL Energy has entered into multiple agreements with the Maine State Historic Preservation Commission to protect historic and archeological resources at the site. Additionally, the MDEP permit imposes a number of requirements that will protect archeological and historic resources. Compliance with agreements with the Maine Historic Preservation Commission and the conditions of the MDEP permit pertaining to protecting archeological and

historic resources will satisfy the requirements of protecting archeological and historic resources as designated in the comprehensive plan.

#### Conclusions of Law

This aspect of the Application is approved, subject to the following conditions:

- A. FPL Energy will comply with the terms and conditions of the agreement with the Maine State Historic Preservation Commission; and
  - B. FPL Energy will comply with all MDEP requirements for the protection of archeological and historic resources.
7. **Will Avoid Problems Associated With Flood Plain Development and Use**

#### Findings of Fact

The dam removal will not have any adverse impact on flood plain development and use. No information opposing this aspect of the Application has been provided.

The MDEP permit includes a requirement that the Applicant provide all necessary technical information to the Towns of Winslow and Benton to support a request to the Federal Emergency Management Agency (FEMA) to revise the flood way maps for the Sebasticook River to take into account the removal of the Fort Halifax Dam.

#### Conclusions of Law

With the requirement that FPL Energy provide all necessary technical information to the Towns of Winslow and Benton to support a request to FEMA to revise the flood maps for the Sebasticook River to take into account the removal of the Fort Halifax Dam, this aspect of the Application is approved.

8. **Is In Conformance With The Provisions of Section 15, Land Use Standards**

#### Findings of Fact

The provisions of Section 15 A through T either do not apply to the pending Application or are covered under criteria 1 through 7 above. The Application is in conformance with Section 15, Land Use Standards. No evidence opposing Standard #8 has been offered.

#### Conclusions of Law

This aspect of the Application complies with Section 15 and is approved.

9. **Temporary Use Permit**

The temporary access road and contractor field office trailer that may be temporarily brought on site comply with criteria numbers 1 through 8, as discussed above.

10. **Flood Plain and Management Ordinance**

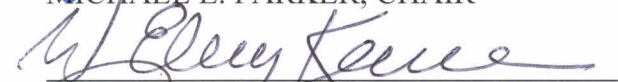
The requirements of the Flood Plain Management Ordinance are either not applicable or are covered in the criteria 1 through 8, as discussed above.

**CONCLUSION**

Subject to all of the conditions noted above, FPL Energy's application for the removal of the Fort Halifax Dam is APPROVED, all concurring.

DATED: March 17, 2008

  
MICHAEL E. PARKER, CHAIR

  
W. ELERY KEENE

  
ROY L. STRAHAN

  
MILTON C. POUILLIOT

  
RICHARD D. BROWNING, SR.

**Any appeal must be made within 30 days of the date of the decision.**

**Saved: Decision of Planning Board.3182008**

**Revised: 3/19/2008**