



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

DEVAL L. PATRICK
Governor

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Secretary

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May 21, 2013

Fairhaven Board of Health
ATTN: Peter DeTerra, Chair
Town Hall
40 Center Street
Fairhaven, MA 02719

RE: MassDEP Wind Turbine Sound Sampling Study- INTERIM REPORT

Dear Mr. DeTerra:

With this cover letter I am providing an INTERIM Report with preliminary results from MassDEP's attended sound sampling of the Fairhaven Wind LLC Wind Turbines (North and South) located at the Waste Water Treatment Facility on Arsene Street in Fairhaven, MA. The enclosed report was prepared in response to a request from the Board to MassDEP to assist the Town in conducting attended sound sampling to determine if the sound from the wind turbines complies with the MassDEP's Noise regulations (310 CMR 7.10) and the 10 dBA threshold contained in the MassDEP Noise Policy.

MassDEP is issuing this INTERIM Report given the length of time it is taking to sample all of the wind conditions outlined in the sampling protocol and because of recent sampling sampling results obtained and verified by our agency. The report details the results found during each sampling event, along with the date and location of the sampling event. MassDEP has identified nineteen sampling events demonstrating compliance and five exceedances of the 10 dBA noise threshold. The five exceedances occurred at three locations when sampling was conducted during the quiet overnight hours during the late fall/winter season, and under certain wind speeds and wind directions.

MassDEP has not completed the sampling work. We are still planning to collect sound samples during the overnight period for two specific weather conditions: a strong southwest or west- southwest wind and a strong northeast wind. Once data is collected for these conditions, the Interim report issued under this cover will be revised to include the additional data and issued as a final report.

The results of this report are preliminary and based upon a limited number of sampling dates under limited conditions, and should not be considered to be conclusive. As noted above, most of the sampling results indicate compliance with MassDEP's standards. We anticipate that the operator of the turbines will be proposing testing and potential mitigation strategies that can be implemented to address

Mr. Peter DeTerra

May 21, 2013

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the conditions in which exceedances were identified. MassDEP is eager to work with your Board and the operator to design effective solutions that will permit the continued operation of these turbines in compliance with MassDEP's noise policy.

Should you have any questions regarding the report, please feel free to contact me at 617-292-5975.

Sincerely,



Martin Suuberg
Deputy Commissioner for
Policy and Planning

Attachment

Cc: Pat, Fowle, Health Agent
Phil Weinberg, Regional Director, SERO
Nancy Seidman, Assistant Commissioner, BWP, MassDEP
Gordon Deane, Fairhaven WindLLC
Sumul Shah, Fairhaven Wind, LLC

INTERIM REPORT / PRELIMINARY RESULTS

**ATTENDED SAMPLING OF SOUND FROM FAIRHAVEN NORTH WIND TURBINE AND
SOUTH WIND TURBINE**

Fairhaven, MA

Prepared by:
MassDEP- Bureau of Waste Prevention
1 Winter Street
Boston, MA 02108

May 21, 2013

Executive Summary

This interim report presents the preliminary results of attended sound sampling of Fairhaven Wind LLC's North and South Wind Turbines located east and south of the Fairhaven Wastewater Treatment Plant on Arscene Street in Fairhaven Massachusetts.

In May 2012 Fairhaven Wind LLC commissioned two Sinovel SL1500 1.5 MW wind turbines at the Waste water treatment plant. Within days of commissioning the Town began receiving complaints from nearby residents regarding the wind turbine operation. In June 2012 the Fairhaven Board of Health (BOH) contacted the Department of Environmental Protection (MassDEP) and asked for assistance to conduct a sound impact analysis of the Wind Turbines in response to the noise complaints. MassDEP agreed to assist the Town in a letter dated June 15, 2012. The BOH was interested in whether noise levels when the turbines were operating exceeded MassDEP noise guidance which calls for sound levels not to exceed 10 dB(A) above background levels.

The Fairhaven Board of Health provided MassDEP a complaint log for the period May 3 through June 3, 2012. With this information MassDEP defined the locations and conditions under which sound impacts were perceived to be the greatest. MassDEP targeted five locations and four weather conditions for initial testing. A fifth weather condition was added based on complaints received over the summer and early fall of 2012.

The sampling protocol was presented to the Board of Health and residents in a meeting on July 23, 2012. Sampling began on August 9, 2012. As of 19 April 2013, all but one of the conditions identified in the protocol have been sampled. The last required weather condition (strong and dry northeasterly winds) has not been present during the overnight period during which MassDEP has been able to sample. MassDEP continues to wait for this condition to occur so the required sampling can be completed. In addition, most of the samples from one night under strong southwesterly wind conditions were discarded from the data set due to a malfunction at one of the wind turbines. Therefore, this wind / weather condition also needs to be re-sampled to complete the testing identified in the protocol. In the interim, MassDEP determined that transmitting some of the preliminary results to the town based on the work done to date would be prudent and responsive to Town and resident needs.

The results in this report include sound sampling conducted on eight nights during the quiet late evening/ overnight hours. A ninth sampling event was held in the evening of a very windy day when there were a significant number of resident complaints. For each location, data was collected with both turbines operating as well as with the turbines shut down. Because the sampling was attended, the study was able to focus directly on sound from the wind turbines and discard any readings that could be attributed to other sources of sound.

Preliminary results indicate that in 19 of the 24 samples, the project was in compliance. In 5 of the samples, the sound impact at 12 Little Bay Road, Teal Circle and 7 Peirce's Point Road in strong northwesterly and/ or easterly wind conditions can exceed the MassDEP 10 dB(A) above the ambient levels and constitute "noise" pursuant to 310 CMR 7.10.

In addition, based upon octave band analysis of the sampled sound, operation of the two wind turbines does not contribute to a pure tone condition under the sampling conditions.

The results of this report are preliminary and based upon a limited number of sampling dates under limited conditions, and should not be considered to be conclusive. As noted above, most of the sampling

results indicate compliance with MassDEP's standards. We anticipate that the operator of the turbines will be proposing testing and potential mitigation strategies that can be quickly implemented to address the conditions in which exceedances were identified. MassDEP is eager to work with your Board and the operator to design effective solutions that will permit the continued operation of these turbines in compliance with MassDEP's noise policy.

1.0 Introduction

In early 2012, Fairhaven Wind LLC constructed two Sinoval 1.5 MW wind turbines at the Waste Water Treatment Plant property on Arsene Street in Fairhaven, MA. These turbines are privately owned and operated but were permitted by the Town and the Town receives revenue/power through an agreement with Fairhaven Wind LLC. The Turbines were the subject of a preconstruction noise impact analysis prepared by Tech Environmental in 2007 and updated in 2011. The original analysis evaluated the impact from installation of two Vesta V82 turbines (1.5 MW). In September 2011, a revised analysis was issued which evaluated the impact of installation of two Sinovel SL1500 1.5 MW turbines. These are the turbines that were eventually permitted and constructed on the site.

Since the turbine commissioning in May 2012, the Board of Health for the Town of Fairhaven has received noise complaints from neighbors and residents regarding the wind turbines. In early June after receiving over 100 complaints, the Board of Health voted to request the assistance of MassDEP to determine the ambient and operational sound levels of the Fairhaven Wind LLC wind turbines. MassDEP agreed to assist the Town in a letter dated June 15, 2012 (see AppendixA). MassDEP's involvement is limited to assessing sound impacts. MassDEP does not currently regulate shadow/ flicker or other non-noise related conditions identified in the resident complaints.

The Fairhaven Board of Health provided a complaint log with MassDEP for the period of May 3 through June 3, 2012. With this information MassDEP was able to define the locations and weather conditions under which sound impacts were perceived to be the greatest. MassDEP targeted five locations and four weather conditions for initial testing. A fifth weather condition was added based on complaints received over the summer and into the early fall 2012.

A draft sampling protocol was presented to the Board of Health and residents on July 23, 2012. A MassDEP representative presented the protocol at a Board of Health meeting which included a 2 hour question and answer session with Fairhaven residents on the issues surrounding noise in general, and wind turbine noise specifically. The sampling protocol was modified slightly after that meeting to add specific details about the sampling sites.

Sound sampling began on August 9, 2012. As of 19 April 2013, all but one of the weather conditions identified in the protocol have been sampled. The last required weather condition (strong and dry northeasterly winds) has not been present during the overnight period during which MassDEP is sampling. MassDEP plans to continue sampling until sound readings for this

weather condition can be collected. In addition, most of the samples from one night under strong southwesterly wind conditions were discarded from the data set due to a malfunction at one of the wind turbines. This wind / weather condition needs to be re-sampled to complete the testing identified in the protocol. In the interim, MassDEP determined that transmittal of some preliminary results to the town based on the work done to date would be prudent and responsive to Town and resident needs.

The results of the sound study documented by this report are specific to the operation of Fairhaven Wind LLC's North and South Wind Turbines operating under the specific weather conditions cited herein. These results are subject to the limitations and caveats stated in Section 2.5. Except where noted in this report, these results should not be interpreted, extrapolated or represented as being representative of the sound impacts under other operating conditions or at locations not proximate to the sites that have been tested. Further, these results are not representative of any other wind turbine either planned or operating.

2.0 Sampling Procedure

As previously stated, prior to conducting the attended sampling, MassDEP prepared a sampling protocol and shared this with the Board of Health and interested residents in a meeting on July 23, 2012. The protocol is included here as Appendix A. This section discusses some of the details of the protocol.

2.1 Equipment

Sampling was performed with a Quest Technologies Sound Pro SE/DL Sound Meter (Type I) with accuracy standards established in American National Standards Institute (ANSI) S1.4-1983 for acoustical measuring devices as specified in ANSI S12.18-1994. The sampler was tripod-mounted approximately 5 feet (1.5m) above ground level. The microphone was equipped with a wind screen. The tripod was located at least 25 feet (7.5m) from any large vertical reflective surface¹ and 5 feet (1.5m) from any small-diameter object in compliance with ANSI standards S12.9-1993/Part 3.

The sampler was calibrated and certified as accurate to standards set by National Institute of Standards & Technology (NIST) by an independent laboratory within the past 6 months and was calibrated in the field before and after each sampling study with a manufacturer-supplied acoustical calibrator which meets the standards of ANSI S1.4-1984.

For broadband impact analysis, the sampler was set to collect data in decibels for the "A" weighted scale (dB(A)) in "slow" response mode.

¹ The exception was when sampling was conducted on a deck at 3 Shawmut Ave. In this case, the wall of the dwelling was within 25 feet of the sampler but the sampler was located to the side of the structure so there was no vertical surface behind the sampler that would allow for reflective sound.

For analysis of pure tone, the sampler was set to collect linear sound ("Z" scale) in "slow" response mode (dB(Z)) and an octave band filter was employed to speciate sound to each of 10 octave bands. For the pure tone analysis, L_{eq} ² data is collected.

2.2 Operating Conditions

The sampling protocol was designed to evaluate the combined sound impacts of the North and South Wind Turbines beginning with the quietest overnight time period to assess the "worst case" condition. Overnight sampling is usually conducted first so it can be determined if there is a sound impact above the MassDEP threshold during the quietest period of the night. If sampling during this time period results in finding sound impacts below 10 dB(A) the conclusion is that wind turbine sound will not exceed 10 dB(A) during daytime hours when background or ambient sound is much greater. The time period that defines the quietest overnight period is site-specific. In Fairhaven, resident and business activity largely ceased after 11 pm on a weeknight on Shawmut Street , Peirces Point and in the Little Bay Road area. On Mill Road. and Teal Circle, activity in the area did not decline to the "quietest " period until shortly before 1am. This "quiet" period was determined by on-site visits conducted prior to the start of sampling. Sampling was also only conducted on weeknights as Fairhaven has a significant change in population and activity levels on weekends and during the summer.

The wind conditions identified in the protocol for sampling are based on the complaint logs and the operating characteristics of the wind turbines. There are two general wind operating conditions sampled: wind speeds just above cut-in when the ambient sound is the lowest (3-4 m/s) and wind speeds as close as possible to 9 m/s or above which is the wind speed determined to generate the maximum sound power level from the turbine according to the manufacturer. The reason for these two wind speeds is to obtain sound samples with a quiet background, and samples with maximum turbine sound output (albeit with a much louder background). Wind directions to be sampled were determined by the complaint log. The complaint log also informed MassDEP as to which locations to sample under specific wind direction(s). Despite all best efforts, local weather predictions are not always as accurate as desired with the result that the sampling collected data for a wider range of wind conditions than planned as seen in Table 1.

The five sampling sites chosen were selected based on the complaint log and also for their proximity to the Wind Turbines. Sound generally decreases with distance so collecting data at the residences nearest the turbines was a higher priority. The residences chosen were then considered "representative" of their neighborhood or "worst case" when compared to homes that are further removed from the turbines but in the same neighborhood.

What has transpired to date is nine "studies" each selected for a specific combination of wind speed and wind direction. The missing wind condition (strong northeast wind) and the re-sampling of the strong SW wind condition will be the tenth and eleventh study respectively. Any

² Leq is the level of hypothetical steady sound that has the same energy as the fluctuating sound observed.

follow-up activity that MassDEP determines is necessary to finalize the results will be collected as separate studies. Table 1. presents a summary of the operating conditions studied and sites evaluated under those conditions.

Table 1. Summary of Study Operating Conditions

Study #	Locations Sampled	Avg Wind Direction	Avg Wind (Wind Speed (m/s)/ Degrees) at Hub
Study #1 9 Aug 2012	7 Peirce's Pt Rd	SSW	3-5 m/s
	3 Shawmut St (on ground)		
	3 Shawmut St (on deck)		
	16 Mill Rd		
	12 Little Bay Rd		
Study #2 31 Aug 2012	3 Shawmut St (on ground)	WSW	5-7 m/s
	3 Shawmut St (on Deck)		
	3 Teal Circle		
Study #3 26 Sept 2012 (late afternoon/evening) ³	3 Shawmut St (on ground)	SW	7-9 and 9-11 m/s
	12 Little Bay Rd		
	16 Mill Rd.		
	7 Peirce's Point Rd		
	3 Teal Circle		
Study #4 10 Oct 2012	16 Mill Rd.	ENE	3-5 m/s
	3 Teal Circle		
	12 Little Bay Rd		
Study #5 15 Oct 2012	3 Shawmut St (on ground)	SW	7-9 and 9-11 m/s
	16 Mill Rd		
	7 Peirce's Pt Rd		
	12 Little Bay rd		
	3 Teal Circle		
Study #6 9 Nov 2012	7 Peirce's Pt Rd	NNW ⁴	7-9 m/s
	12 Little Bay Rd		
	3 Teal Circle		
Study #7 20 Mar 2013	7 Peirce's Pt Rd	WNW	4-5 m/s
	3 Shawmut St		
Study #8 2 Apr 2013	Teal Circle	WNW	5-7 m/s
	12 Little Bay Rd		
	7 Peirce's Pt. Rd		
Study #9 12 Apr 2013	Teal Circle	NE	3-5 m/s
	12 Little Bay Rd.		
	Mill Rd.		
Study #10 TBD	TBD	NE-ENE	9 m/s + at hub
Study #11	TBD- re-sampling for	SW- WSW	9 m/s + at hub

³ This afternoon/ evening sampling study was added in response to a large number of complaints filed during the morning on this day.

⁴ The original protocol did not list NW as a wind condition to be sampled. This wind direction was added based on complaints received in late summer/ early fall.

Study #	Locations Sampled	Avg Wind Direction	Avg Wind (Wind Speed (m/s)/ Degrees) at Hub
TBD	<i>conditions of 15 Oct 12</i>		

Meteorological data was obtained from the West Island Weather Station website (KMAFAIRH10). Fairhaven Wind LLC provided hub-height wind speed and wind direction data (in various formats depending on the date) including 1 second data as well as 10 minute averages. The data originated from meteorological equipment on both Wind Turbines. The data presented in this report represents an average of the wind speed and wind direction data from the two wind turbines. Fairhaven Wind LLC also provided power generation data for the sampling periods.

2.3 Sampling Locations

The sampler location within each sampling site is important to ensure that the maximum sound impact is being evaluated without interference or unintentional amplification. Prior to commencing sampling the MassDEP technician met with the residents of each sampling site to determine the point of perceived maximum impact at each site. Further, and as previously indicated, the sampler was located at least 25 feet from any large vertical reflective surfaces such as walls of buildings and 5 feet from any small-diameter objects such as trees. Wherever possible the technician looked to identify a location with direct line-of-sight locations with no thick stands of trees or buildings between the sampler and the turbines.

During the first sampling night and on selected subsequent nights, the MassDEP technician walked around each site with the sound meter operating to confirm the area of actual highest sound impact. Sampling then commenced from this location. There was only one sampling location for each site and sampling event with one exception. There were initially two sampling locations at 3 Shawmut St. based on resident concerns that impacts on an elevated deck were significantly greater than impacts at ground level. A description of the sampling sites is provided in Table 2.

Table 2. Sampling Site Description

Address	Site Description
3 Shawmut St	Site #1 is on the elevated lawn to the east of the driveway. Site #2 is on the south deck with clear line of site to the turbines.
12 Little Bay Rd.	Sampler set up in a lightly wooded area in the back yard south and east of the fence surrounding the pool. Later sampling (March-April 2013) set up in the driveway as a number of trees had been removed in the area.
3 Teal Circle	Sampler set up varied based on

	neighborhood activity and point of highest impact per the sampler. Site #1 was in the cul-de-sac next to the fire Hydrant south of 3 Teal Circle. Site # 2 was the rear side yard south of 3 Teal Circle.
16 Mill Rd	Sampling site was set up across the street from 16 Mill Rd (19 Mill Rd.) with clear line of site to the turbines. Sampling in April 2013 was moved further down the street towards Route 6 to get away from the sound of the mill race.
7 Peirce's Pt Rd	Sampling site set up in lightly wooded front yard on south side of driveway about halfway up the slope to the picnic area.

2.4 Procedure

On each day when conditions appeared to be optimal for sampling, MassDEP notified Fairhaven Wind LLC, the residents at the sampling sites, the Board of Health and a resident who accompanied the MassDEP technician on behalf of a local group of wind turbine opponents. Sampling days were selected based on the predicted wind conditions (wind direction and wind speed) for the day. The notification contained the logistics for the sampling event including a meeting place and time. The MassDEP technician met other observers at the previously advertised location approximately 30 minutes before the start of sampling to organize the equipment and the order of sampling for the night.

Sampling began at the location that was judged to be the quietest at the time. In general this meant starting with sites removed from the commercial activity and traffic on Route 6 earlier, and then moving to sites adjacent to Route 6 later at night. For each site, once the sound sampling with the wind turbines operating was complete, the wind turbines were shut down so that sampling of ambient or background conditions could be conducted. The representative from Fairhaven Wind LLC controlled wind turbine operation via a laptop or smart phone and turned the turbines on or off as necessary. Sampling at each site took approximately 40 minutes and each study night required 3-5 hours to complete.

As this was an attended study, the MassDEP technician manually recorded the readings from the sampler. The technician wrote down the dB(A) reading (1 second average sound power levels) shown by the sampler every 5 seconds during each sample run (5 minutes). There was a minimum of 3 five-minute sample runs for each site in each study. In the course of writing down the readings, the technician flagged sound readings that were influenced by a transient sound such as a passing motor vehicle or airplane. Sampling done under higher wind conditions was more challenging when the sound of wind in the trees in large gusts overwhelmed the sound from the wind turbines. Any such occurrences were documented so that the impacts of the wind turbine sound could be verified and not masked or influenced by

other sound sources. If necessary, additional 5-minute sampling periods were added to compensate for data lost to excessive interference. Tables containing all of the data logged by the MassDEP technician are included here as Appendix B.

The sampler logged data at 1 second intervals. This logged data was used for Quality Assurance and Quality Control (QA/QC). QA/QC assessment of the data also included an assessment of the wind conditions at the hub at the time the impact sound was collected in comparison to the wind speed at the time the background or ambient sampling was collected. The wind speeds from the two turbines were averaged over each 15 minute sampling period and where there was a difference in hub wind speed of 2 m/s or greater, the results were not considered valid. As previously mentioned, Fairhaven Wind LLC provided hub-height wind speed and wind direction data that was used for this analysis. Fairhaven Wind LLC also provided power generation data which was reviewed to determine that the turbines were operating normally during the impact sampling.

2.5 Limitations

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3.0 Results

MassDEP's Noise policy states: "A source of sound emissions is considered to be violating MassDEP's noise regulation (310 CMR 7.10) if the source:

1. Increases the broadband sound level by more than ten dB(A) above ambient, or
2. Produces a "pure tone" condition – when any octave band center frequency sound pressure level exceeds the two adjacent center frequency sound pressure levels by three decibels or more."

This section summarizes the results from the attending sampling described in this report. For the sampling summary sheets showing all the collected data, including meteorological data and the statistical metrics from the sound sampler, please see Appendix B.

3.1 Broadband Sound Impact

To determine broadband sound level impact, the collected data is evaluated to compare L_{90} ⁵ sound levels to L_{max} attributable to the turbines. As was done in the Falmouth Wind Turbine Compliance Evaluation, the L_{max} ⁶ for each of the three five-minute runs collected at each site under each operating condition was averaged to calculate an L_{max} value that was compared to the L_{90} ambient or background over a 15-minute sampling period for each operating condition. The L_{max} is intended to take into account only sound impacts that can be attributed to the Wind

⁵ L_{90} is the decibel level that is exceeded 90% of the time and therefore reflects a quiet background or ambient condition.

⁶ L_{max} is the maximum decibel level attributable to the sound source being studied.

Turbines. With an attended study, the attending technician “discards” any sound that can be attributed to an interfering source such as a motor vehicle, barking dog or an airplane. The following table summarizes the results of the broadband sound impact study.

Table 3. Summary of Preliminary Results of Broadband Analysis

Study #	Location	Ambient (L90) dB(A)	Impact Sound (Lmax) dB(A)	Difference dB(A)
Study #1 9 Aug 2012	7 Peirce's Pt Rd	44.1	46.2	2.1
	3 Shawmut St (on ground)	na ⁷	na	na
	3 Shawmut St (on deck)	43.8	46.8	3.0
	16 Mill Rd	38.9	42.4	3.5
	12 Little Bay Rd	46.2	47.4	1.2
Study #2 31 Aug 2012	3 Shawmut St (on ground)	47.6	48.5	0.9
	3 Shawmut St (on Deck) ⁸	na	na	na
	Teal Circle	44.4	46.1	1.7
Study #3 26 Sept 2012 (late afternoon/ evening) ⁹	3 Shawmut St (on ground)	42.9	49.1	6.2
	12 Little Bay Rd	46	52.3	6.3
	16 Mill Rd.	45.4	48	2.6
	7 Peirce's Point Rd	44.8	53.3	8.5
	Teal Circle	43.3	49.2	5.9
Study #4 10 Oct 2012	16 Mill Rd	31.1	36.6	5.5
	Teal Circle	33.9	45.4	8.5
	12 Little Bay Rd	38.8	44.8	6.0
Study #5 15 Oct 2012 ¹⁰	7 Peirce's Pt Rd	42.1	51.5	9.4
	3 Shawmut St (on ground)	na	na	na
	16 Mill Rd	na	na	na
	12 Little Bay Rd	na	na	na
	Teal Circle	na	na	na
Study #6 9 Nov 2012	7 Peirce's Pt Rd ¹¹	40.3	49.9	9.6
	12 Little Bay Rd	40.3	51.0	10.7¹²

⁷ A value of “na” indicates that the results are invalid based on post sampling assessment of the results. See the specific tables in Appendix B for more information on why the result was invalidated.

⁸ Results invalid due to changes in wind speed of greater than 2 m/s between time of impact sampling and time of ambient sampling

⁹ This afternoon/ evening sampling event was added in response to a large number of complaints filed during the morning hours of this day.

¹⁰ After the first shut down of the wind turbines on October 15, the generator from the south turbine did not restart. This invalidated the results for all sampling sites after the first site (Pierces Pt Rd.)

¹¹ Fairhaven Wind was unable to establish contact with the Wind turbine to shut it down. The Ambient levels used here are the same as those for Little Bay Road which has a similar land use characteristics and distance from commercial areas.

Study #	Location	Ambient (L90) dB(A)	Impact Sound (Lmax) dB(A)	Difference dB(A)
	Teal Circle	38.1	45.8	7.7
Study #7 20 Mar 2013	3 Shawmut Ave	na	na	na
	7 Peirce's Pt Rd	34.4	45.8	11.4
	7 Peirce's Pt Rd	na	na	na
Study #8 2 Apr 2013	12 Little Bay Rd	32.9	45.8	12.9
	Teal Circle	34.9	44.7	9.8
	Mill Rd	33.8	37.6	3.8
Study #10 TBD	NOT YET COMPLETED	TBD	TBD	TBD
Study # 11 TBD	NOT YET COMPLETED	TBD	TBD	TBD

As Table 3 indicates, preliminary results show that the sound impact at 12 Little Bay Road, Teal Circle and 7 Pierces Point Rd in strong northwesterly and/ or easterly wind conditions exceed the MassDEP 10 dB(A) above ambient limit for what constitutes "noise" pursuant to 310 CMR 7.10, when measured using the methodology adopted for this report. The first time this exceedence was recorded (November 2012) was viewed as a potential anomaly because of high levels of wind sound in the trees. MassDEP did not, therefore consider this an exceedence until the sound levels could be confirmed under comparable conditions as was done in subsequent sampling in March and April 2013. All three sites in question are the closest residential properties to the wind turbines (within approximately 1400 feet). MassDEP has also found that other sampling locations which are further removed from the turbines are not impacted by sound from the wind turbines in excess of 10 dB(A) under the conditions sampled.

3.2 Pure tone

As previously found when sampling sound in Falmouth, assessment of pure tone when sampling wind turbine sound is complicated by the sound of the wind as the wind itself contributes to the tonal quality of sound, particularly at higher wind speeds. In order to attempt to separate the contribution of the wind from the contribution of the wind turbine, center octave band readings were taken with the North and South Wind Turbines off as well as when they were operating. It was then possible to determine the incremental sound level increase associated with operation of the turbines at each of the center octave bands. Operation of the two wind turbines was found to not contribute to a pure tone under the conditions tested.

¹² MassDEP suspected that this result was unduly influenced by tree/ leaf sound. As a result, MassDEP did not consider this an exceedence until the sound levels could be confirmed though re-sampling under comparable conditions.

TABLES WITH RESULTS TO BE PROVIDED IN FINAL REPORT

APPENDIX A
SAMPLING PROTOCOL
AND COMMUNICATIONS WITH
FAIRHAVEN MA

Wind Turbine Noise Study Protocol: Fairhaven**July 2012 (Rev 2)**Equipment:

- Sampling will be performed with a Type I digital Meter (Quest Sound Pro SEL) with accuracy to +/- 1 dB. The sampler will be set to collect data on the “A” weighted scale in “slow” response mode with a one second recording interval (log period). The sampler will be calibrated before and after each sampling event.
- Ground level wind speed will be extrapolated from nearby met data including data from New Bedford Airport and from West Island Weather (KMAFAIRH13). Fairhaven Wind LLC shall provide hub-height wind speeds (10 minute averages) obtained from equipment on either the north or south turbine.

Sampling Sites and Operating Conditions:

- A minimum of five sites will be sampled at the point of perceived maximum impact from the wind turbines. The five sites to be sampled including 3 Teal Circle, 3 Shawmut St, 12 Little Bay Road, 16 Mill ST and 7 Pierces Point Rd. Additional sites may be added as conditions during sampling warrant and at the discretion of MassDEP. MassDEP will coordinate with the residents at the selected sites to determine the point of greatest impact and will conduct the sampling at or near that location or at the property line, whichever is practicable. Sampling will not be conducted indoors.
- The sampler will be mounted at a height of approximately 1.3 meters and shall be located so as to comply with offsets from vertical reflecting surfaces as specified in ANSI 12.9.
- Four different operating conditions (wind speeds/ wind direction) will be evaluated including the following:
 1. At or near the cut-in wind speed where background sound will be the lowest (4-5 m/s wind speed at hub height) with winds from the south, west or southwest such that the Shawmut Street/ Weeden Road, Pierces Point Rd and Mill Street area is generally downwind from the turbines.
 2. At or near the cut-in wind speed where background sound will be the lowest (4-5 m/s wind speed at hub height) with winds from the east, southeast or northeast such that the area of Teal Street, John St and Little Bay Road are located generally downwind from the turbines;
 3. At the wind speed where manufacturer data indicates there will be the greatest sound power level from the turbine (9-11 m/s) with winds from the west or southwest,
 4. At a wind speed at or near where the manufacturer data indicates the turbines will produce the greatest sound power level (9-11 m/s) with winds from the east or northeast.

Multiple days of sampling will be required to collect all of the scenarios and locations identified herein.

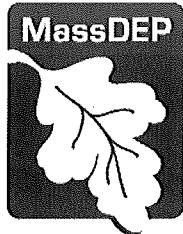
Procedure:

- Sampling may be conducted during one or more time periods including:

- quietest hours (for example, 1am-4am)
- daytime off-peak hours (1:30 pm-4pm);
- evening hours (8pm-11 pm) and
- Sampling will start with data collection during the quietest overnight hours to be determined on a site specific basis (generally 1am-4am). Should sampling during that time period reveal no exceedence of MassDEP's noise policy at one or more locations for the given wind conditions sampled, daytime and evening sampling will not be conducted for those locations.
- Sampling days will be selected based on predicted wind conditions. MassDEP will make every effort to notify The Town, Fairhaven Wind LLC and residents at whose properties sampling will be conducted at least 24 hours in advance of a sampling event.
- To evaluate the effect of wind speed on turbine sound emission levels (impact sound), three sampling runs will be conducted at each site under each operating condition to establish an L_{max} for each respective operating condition. L_{max} is the highest sampled sound level attributed to the sound source (wind turbines) during the sampling run on a one second average. The L_{max} from each of three runs at a single site and operating condition will be averaged to create a single L_{max} for that sampling site under the select wind conditions.
- Each sampling run will be 5 minutes in duration. Samples will be collected manually every 5 seconds (60 sound measurements). Consistent with current MassDEP guidance, any peak sound levels that can be attributed to another sound source (e.g. local traffic, resident generated sounds, etc.) will be identified by the study attendant and discarded from the data set before determining L_{max} .
- At two sites, (varies with weather conditions), a pure tone analysis will be conducted. For pure tone analysis, the meter will be set to collect linear sound on a "slow" response and an octave band filter will be employed to speciate sound pressure levels for 10 octave bands. Pure tone analysis will include collection of one minute L_{eq} sound pressure levels with the wind turbines operating and without the wind turbines operating to evaluate the impact of the wind turbines to pure tone.
- At five sites (Little Bay Road, Teal Circle, Mill Road, Pierces Point Road, Shawmut Street) background sampling shall be performed to determine the L_{90} background against which the L_{max} will be compared. The study attendant shall coordinate with Fairhaven Wind LLC to shut down both wind turbines for the purpose of sampling background.
- As the sampling will be done under conditions where the wind might significantly contribute to total sound recorded, MassDEP will make an effort to exclude data from analysis where the sound of the wind is dominant over the sound of the wind turbines.

Assessment of Results

Once the data is collected and quality control review is complete, MassDEP will analyze all of the data to determine if the sound levels from the wind turbines comply with MassDEP's Noise Policy Threshold for impact sound of 10 dB(A) at each of the sampling sites and under each of the defined operating scenarios. The pure tone data will be analyzed to determine if any octave band center frequency sound pressure level attributable to the wind turbines exceeds the two adjacent center frequency sound pressure level by three decibels or more. The results will be compiled into a single report to be provided to the Town once the sampling and data quality review is complete.



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

DEVAL L. PATRICK
Governor

RICHARD K. SULLIVAN JR.
Secretary

TIMOTHY P. MURRAY
Lieutenant Governor

KENNETH L. KIMMELL
Commissioner

June 15, 2012

Mr. Peter DeTerra, Chairman
Fairhaven Board of Health
Town Hall
40 Center Street
Fairhaven, MA 02719

Dear Chairman DeTerra;

Thank you for your letter of June 7, 2012. MassDEP appreciates the Board of Health's attention to this matter and is willing to assist the Town of Fairhaven in the matter of wind turbine noise assessment.

MassDEP will work with the Board of Health, the Board of Selectmen, and the turbine owner/operator Fairhaven Wind LLC to evaluate the information you have provided on the complaints you have received and to develop a scope of work to measure sound levels in the vicinity of the turbines based on the information in the complaints. Our evaluation will include consideration of the weather and operating conditions associated with the complaints. We will also need to coordinate with Fairhaven Wind LLC on the sampling logistics.

Based on our experience in Falmouth, we expect that we could begin sampling within the month but it may take several weeks after we begin to complete the data collection and analysis. As you would likely recognize, sampling will be dependent on certain wind and weather conditions that may not be present on a regular basis.

Using the complaint information you provided with your letter, we are beginning the analysis and protocol development. Should you have any questions in advance of receiving the protocol, please feel free to contact Laurel Carlson at 617-348-4095.

Sincerely,


Martin Subberg
Acting Regional Director

Cc: Jeffery Osuch, Town Administrator
Town of Fairhaven
Town Hall
40 Center Street
Fairhaven, MA 02719

Mr. Samul Shah
Fairhaven Wind LLC
13 Elm Street, Suite 200
Cohasset, MA 02025

MassDEP – Boston
Attn: Alicia McDevitt, Deputy Commissioner
Laurel Carlson

MassDEP – SERO
Attn: David Johnston, Deputy Regional Director

APPENDIX B

SAMPLING DATA

Wind Turbine Sound Sampling: Fairhaven 9 August 2012
IMPACT SOUND - PRELIMINARY DATA

7 Peirces Point Rd		
Date: 8 Aug 2012		
Time: 11:56 pm		
Run #	mm:ss	dB(A)
1	5	46
1	10	46.1
1	15	45.8
1	20	46
1	25	46.1
1	30	46
1	35	46.2
1	40	45.5
1	45	45.4
1	50	44.9
1	55	44.9
1	60	45.7
1	1:05	45.1
1	1:10	45.3
1	1:15	45.3
1	1:20	45.2
1	1:25	45.2
1	1:30	45.3
1	1:35	45.8
1	1:40	45.4
1	1:45	45.3
1	1:50	45.3
1	1:55	44.7
1	2:00	45.4
1	2:05	44.9
1	2:10	45.1
1	2:15	45.3
1	2:20	45.3
1	2:25	45.5
1	2:30	45.3
1	2:35	45.2
1	2:40	45
1	2:45	45.5
1	2:50	45.1
1	2:55	45.6
1	3:00	45.2
1	3:05	45.3
1	3:10	45.4
1	3:15	45.2
1	3:20	45.1
1	3:25	45.1
1	3:30	45.6
1	3:35	45.2
1	3:40	45.1
1	3:45	45
1	3:50	45.5
1	3:55	45.6
1	4:00	45.6
1	4:05	45.4
1	4:10	45.4
1	4:15	45.5
1	4:20	46.1
1	4:25	45.7
1	4:30	45.4

7 Peirces Point Rd		
Date: 9 Aug 2012		
Time: 12:03 am		
Run #	mm:ss	dB(A)
2	5	45.6
2	10	45.3
2	15	45.6
2	20	45.4
2	25	45.4
2	30	45.3
2	35	44.9
2	40	45.3
2	45	45.4
2	50	45.4
2	55	45
2	60	45.2
2	1:05	45.4
2	1:10	45.3
2	1:15	44.9
2	1:20	45.1
2	1:25	45.3
2	1:30	45.5
2	1:35	45.7
2	1:40	45.6
2	1:45	46
2	1:50	45.3
2	1:55	45.2
2	2:00	45.5
2	2:05	45.7
2	2:10	45.8
2	2:15	46.2
2	2:20	45.7
2	2:25	45.7
2	2:30	45.8
2	2:35	45.7
2	2:40	45.3
2	2:45	45.1
2	2:50	45.8
2	2:55	46
2	3:00	46
2	3:05	45
2	3:10	45.1
2	3:15	46.2
2	3:20	45.1
2	3:25	45.4
2	3:30	45.3
2	3:35	45.3
2	3:40	45.1
2	3:45	45.1
2	3:50	45.2
2	3:55	45.2
2	4:00	45.5
2	4:05	45.3
2	4:10	44.9
2	4:15	45.2
2	4:20	45.6
2	4:25	45.3
2	4:30	45.4

7 Peirces Point Rd		
Date: 9 Aug 2012		
Time: 12:10 am		
Run #	mm:ss	dB(A)
3	5	45.5
3	10	45.4
3	15	45.6
3	20	46.2
3	25	45.2
3	30	45.4
3	35	45.2
3	40	45.5
3	45	45.5
3	50	45.3
3	55	45.2
3	60	45.4
3	1:05	45.2
3	1:10	45.2
3	1:15	45.2
3	1:20	45.6
3	1:25	45.1
3	1:30	45.3
3	1:35	45.6
3	1:40	45
3	1:45	45.3
3	1:50	45.1
3	1:55	45
3	2:00	45.2
3	2:05	45.2
3	2:10	45.2
3	2:15	45.6
3	2:20	45.1
3	2:25	45.5
3	2:30	45.4
3	2:35	45.6
3	2:40	45.5
3	2:45	45
3	2:50	44.9
3	2:55	44.9
3	3:00	45
3	3:05	45.3
3	3:10	45.1
3	3:15	45.1
3	3:20	45
3	3:25	46.1
3	3:30	45.5
3	3:35	45.7
3	3:40	45.5
3	3:45	46.2
3	3:50	45.5
3	3:55	45.7
3	4:00	46
3	4:05	45.6
3	4:10	45.2
3	4:15	45.3
3	4:20	45.4
3	4:25	45
3	4:30	45.2

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 9 August 2012
IMPACT SOUND - PRELIMINARY DATA

7 Peirces Point Rd		
Date: 8 Aug 2012		
Time: 11:56 pm		
Run #	mm:ss	dB(A)
1	4:35	45
1	4:40	45.1
1	4:45	45.4
1	4:50	45.2
1	4:55	45.5
1	5:00	45.6

7 Peirces Point Rd		
Date: 9 Aug 2012		
Time: 12:03 am		
Run #	mm:ss	dB(A)
2	4:35	45.4
2	4:40	45.1
2	4:45	45.4
2	4:50	45.4
2	4:55	45
2	5:00	45.3

7 Peirces Point Rd		
Date: 9 Aug 2012		
Time: 12:10 am		
Run #	mm:ss	dB(A)
3	4:35	44.9
3	4:40	44.9
3	4:45	45.4
3	4:50	44.8
3	4:55	45
3	5:00	44.9

Lmax	46.2	dBA
Leq	45.3	dBA
Range	44.7	to 46.2 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	45.5	dBA
L10	45.9	dBA
L50	45.3	dBA
Leq	45.4	dBA
L10	45.7	dBA
L50	45.3	dBA
Leq	45.3	dBA
L10	45.5	dBA
L50	45.2	dBA

Met Data		
WS at Hub	3.5	m/s
WS at West Is.	< 1	m/s
WD at Hub	202	degrees
WD at West Is.	South	
BP	29.98	in
Humidity	44	%
Temp	72.6	degr F

Wind TURbine Sound Sampling: Fairhaven 9 August 2012

AMBIENT SOUND- PRELIMINARY DATA

7 Peirces Point Rd		
Date: 9 Aug 2012		
Time: 12:19 am		
Run #	mm:ss	dB(A)
1	5	44.8
1	10	44.9
1	15	44.6
1	20	44.7
1	25	44.6
1	30	44.8
1	35	44.6
1	40	44.7
1	45	44.8
1	50	44.8
1	55	44.8
1	60	44.6
1	1:05	44.5
1	1:10	44.7
1	1:15	44.2
1	1:20	44.5
1	1:25	44.6
1	1:30	44.7
1	1:35	44.6
1	1:40	44.6
1	1:45	44.8
1	1:50	44.9
1	1:55	44.6
1	2:00	44.7
1	2:05	44.1
1	2:10	44.5
1	2:15	44.7
1	2:20	44.7
1	2:25	44.5
1	2:30	44.5
1	2:35	44.3
1	2:40	44.5
1	2:45	44.6
1	2:50	44.7
1	2:55	44.8
1	3:00	44.7
1	3:05	45
1	3:10	45
1	3:15	44.6
1	3:20	45
1	3:25	44.6
1	3:30	45.1
1	3:35	45
1	3:40	44.3
1	3:45	45
1	3:50	45.3
1	3:55	44.8
1	4:00	44.8

7 Peirces Point Rd		
Date: 9 Aug 2012		
Time: 12:26 am		
Run #	mm:ss	dB(A)
2	5	44.9
2	10	44.6
2	15	44.3
2	20	44.2
2	25	44.1
2	30	44.1
2	35	43.7
2	40	44.8
2	45	44.2
2	50	44.1
2	55	44.2
2	60	46.9
2	1:05	44.5
2	1:10	44.5
2	1:15	44.3
2	1:20	44.2
2	1:25	44.5
2	1:30	44.4
2	1:35	44.3
2	1:40	44.6
2	1:45	44.4
2	1:50	44.3
2	1:55	44.4
2	2:00	44.2
2	2:05	44.3
2	2:10	44.2
2	2:15	44.2
2	2:20	44.2
2	2:25	44.4
2	2:30	44.1
2	2:35	44.4
2	2:40	44.4
2	2:45	44.4
2	2:50	44.4
2	2:55	44.5
2	3:00	44.5
2	3:05	44.6
2	3:10	44.7
2	3:15	44.7
2	3:20	44.8
2	3:25	44.5
2	3:30	44.7
2	3:35	44.8
2	3:40	44.9
2	3:45	44.9
2	3:50	44.7
2	3:55	44.6
2	4:00	44.4

7 Peirces Point Rd		
Date: 9 Aug 2012		
Time: 12:32 am		
Run #	mm:ss	dB(A)
3	5	44.2
3	10	44.4
3	15	44.5
3	20	44.4
3	25	44.3
3	30	44.7
3	35	44.5
3	40	44.5
3	45	44.6
3	50	44.5
3	55	45
3	60	44.8
3	1:05	44.6
3	1:10	44
3	1:15	44.4
3	1:20	44.3
3	1:25	44
3	1:30	44.1
3	1:35	43.8
3	1:40	44
3	1:45	44.1
3	1:50	44.2
3	1:55	44.2
3	2:00	44.4
3	2:05	44.4
3	2:10	44.4
3	2:15	44.6
3	2:20	44.3
3	2:25	44.6
3	2:30	44.4
3	2:35	44.1
3	2:40	44.3
3	2:45	44.3
3	2:50	43.9
3	2:55	44.3
3	3:00	44.7
3	3:05	44.7
3	3:10	44.6
3	3:15	44.7
3	3:20	44.5
3	3:25	44.7
3	3:30	44.7
3	3:35	44.6
3	3:40	44.7
3	3:45	44.4
3	3:50	44
3	3:55	44.4
3	4:00	44.3

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

AMBIENT SOUND- PRELIMINARY DATA

7 Peirces Point Rd		
Date: 9 Aug 2012		
Time: 12:19 am		
Run #	mm:ss	dB(A)
1	4:05	44.9
1	4:10	44.6
1	4:15	44.5
1	4:20	45.2
1	4:25	45
1	4:30	44.6
1	4:35	44.7
1	4:40	44.7
1	4:45	45
1	4:50	44.9
1	4:55	44.7
1	5:00	44.8

7 Peirces Point Rd		
Date: 9 Aug 2012		
Time: 12:26 am		
Run #	mm:ss	dB(A)
2	4:05	44.5
2	4:10	43.9
2	4:15	44.1
2	4:20	44.3
2	4:25	44.5
2	4:30	44.5
2	4:35	44.4
2	4:40	44.1
2	4:45	44.2
2	4:50	43.9
2	4:55	44.1
2	5:00	44.1

7 Peirces Point Rd		
Date: 9 Aug 2012		
Time: 12:32 am		
Run #	mm:ss	dB(A)
3	4:05	44.8
3	4:10	44.8
3	4:15	44.8
3	4:20	44.5
3	4:25	44.2
3	4:30	44.3
3	4:35	44.8
3	4:40	44.7
3	4:45	44.7
3	4:50	44.8
3	4:55	44.3
3	5:00	44.3

L90	44.1	dBA			
Range	43.8	to	45.3	dBA	

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	44.7	dBA		Leq	44.4	dBA		Leq	44.4	dBA
L90	44.3	dBA		L90	44	dBA		L90	43.9	dBA

Met Data

WS at Hub	3.3	m/s
WS at West ls.	2	m/s
WD at Hub	197	degrees
WD at West ls.	South	
BP	29.98	in
Humidity	41	%
Temp	73	degr F

Wind Turbine Sound Sampling: Fairhaven 9 August 2012
IMPACT SOUND- PRELIMINARY SOUND

3 Shawmut St		
Date: 9 Aug 2012		
Time: 1:22 am		
Run #	mm:ss	dB(A)
1	5	50.7
1	10	50.7
1	15	51.6
1	20	49.8
1	25	50
1	30	51.1
1	35	51.3
1	40	50.8
1	45	50.9
1	50	50.8
1	55	50.2
1	60	50
1	1:05	50.6
1	1:10	50.8
1	1:15	50.7
1	1:20	50.6
1	1:25	50.1
1	1:30	50.5
1	1:35	50.2
1	1:40	50.2
1	1:45	50.8
1	1:50	50.6
1	1:55	50
1	2:00	50.6
1	2:05	50.2
1	2:10	50.8
1	2:15	51.1
1	2:20	50.7
1	2:25	50.9
1	2:30	51.8
1	2:35	50.7
1	2:40	50.3
1	2:45	50.4
1	2:50	50.8
1	2:55	49.5
1	3:00	50.7
1	3:05	51.2
1	3:10	50.8
1	3:15	50.3
1	3:20	51.1
1	3:25	51
1	3:30	50.9
1	3:35	49.4
1	3:40	50
1	3:45	50.1
1	3:50	48.7
1	3:55	47.9
1	4:00	48.2
1	4:05	48.4
1	4:10	47.2
1	4:15	46.6
1	4:20	47.4
1	4:25	48.1
1	4:30	46.3

Lmax 1

3 Shawmut St		
Date: 9 Aug 2012		
Time: 1:29 am		
Run #	mm:ss	dB(A)
2	5	49.7
2	10	49.2
2	15	48.2
2	20	47.7
2	25	49.2
2	30	50.3
2	35	50.6
2	40	50.6
2	45	50.5
2	50	50.4
2	55	50.2
2	60	50.2
2	1:05	50.1
2	1:10	50.3
2	1:15	50.6
2	1:20	51
2	1:25	50.8
2	1:30	50.6
2	1:35	50.2
2	1:40	50.5
2	1:45	50.3
2	1:50	50.7
2	1:55	52
2	2:00	51.4
2	2:05	50.5
2	2:10	50.6
2	2:15	50.7
2	2:20	51.2
2	2:25	51
2	2:30	51
2	2:35	50.9
2	2:40	50.9
2	2:45	51
2	2:50	51.1
2	2:55	51.2
2	3:00	51.4
2	3:05	50.9
2	3:10	51.1
2	3:15	50.9
2	3:20	50.8
2	3:25	50.6
2	3:30	50.6
2	3:35	51.1
2	3:40	50.6
2	3:45	51.3
2	3:50	51.4
2	3:55	51.2
2	4:00	52.9
2	4:05	51.3
2	4:10	52.3
2	4:15	51.7
2	4:20	50.3
2	4:25	52.3
2	4:30	51.3

Lmax 2

3 Shawmut St		
Date: 9 Aug 2012		
Time: 1:35 am		
Run #	mm:ss	dB(A)
3	5	50.3
3	10	50.3
3	15	50.3
3	20	50.3
3	25	50.2
3	30	50.8
3	35	50.3
3	40	50.3
3	45	50.3
3	50	50.3
3	55	50.3
3	60	50.5
3	1:05	49.4
3	1:10	50.3
3	1:15	50.6
3	1:20	50.1
3	1:25	49.1
3	1:30	49.7
3	1:35	50.7
3	1:40	50.1
3	1:45	49.8
3	1:50	50.5
3	1:55	50
3	2:00	50.3
3	2:05	50.1
3	2:10	49.6
3	2:15	49.5
3	2:20	49.7
3	2:25	50.5
3	2:30	50.5
3	2:35	50.1
3	2:40	50.2
3	2:45	50.6
3	2:50	50.2
3	2:55	50
3	3:00	50.1
3	3:05	49.6
3	3:10	49.6
3	3:15	50.1
3	3:20	49.5
3	3:25	49.5
3	3:30	49.6
3	3:35	49.7
3	3:40	49.6
3	3:45	48.8
3	3:50	49.6
3	3:55	50
3	4:00	50.6
3	4:05	51.6
3	4:10	48.1
3	4:15	48.6
3	4:20	49.8
3	4:25	50.2
3	4:30	50.1

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 9 August 2012
IMPACT SOUND- PRELIMINARY SOUND

3 Shawmut St		
Date: 9 Aug 2012		
Time: 1:22 am		
Run #	mm:ss	dB(A)
1	4:35	48
1	4:40	48.1
1	4:45	47.9
1	4:50	47.9
1	4:55	48.5
1	5:00	49.6

3 Shawmut St		
Date: 9 Aug 2012		
Time: 1:29 am		
Run #	mm:ss	dB(A)
2	4:35	50.6
2	4:40	50.4
2	4:45	50.6
2	4:50	50.6
2	4:55	50.7
2	5:00	49.6

3 Shawmut St		
Date: 9 Aug 2012		
Time: 1:35 am		
Run #	mm:ss	dB(A)
3	4:35	50.4
3	4:40	51.1
3	4:45	51
3	4:50	50.4
3	4:55	50
3	5:00	50.2

Lmax	52.1	dBA	
Leq	50.2	dBA	
Range	46.3	to	52.9 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)								
Leq	50.1	dBA	Leq	50.8	dBA	Leq	50.1	dBA
L10	51	dBA	L10	51.3	dBA	L10	50.5	dBA
L50	50.3	dBA	L50	50.6	dBA	L50	50	dBA

Met Data		
WS at Hub	3.6	m/s
WS at West Is.	< 1	m/s
WD at Hub	224	degrees
WD at West Is.	South	
BP	29.98	in
Humidity	39	%
Temp	73.3	degr F

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

AMBIENT SOUND- PRELIMINARY DATA

3 Shawmut St		
Date: 9 Aug 2012		
Time: 12:58 am		
Run #	mm:ss	dB(A)
1	5	48.7
1	10	48.4
1	15	48.5
1	20	48.2
1	25	48.3
1	30	49.2
1	35	49
1	40	48.9
1	45	49
1	50	49.2
1	55	50.2
1	60	49.9
1	1:05	49.8
1	1:10	50.2
1	1:15	50.1
1	1:20	50.1
1	1:25	50.5
1	1:30	53.5
1	1:35	53.9
1	1:40	53.3
1	1:45	53.9
1	1:50	53
1	1:55	53
1	2:00	53.2
1	2:05	53.7
1	2:10	53.3
1	2:15	52.3
1	2:20	53
1	2:25	52.4
1	2:30	52.9
1	2:35	52.9
1	2:40	52.9
1	2:45	53.2
1	2:50	53.3
1	2:55	53.5
1	3:00	53.4
1	3:05	53.5
1	3:10	53.6
1	3:15	53.2
1	3:20	53.5
1	3:25	53.2
1	3:30	53.5
1	3:35	53.3
1	3:40	53.5
1	3:45	53.1
1	3:50	53.1
1	3:55	52.8
1	4:00	53.3
1	4:05	53.1

3 Shawmut St		
Date: 9 Aug 2012		
Time: 1:04 am		
Run #	mm:ss	dB(A)
2	5	48.1
2	10	47.7
2	15	51.7
2	20	52.8
2	25	52.3
2	30	52.6
2	35	52.9
2	40	52.7
2	45	52.9
2	50	52.2
2	55	52.5
2	60	52.8
2	1:05	53.5
2	1:10	53.1
2	1:15	52.7
2	1:20	52.7
2	1:25	52.4
2	1:30	52.6
2	1:35	52.8
2	1:40	52.7
2	1:45	53
2	1:50	53
2	1:55	53.6
2	2:00	53.9
2	2:05	53.9
2	2:10	53.7
2	2:15	53.7
2	2:20	54
2	2:25	54.2
2	2:30	53.6
2	2:35	53.6
2	2:40	53.8
2	2:45	53
2	2:50	53.8
2	2:55	54.1
2	3:00	54.1
2	3:05	53.8
2	3:10	54
2	3:15	53.7
2	3:20	53.8
2	3:25	53.7
2	3:30	53.5
2	3:35	53.5
2	3:40	53.6
2	3:45	53.7
2	3:50	50.9
2	3:55	50.1
2	4:00	50.2
2	4:05	50

3 Shawmut St		
Date: 9 Aug 2012		
Time: 1:10 am		
Run #	mm:ss	dB(A)
3	5	50.7
3	10	50.7
3	15	50.7
3	20	49.8
3	25	50
3	30	50.3
3	35	51.7
3	40	50.3
3	45	50.4
3	50	50.1
3	55	50.6
3	60	50.7
3	1:05	50.6
3	1:10	50.8
3	1:15	51.2
3	1:20	51.2
3	1:25	51.4
3	1:30	51.7
3	1:35	51.9
3	1:40	51.9
3	1:45	52.2
3	1:50	52
3	1:55	52.2
3	2:00	52.5
3	2:05	52.3
3	2:10	52.4
3	2:15	51.9
3	2:20	52.1
3	2:25	52.1
3	2:30	51.8
3	2:35	52.1
3	2:40	51.8
3	2:45	51.6
3	2:50	51.7
3	2:55	51.9
3	3:00	52.2
3	3:05	52.2
3	3:10	52.4
3	3:15	52.2
3	3:20	52.2
3	3:25	52.1
3	3:30	51.8
3	3:35	52.2
3	3:40	52
3	3:45	52.5
3	3:50	51.7
3	3:55	52.1
3	4:00	51.6
3	4:05	51.7

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

AMBIENT SOUND- PRELIMINARY DATA

3 Shawmut St		
Date: 9 Aug 2012		
Time: 12:58 am		
Run #	mm:ss	dB(A)
1	4:10	53.3
1	4:15	53.4
1	4:20	53.3
1	4:25	53.3
1	4:30	53.1
1	4:35	53.1
1	4:40	53.5
1	4:45	53.5
1	4:50	53.5
1	4:55	53.2
1	5:00	53.3

3 Shawmut St		
Date: 9 Aug 2012		
Time: 1:04 am		
Run #	mm:ss	dB(A)
2	4:10	49.8
2	4:15	49.8
2	4:20	50.1
2	4:25	50.1
2	4:30	50.6
2	4:35	50.3
2	4:40	50.2
2	4:45	50.3
2	4:50	50.7
2	4:55	50.7
2	5:00	50.2

3 Shawmut St		
Date: 9 Aug 2012		
Time: 1:10 am		
Run #	mm:ss	dB(A)
3	4:10	51.9
3	4:15	51.8
3	4:20	51.5
3	4:25	51.8
3	4:30	51.9
3	4:35	52.3
3	4:40	52.4
3	4:45	51.8
3	4:50	52.4
3	4:55	52.5
3	5:00	52.7

L90	50	dBA
Range	49.8	to

50	54.1	dBA
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Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	52.4	dBA	Leq	52.5	dBA	Leq	51.7	dBA
L90	48.8	dBA	L90	50	dBA	L90	50.4	dBA

Met Data

WS at Hub	3.4	m/s
WS at West Is.	2.1	m/s
WD at Hub	215	degrees
WD at West Is.	SSW	
BP	29.98	in
Humidity	39	%
Temp	73.2	degr F

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

IMPACT AMBIENT SOUND- PRELIMINARY DATA

3 Shawmut St- deck		
Date: 9 Aug 2012		
Time: 1:45 am		
Run #	mm:ss	dB(A)
1	1:05	45.9
1	1:10	45.6
1	1:15	46.7
1	1:20	46.1
1	1:25	45.4
1	1:30	46.2
1	1:35	46.5
1	1:40	45.8
1	1:45	45.4
1	1:50	45.6
1	1:55	45.2
1	2:00	45.3
1	2:05	45.4
1	2:10	45.7
1	2:15	45.9
1	2:20	46.2
1	2:25	46.2
1	2:30	45.6
1	2:35	45.4
1	2:40	45.7
1	2:45	46
1	2:50	46.4
1	2:55	46.6
1	3:00	45.9
1	3:05	45.7
1	3:10	46.4
1	3:15	45.5
1	3:20	45.7
1	3:25	46.2
1	3:30	45.4
1	3:35	46
1	3:40	45.9
1	3:45	45.7
1	3:50	45.8
1	3:55	45.8
1	4:00	45.9
1	4:05	46
1	4:10	45.9
1	4:15	46.1
1	4:20	46.8
1	4:25	45.8
1	4:30	45.3
1	4:35	45.5
1	4:40	45.6
1	4:45	45.9
1	4:50	45.7
1	4:55	45.8
1	5:00	46

BAC 3 Shawmut St deck		
Date: 9 Aug 2012		
Time: 1:56 am		
Run #	mm:ss	dB(A)
1	5	42.5
1	30	46
1	1:50	45.2
1	2:10	45.2
1	2:05	45
1	1:15	44.9
1	1:35	44.9
1	2:00	44.9
1	3:30	44.9
1	1:40	44.8
1	1:45	44.8
1	1:55	44.8
1	3:40	44.8
1	4:40	44.8
1	60	44.6
1	3:35	44.6
1	3:55	44.6
1	35	44.5
1	45	44.5
1	1:10	44.5
1	2:30	44.5
1	3:45	44.5
1	4:25	44.5
1	1:05	44.4
1	1:30	44.4
1	15	44.3
1	20	44.3
1	25	44.3
1	3:50	44.3
1	4:35	44.3
1	40	44.2
1	50	44.2
1	55	44.2
1	1:20	44.2
1	2:15	44.2
1	2:35	44.2
1	2:40	44.2
1	4:00	44.2
1	2:20	44.1
1	2:25	44.1
1	2:45	44.1
1	3:00	44.1
1	4:05	44.1
1	4:10	44.1
1	4:45	44.1
1	10	44
1	3:10	44
1	4:15	44

x

Lmax 1

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

IMPACT AMBIENT SOUND- PRELIMINARY DATA

3 Shawmut St- deck		
Date: 9 Aug 2012		
Time: 1:45 am		
Run #	mm:ss	dB(A)
1	5	44.6
1	10	45.3
1	15	45.3
1	20	45.8
1	25	45.3
1	30	45.3
1	35	44.8
1	40	45.5
1	45	45.3
1	50	45.5
1	55	45.4
1	60	45.8

x

BAC 3 Shawmut St deck		
Date: 9 Aug 2012		
Time: 1:56 am		
Run #	mm:ss	dB(A)
1	4:20	44
1	5:00	44
1	1:25	43.9
1	3:25	43.9
1	4:30	43.9
1	4:50	43.9
1	2:55	43.8
1	3:15	43.8
1	3:05	43.6
1	3:20	43.6
1	4:55	43.6
1	2:50	43

Lmax	46.8	dBA		L90	43.8	dBA	
Leq	45.8	dBA		Range	42.5	to	46
Range	44.6	to	46.8	dBA		dBA	

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	46	dBA	Leq	44.4	dBA
L10	46.2	dBA	L90	43.8	dBA
L50	45.7	dBA			

Met Data		
WS at Hub	3.4	m/s
WS at West Is.	1.1	m/s
WD at Hub	213	degrees
WD at West Is.	SSW	
BP	29.97	in
Humidity	39	%
Temp	73.1	degr F

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

IMPACT SOUND - PRELIMINARY DATA

16 Mill Rd.		
Date: 9 Aug 2012		
Time: 2:46 am		
Run #	mm:ss	dB(A)
1	5	42.4
1	10	41.6
1	15	41.1
1	20	40.8
1	25	41.1
1	30	41.2
1	35	40.7
1	40	41
1	45	40.3
1	50	41
1	55	41.3
1	60	40.7
1	1:05	41.3
1	1:10	40.9
1	1:15	40.5
1	1:20	40.6
1	1:25	40.9
1	1:30	40.4
1	1:35	40.2
1	1:40	40
1	1:45	40.9
1	1:50	40.5
1	1:55	41
1	2:00	41.6
1	2:05	41.4
1	2:10	41.1
1	2:15	41
1	2:20	40.8
1	2:25	41.7
1	2:30	41.4
1	2:35	42.1
1	2:40	42.1
1	2:45	42.6
1	2:50	42.8
1	2:55	42
1	3:00	42.2
1	3:05	42.4
1	3:10	43.4
1	3:15	42.3
1	3:20	42.4
1	3:25	41.7
1	3:30	41.1
1	3:35	40.6
1	3:40	40.8
1	3:45	41.1
1	3:50	41.8
1	3:55	43.3
1	4:00	43.2
1	4:05	47.2
1	4:10	43
1	4:15	41.8
1	4:20	41.2
1	4:25	40.7
1	4:30	41.2
1	4:35	43.2

Lmax 1

16 Mill Rd.		
Date: 9 Aug 2012		
Time: 2:52 am		
Run #	mm:ss	dB(A)
2	5	42.6
2	10	40.5
2	15	40.9
2	20	40.6
2	25	40.1
2	30	41.1
2	35	42.6
2	40	41
2	45	40.9
2	50	40.5
2	55	41
2	60	40.9
2	1:05	42.5
2	1:10	41.5
2	1:15	41.2
2	1:20	42
2	1:25	42.9
2	1:30	42.3
2	1:35	46.5
2	1:40	42.7
2	1:45	42.3
2	1:50	40.8
2	1:55	40.9
2	2:00	40.4
2	2:05	40.5
2	2:10	41
2	2:15	41
2	2:20	40.2
2	2:25	41
2	2:30	40.8
2	2:35	40.2
2	2:40	40.5
2	2:45	40.7
2	2:50	41.3
2	2:55	42
2	3:00	40.8
2	3:05	40.4
2	3:10	40.2
2	3:15	41.6
2	3:20	40.6
2	3:25	40.6
2	3:30	41.5
2	3:35	41.4
2	3:40	41
2	3:45	40.8
2	3:50	40.9
2	3:55	40.9
2	4:00	41.6
2	4:05	42.4
2	4:10	41.9
2	4:15	42.3
2	4:20	42.1
2	4:25	42.8
2	4:30	41.3
2	4:35	41.6

Lmax 2

16 Mill Rd		
Date: 9 Aug 2012		
Time: 2:59 am		
Run #	mm:ss	dB(A)
3	5	41.7
3	10	41.4
3	15	40.5
3	20	40.5
3	25	40.3
3	30	40.7
3	35	40.6
3	40	41.8
3	45	40.7
3	50	40.9
3	55	41.1
3	60	40.7
3	1:05	40.8
3	1:10	41.2
3	1:15	41.5
3	1:20	41.9
3	1:25	41.9
3	1:30	41.1
3	1:35	40.7
3	1:40	40.9
3	1:45	42.1
3	1:50	41
3	1:55	40.9
3	2:00	41
3	2:05	40.9
3	2:10	41.5
3	2:15	41.5
3	2:20	41.8
3	2:25	41.4
3	2:30	41.7
3	2:35	42.2
3	2:40	42.8
3	2:45	42.1
3	2:50	44
3	2:55	44.4
3	3:00	43.4
3	3:05	42.1
3	3:10	42.6
3	3:15	42.1
3	3:20	41.6
3	3:25	41.2
3	3:30	41.3
3	3:35	41
3	3:40	40.5
3	3:45	40.5
3	3:50	41.7
3	3:55	41.6
3	4:00	41.2
3	4:05	41.7
3	4:10	40.9
3	4:15	41.1
3	4:20	41
3	4:25	42.1
3	4:30	41.6
3	4:35	41.1

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

IMPACT SOUND - PRELIMINARY DATA

16 Mill Rd.		
Date: 9 Aug 2012		
Time: 2:46 am		
Run #	mm:ss	dB(A)
1	4:40	41.1
1	4:45	40.8
1	4:50	41.3
1	4:55	41.4
1	5:00	41.2

16 Mill Rd.		
Date: 9 Aug 2012		
Time: 2:52 am		
Run #	mm:ss	dB(A)
2	4:40	42.1
2	4:45	41.2
2	4:50	40.8
2	4:55	40.7
2	5:00	40.9

16 Mill Rd		
Date: 9 Aug 2012		
Time: 2:59 am		
Run #	mm:ss	dB(A)
3	4:40	40.5
3	4:45	40.9
3	4:50	41
3	4:55	41.2
3	5:00	40.5

Lmax	42.4	dBA
Leq	41.1	dBA
Range	40	to
		42.6 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	42	dBA
L10	42.9	dBA
L50	41.1	dBA

Leq	41.5	dBA
L10	42.4	dBA
L50	41	dBA

Leq	41.6	dBA
L10	42.4	dBA
L50	41.1	dBA

Met Data		
WS at Hub	3.3	m/s
WS at West Is.	1	m/s
WD at Hub	226	degrees
WD at West Is.	SSW	
BP	29.96	in
Humidity	46	%
Temp	73.1	degr F

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

AMBIENT SOUND- PRELIMINARY DATA

16 Mill Rd		
Date: 9 Aug 2012		
Time: 2:17 am		
Run #	mm:ss	dB(A)
1	5	39.9
1	10	39.6
1	15	39.3
1	20	52.1
1	25	x
1	30	59.7
1	35	59.4
1	40	50.6
1	45	41.2
1	50	40
1	55	40.6
1	60	41.1
1	1:05	41
1	1:10	43
1	1:15	46.6
1	1:20	53.1
1	1:25	44.2
1	1:30	40.9
1	1:35	40.3
1	1:40	40.2
1	1:45	40.3
1	1:50	39.6
1	1:55	39.5
1	2:00	39.4
1	2:05	39.5
1	2:10	39.6
1	2:15	39.6
1	2:20	39.4
1	2:25	39.4
1	2:30	39.5
1	2:35	39.7
1	2:40	39.5
1	2:45	39.7
1	2:50	39.5
1	2:55	39.5
1	3:00	39.7
1	3:05	40.1
1	3:10	40.2
1	3:15	41.7
1	3:20	42.2
1	3:25	43.1
1	3:30	44.5
1	3:35	42.1
1	3:40	40.7
1	3:45	40.2
1	3:50	40
1	3:55	39.8
1	4:00	39.6

16 Mill Rd		
Date: 9 Aug 2012		
Time: 2:24 am		
Run #	mm:ss	dB(A)
2	5	39.2
2	10	39.1
2	15	39
2	20	39
2	25	38.9
2	30	39.6
2	35	39.1
2	40	39.2
2	45	39.4
2	50	39.6
2	55	39.5
2	60	39.4
2	1:05	39.4
2	1:10	39.5
2	1:15	39.6
2	1:20	39.3
2	1:25	39.5
2	1:30	39.3
2	1:35	38.9
2	1:40	38.9
2	1:45	39.9
2	1:50	39.4
2	1:55	39.3
2	2:00	39.2
2	2:05	39.5
2	2:10	39.4
2	2:15	39.4
2	2:20	39.2
2	2:25	39.4
2	2:30	39.7
2	2:35	39.8
2	2:40	40.2
2	2:45	40
2	2:50	40.6
2	2:55	40.8
2	3:00	40.5
2	3:05	44.2
2	3:10	40
2	3:15	39.7
2	3:20	39.8
2	3:25	39.6
2	3:30	39.3
2	3:35	39.1
2	3:40	39.3
2	3:45	39
2	3:50	39.3
2	3:55	39.3
2	4:00	39

16 Mill Rd		
Date: 9 Aug 2012		
Time: 2:32 am		
Run #	mm:ss	dB(A)
3	10	39.1
3	15	39.2
3	20	39.1
3	25	39.5
3	30	39.6
3	35	39.9
3	40	39.8
3	4:48	45.1
3	45	39.6
3	50	39.2
3	55	39
3	60	39.1
3	1:05	38.9
3	1:10	38.9
3	1:15	38.5
3	1:20	38.7
3	1:25	39.3
3	1:30	38.9
3	1:35	39.4
3	1:40	39.2
3	1:45	39.4
3	1:50	38.9
3	1:55	38.9
3	2:00	39
3	2:05	39.1
3	2:10	38.9
3	2:15	39
3	2:20	38.9
3	2:25	39.3
3	2:30	39.2
3	2:35	39.3
3	2:40	39.2
3	2:45	39.4
3	2:50	39.3
3	2:55	39.1
3	3:00	39.1
3	3:05	39.3
3	3:10	38.9
3	3:15	39
3	3:20	39.2
3	3:25	39.1
3	3:30	39
3	3:35	39
3	3:40	39.3
3	3:45	39
3	3:50	38.9
3	3:55	38.9
3	4:00	38.9

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

AMBIENT SOUND- PRELIMINARY DATA

16 Mill Rd		
Date: 9 Aug 2012		
Time: 2:17 am		
Run #	mm:ss	dB(A)
1	4:05	39.4
1	4:10	39.4
1	4:15	39.7
1	4:20	40.1
1	4:25	40.1
1	4:30	39.4
1	4:35	39.4
1	4:40	39.3
1	4:45	39.5
1	4:50	39.3
1	4:55	x
1	5:00	x

16 Mill Rd		
Date: 9 Aug 2012		
Time: 2:24 am		
Run #	mm:ss	dB(A)
2	4:05	39.5
2	4:10	50.8
2	4:15	72.7
2	4:20	58.7
2	4:25	47.5
2	4:30	41.1
2	4:35	40.7
2	4:40	40.7
2	4:45	41.2
2	4:50	40.3
2	4:55	41.4
2	5:00	39.8

16 Mill Rd		
Date: 9 Aug 2012		
Time: 2:32 am		
Run #	mm:ss	dB(A)
3	4:05	38.9
3	4:10	39
3	4:15	39.2
3	4:20	39
3	4:25	39.2
3	4:30	39.4
3	4:35	39.2
3	4:40	40.5
3	4:45	41
3	4:55	40.2
3	5:00	39.8
3	5	40.3

L90	38.9	dBA
Range	38.5 to 41.2	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	50	dBA	Leq	52.5	dBA	Leq	39.5	dBA
L90	39.3	dBA	L90	39	dBA	L90	38.8	dBA

Met Data

WS at Hub	3.2	m/s
WS at West Is.	2	m/s
WD at Hub	221	degrees
WD at West Is.	SSW	
BP	29.97	in
Humidity	42	%
Temp	73	degr F

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

IMPACT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:20 am		
Run #	mm:ss	dB(A)
1	1:05	46.3
1	1:10	46.1
1	1:15	46
1	1:20	46.3
1	1:25	46.3
1	1:30	46.4
1	1:35	46.5
1	1:40	46.3
1	1:45	46.5
1	1:50	46.4
1	1:55	46.7
1	2:00	46.5
1	2:05	46.5
1	2:10	46.5
1	2:15	46.5
1	2:20	46.6
1	2:25	46.7
1	2:30	46.5
1	2:35	46.7
1	2:40	46.6
1	2:45	46.6
1	2:50	46.5
1	2:55	46.9
1	3:00	46.7
1	3:05	46.8
1	3:10	46.5
1	3:15	46.5
1	3:20	46.9
1	3:25	46.8
1	3:30	46.7
1	3:35	46.9
1	3:40	46.7
1	3:45	46.5
1	3:50	46.9
1	3:55	46.5
1	4:00	46.8
1	4:05	46.8
1	4:10	46.8
1	4:15	46.9
1	4:20	46.6
1	4:25	46.4
1	4:30	46.9
1	4:35	47.3
1	4:40	47
1	4:45	46.8
1	4:50	47
1	4:55	46.9
1	5:00	47.1
1	5	46.9
1	10	46.6
1	15	46.7
1	20	46.8
1	25	46.8
1	30	46.7

Lmax 1

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:27 am		
Run #	mm:ss	dB(A)
2	1:05	47.4
2	1:10	46.9
2	1:15	47.3
2	1:20	47.2
2	1:25	47.4
2	1:30	47.2
2	1:35	47.5
2	1:40	47.5
2	1:45	47.7
2	1:50	47.1
2	1:55	47.5
2	2:00	47.2
2	2:05	47.5
2	2:10	47.6
2	2:15	47.2
2	2:20	47.5
2	2:25	47.4
2	2:30	47.6
2	2:35	47.7
2	2:40	47.1
2	2:45	47.6
2	2:50	46.9
2	2:55	46.9
2	3:00	47
2	3:05	47
2	3:10	47.1
2	3:15	47.2
2	3:20	47.3
2	3:25	47.2
2	3:30	47.1
2	3:35	47.2
2	3:40	47
2	3:45	46.9
2	3:50	47.5
2	3:55	47.3
2	4:00	47.1
2	4:05	47.1
2	4:10	47.1
2	4:15	46.8
2	4:20	46.7
2	4:25	46.7
2	4:30	46.9
2	4:35	46.7
2	4:40	46.7
2	4:45	46.9
2	4:50	47
2	4:55	47.1
2	5:00	46.7
2	5	46.9
2	10	46.9
2	15	46.9
2	20	47
2	25	46.9
2	30	47

Lmax 2

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:34 am		
Run #	mm:ss	dB(A)
3	1:05	46.9
3	1:10	46.7
3	1:15	46.9
3	1:20	46.7
3	1:25	46.8
3	1:30	46.9
3	1:35	47
3	1:40	46.9
3	1:45	47.2
3	1:50	47
3	1:55	46.8
3	2:00	46.6
3	2:05	46.8
3	2:10	47.1
3	2:15	46.8
3	2:20	46.8
3	2:25	46.8
3	2:30	47
3	2:35	47
3	2:40	47
3	2:45	46.9
3	2:50	47
3	2:55	46.9
3	3:00	46.8
3	3:05	46.7
3	3:10	46.7
3	3:15	46.6
3	3:20	46.7
3	3:25	46.9
3	3:30	46.8
3	3:35	46.9
3	3:40	47
3	3:45	46.8
3	3:50	47
3	3:55	47
3	4:00	46.9
3	4:05	46.8
3	4:10	47
3	4:15	46.9
3	4:20	46.8
3	4:25	46.7
3	4:30	47
3	4:35	46.7
3	4:40	47
3	4:45	46.9
3	4:50	46.9
3	4:55	46.9
3	5:00	47
3	5	47.2
3	10	47
3	15	47.1
3	20	47.2
3	25	47.2
3	30	47.3

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

IMPACT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:20 am		
Run #	mm:ss	dB(A)
1	35	46.5
1	40	46.4
1	45	46.2
1	50	46.2
1	55	46.3
1	60	46.4

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:27 am		
Run #	mm:ss	dB(A)
2	35	47.2
2	40	47.1
2	45	47.1
2	50	47.3
2	55	47.2
2	60	47.6

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:34 am		
Run #	mm:ss	dB(A)
3	35	47.3
3	40	47.3
3	45	47.1
3	50	46.8
3	55	47
3	60	47

Lmax	47.4	dBA
Leq	46.9	dBA
Range	46	to
	47.7	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	46.6	dBA	Leq	47.2	dBA	Leq	47	dBA
L10	46.9	dBA	L10	47.4	dBA	L10	47	dBA
L50	46.5	dBA	L50	47	dBA	L50	46.8	dBA

Met Data

WS at Hub	3.3	m/s
WS at West Is.	< 1	m/s
WD at Hub	239	degrees
WD at West Is.	SW	
BP	29.96	in
Humidity	47	%
Temp	73.3	degr F

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

AMBIENT SOUND- PRELIMINARY DATA

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:46 am		
Run #	mm:ss	dB(A)
1	5	46.4
1	10	46.3
1	15	46.6
1	20	46.3
1	25	46.3
1	30	46.3
1	35	46.2
1	40	46.6
1	45	46.3
1	50	46.6
1	55	46.8
1	60	46.8
1	1:05	46.7
1	1:10	46.6
1	1:15	46.5
1	1:20	46.8
1	1:25	46.7
1	1:30	46.3
1	1:35	46.3
1	1:40	46.6
1	1:45	46.4
1	1:50	46.4
1	1:55	46.7
1	2:00	46.9
1	2:05	46.9
1	2:10	46.6
1	2:15	46.8
1	2:20	46.4
1	2:25	46.3
1	2:30	46.2
1	2:35	46.2
1	2:40	46.3
1	2:45	46.1
1	2:50	46.2
1	2:55	46
1	3:00	46.2
1	3:05	46.1
1	3:10	46.5
1	3:15	46.4
1	3:20	46.6
1	3:25	46.5
1	3:30	46.4
1	3:35	46.7
1	3:40	46.4
1	3:45	46.3
1	3:50	46.3
1	3:55	46.2

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:52 am		
Run #	mm:ss	dB(A)
2	5	46
2	10	46.2
2	15	46.1
2	20	46.4
2	25	46.3
2	30	46.3
2	35	46.5
2	40	46.6
2	45	46.9
2	50	46.7
2	55	46.4
2	60	46.2
2	1:05	46.1
2	1:10	46.5
2	1:15	46.4
2	1:20	46.2
2	1:25	46.2
2	1:30	46
2	1:35	46.3
2	1:40	46.3
2	1:45	46.3
2	1:50	46
2	1:55	45.9
2	2:00	45.9
2	2:05	46.4
2	2:10	46.4
2	2:15	46.6
2	2:20	46.8
2	2:25	46.7
2	2:30	46.4
2	2:35	46.6
2	2:40	46.6
2	2:45	46.8
2	2:50	47.1
2	2:55	46.9
2	3:00	47
2	3:05	46.9
2	3:10	46.2
2	3:15	46.7
2	3:20	46.6
2	3:25	46.7
2	3:30	46.7
2	3:35	46.5
2	3:40	46.4
2	3:45	46.5
2	3:50	46.3
2	3:55	46.4

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:58 am		
Run #	mm:ss	dB(A)
3	5	46.2
3	10	46.3
3	15	46.2
3	20	46.4
3	25	46.2
3	30	46.3
3	35	46.5
3	40	46.7
3	45	46.7
3	50	46.3
3	55	46.3
3	60	46.4
3	1:05	46.1
3	1:10	46.3
3	1:15	46.5
3	1:20	46.5
3	1:25	46.2
3	1:30	46.4
3	1:35	46.3
3	1:40	46.5
3	1:45	46.6
3	1:50	46.7
3	1:55	46.4
3	2:00	46.5
3	2:05	46.6
3	2:10	46.5
3	2:15	46.5
3	2:20	46.5
3	2:25	46.5
3	2:30	46.4
3	2:35	46.3
3	2:40	46.1
3	2:45	46.2
3	2:50	46.4
3	2:55	46.3
3	3:00	46.4
3	3:05	46.5
3	3:10	46.6
3	3:15	46.4
3	3:20	46.3
3	3:25	46.7
3	3:30	46.9
3	3:35	46.6
3	3:40	46.6
3	3:45	46.5
3	3:50	46.3
3	3:55	46.3

Wind Turbine Sound Sampling: Fairhaven 9 August 2012

AMBIENT SOUND- PRELIMINARY DATA

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:46 am		
Run #	mm:ss	dB(A)
1	4:00	46.8
1	4:05	46.5
1	4:10	46.7
1	4:15	46.3
1	4:20	46.3
1	4:25	46.5
1	4:30	46.3
1	4:35	46.3
1	4:40	46.4
1	4:45	46.6
1	4:50	46.4
1	4:55	46.1
1	5:00	46.6

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:52 am		
Run #	mm:ss	dB(A)
2	4:00	46.2
2	4:05	46.4
2	4:10	46.1
2	4:15	46.4
2	4:20	46.2
2	4:25	46.3
2	4:30	46.2
2	4:35	45.8
2	4:40	46.4
2	4:45	46.2
2	4:50	46.5
2	4:55	46.4
2	5:00	46.3

12 Little Bay Rd		
Date: 9 Aug 2012		
Time: 3:58 am		
Run #	mm:ss	dB(A)
3	4:00	46.4
3	4:05	46.4
3	4:10	46.5
3	4:15	46.3
3	4:20	46.4
3	4:25	46.5
3	4:30	46.6
3	4:35	46.6
3	4:40	46.4
3	4:45	46.5
3	4:50	46.3
3	4:55	46.2
3	5:00	46.4

L90 46.2 dBA
 Range 45.8 to 47.1 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	46.5	dBA	Leq	46.5	dBA	Leq	46.4	dBA
L90	46.1	dBA	L90	46	dBA	L90	46.1	dBA

Met Data

WS at Hub	3.4	m/s
WS at West Is.	calm	m/s
WD at Hub	244	degrees
WD at West Is.	calm	
BP	29.96	in
Humidity	44	%
Temp	73.2	degr F

Wind Turbine Sound Sampling Summary: Fairhaven 9 August 2012
PRELIMINARY DATA

LOCATION						
	Parameter	7 Peirces Pt Road	3 Shawmut St	3 Shawmut St (deck)	16 Mill Rd	12 Little Bay Rd
Hand Log data (dBA)	Lmax	46.2	<i>Results invalid. Microphone overly influenced by insect sound</i>	46.8	42.4	47.4
	L90	44.1		43.8	38.9	46.2
	Diff	2.1		3.0	3.5	1.2
	Range Turbine on	44.7 - 46.2		44.6 - 46.8	40 - 42.6	46 - 47.7
	Range Turbine Off	43.8 - 45.3		42.5 - 46	38.5 - 41.2	45.8 - 47.1
MET	Wind Direction	South	SSW	SSW	SSW	SW
	Sampling Location Relationship to WT	Perpendicular to right	Perpendicular to right	Perpendicular to right	Downwind offset left	Upwind
	Wind Speed Hub	3.3 - 3.5 m/s	3.4 - 3.6 m/s	3.4 m/s	3.2 - 3.3 m/s	3.3 - 3.4 m/s

Wind Turbine Sound Sampling: Fairhaven 31 August 2012

IMPACT SOUND- PRELIMINARY DATA

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 11:28 pm		
Run #	mm:ss	dB(A)
1	5	47.8
1	10	46.6
1	15	47.7
1	20	47.1
1	25	47.4
1	30	46.4
1	35	45.9
1	40	46.4
x	45	46.6
1	50	46.7
1	55	45.9
1	60	46.4
1	1:05	46.3
1	1:10	46.4
1	1:15	46.1
1	1:20	46.3
1	1:25	46.2
1	1:30	46.4
1	1:35	47.3
x	1:40	47.2
x	1:45	46.2
1	1:50	45.7
1	1:55	45.6
1	2:00	46
1	2:05	45.9
1	2:10	46.4
1	2:15	46.8
1	2:20	47.1
x	2:25	47.4
x	2:30	47.5
x	2:35	47
1	2:40	46.6
1	2:45	47
1	2:50	47
1	2:55	47.2
1	3:00	46.9
1	3:05	47.3
1	3:10	47.4
1	3:15	47.1
1	3:20	47.9
x	3:25	48.8
x	3:30	48.1
1	3:35	47.7
1	3:40	47.9
x	3:45	48.8
1	3:50	48.7
1	3:55	47.6
x	4:00	47.6
1	4:05	47.6
1	4:10	47.8
x	4:15	47.9
x	4:20	47.6
x	4:25	48.3
x	4:30	47.5

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 11:41 PM		
Run #	mm:ss	dB(A)
2	5	48.6
2	10	48.1
2	15	48.6
2	20	48.7
2	25	48.5
2	30	48.9
x	35	48.6
2	40	48.6
2	45	48.7
2	50	48.8
2	55	48.6
2	60	49.1
x	1:05	48.5
x	1:10	48.5
2	1:15	48.5
2	1:20	48.3
2	1:25	47.9
2	1:30	48.3
2	1:35	48.4
2	1:40	48.3
2	1:45	48.8
2	1:50	47.6
2	1:55	47.5
2	2:00	48
x	2:05	48.2
2	2:10	48.9
2	2:15	48.5
2	2:20	48.2
2	2:25	47.6
2	2:30	48.1
2	2:35	48.4
2	2:40	48.8
2	2:45	48.4
2	2:50	48.5
2	2:55	48.6
2	3:00	48.3
2	3:05	48.9
2	3:10	48.6
2	3:15	48
2	3:20	47.9
x	3:25	48.8
x	3:30	48
x	3:35	48.6
2	3:40	47.7
x	3:45	48.4
2	3:50	47.7
2	3:55	48
2	4:00	48.4
2	4:05	48.3
x	4:10	49.6
x	4:15	48.6
x	4:20	48.5
x	4:25	48.7
x	4:30	49.9

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 11:51 am		
Run #	mm:ss	dB(A)
3	5	48.5
3	10	48.4
3	15	48.8
x	20	48.8
3	25	48.3
3	30	48.3
3	35	47.6
3	40	47.2
3	45	47.6
3	50	48.2
3	55	47.8
3	60	47.6
3	1:05	48.1
3	1:10	47.6
3	1:15	47.4
3	1:20	48
3	1:25	47.9
3	1:30	47.8
3	1:35	47.3
3	1:40	47.7
3	1:45	48
3	1:50	48.4
3	1:55	48
3	2:00	47.9
3	2:05	48.1
3	2:10	48.3
3	2:15	48.1
3	2:20	48.5
3	2:25	48.6
3	2:30	47.1
3	2:35	47.3
3	2:40	48.5
3	2:45	47.9
3	2:50	47.6
3	2:55	47.8
3	3:00	48.5
3	3:05	47.9
3	3:10	47.6
3	3:15	48.22
3	3:20	47.2
3	3:25	47.5
3	3:30	47.7
3	3:35	48.2
3	3:40	47.3
3	3:45	48.1
3	3:50	47.5
3	3:55	47.9
3	4:00	48.1
3	4:05	48.6
x	4:10	50.6
x	4:15	49.9
x	4:20	49.5
x	4:25	50.1
x	4:30	48.4

Lmax 1

Lmax 2

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 31 August 2012
IMPACT SOUND- PRELIMINARY DATA

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 11:28 pm		
Run #	mm:ss	dB(A)
1	4:35	47.1
1	4:40	47.2
1	4:45	47.8
1	4:50	47.3
1	4:55	47.5
1	5:00	x

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 11:41 PM		
Run #	mm:ss	dB(A)
2	4:35	48.2
2	4:40	47.2
2	4:45	47.6
2	4:50	47.4
2	4:55	47.9
2	5:00	48

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 11:51 am		
Run #	mm:ss	dB(A)
3	4:35	48
3	4:40	48.3
3	4:45	48.1
3	4:50	47.9
3	4:55	48
3	5:00	48.7

Lmax	48.5	dBA
Leq	47.7	dBA
Range	45.6	to 48.9 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	47.3	dBA
L10	48	dBA
L50	47.1	dBA
Leq	48.4	dBA
L10	48.8	dBA
L50	48.3	dBA
Leq	48.2	dBA
L10	48.7	dBA
L50	47.9	dBA

Met Data		
WS at Hub	7.2	m/s
WS at West Is.	3.6	m/s
WD at Hub	236	degrees
WD at West Is.	SW	
BP	30	in
Humidity	72	%
Temp	70.5	degr F

Wind Turbine Sound Sampling: Fairhaven 31 August 2012

AMBIENT SOUND- PRELIMINARY DATA

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 12:01 am		
Run #	mm:ss	dB(A)
1	5	47.8
1	10	46.9
1	15	47.9
1	20	48.2
1	25	48.6
1	30	49.5
1	35	49.3
1	40	52
1	45	50.3
1	50	49.8
1	55	50.6
1	60	48.4
1	1:05	49.5
1	1:10	47.9
1	1:15	49.3
1	1:20	51.7
1	1:25	49.3
1	1:30	48.4
1	1:35	47.7
1	1:40	47.8
1	1:45	47.4
1	1:50	47.1
1	1:55	46.9
1	2:00	48.2
1	2:05	47.6
1	2:10	47.7
1	2:15	49
1	2:20	50.8
1	2:25	50.4
1	2:30	47.9
1	2:35	47.4
1	2:40	47.1
1	2:45	46.6
1	2:50	46.7
1	2:55	46.7
1	3:00	47.4
1	3:05	47.6
1	3:10	48.2
1	3:15	47.8
1	3:20	47.6
1	3:25	47.3
1	3:30	48.5
1	3:35	48.5
1	3:40	48.2
1	3:45	47.7
1	3:50	47.6
1	3:55	48.2
1	4:00	48.5
1	4:05	48.1
1	4:10	47.9
1	4:15	48

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 12:09 am		
Run #	mm:ss	dB(A)
2	5	48.7
2	10	50.1
2	15	50.7
2	20	51.3
2	25	49.8
2	30	48.7
2	35	48
2	40	47.8
2	45	47.8
2	50	48
2	55	48
2	60	47.8
2	1:05	47.6
2	1:10	47.9
2	1:15	48.4
2	1:20	50.3
2	1:25	50
2	1:30	49.5
2	1:35	49.6
2	1:40	49.6
2	1:45	49
2	1:50	48.5
2	1:55	48.5
2	2:00	48.2
2	2:05	47.8
2	2:10	47.9
2	2:15	47.9
2	2:20	47.2
2	2:25	47.9
2	2:30	50.5
2	2:35	49
2	2:40	50.8
2	2:45	50
2	2:50	48
2	2:55	48.9
2	3:00	50
2	3:05	51
2	3:10	50.4
2	3:15	49.1
2	3:20	47.9
2	3:25	48.1
2	3:30	48.6
2	3:35	47.9
2	3:40	48.3
2	3:45	47.5
2	3:50	48.6
2	3:55	49.6
2	4:00	48.8
2	4:05	48.9
2	4:10	48.8
2	4:15	49.3

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 12:16 am		
Run #	mm:ss	dB(A)
3	5	48.1
3	10	47.9
3	15	47.9
3	20	47.6
3	25	48.1
3	30	48.5
3	35	49.6
3	40	48.8
3	45	48.9
3	50	49
3	55	49.3
3	60	48.9
3	1:05	48.7
3	1:10	48.5
3	1:15	49.1
3	1:20	48.5
3	1:25	48.8
3	1:30	48.8
3	1:35	48.6
3	1:40	48.8
3	1:45	49.2
3	1:50	49.4
3	1:55	49.2
3	2:00	49.1
3	2:05	49.5
3	2:10	49.6
3	2:15	49.4
3	2:20	49.6
3	2:25	49.3
3	2:30	49.7
3	2:35	49.5
3	2:40	48.6
3	2:45	49
3	2:50	48.5
3	2:55	48.3
3	3:00	49
3	3:05	48.7
3	3:10	49.4
3	3:15	48.6
3	3:20	49.1
3	3:25	49.6
3	3:30	50.2
3	3:35	49.6
3	3:40	49.8
3	3:45	49.5
3	3:50	49.7
3	3:55	49.9
3	4:00	49
3	4:05	50.1
3	4:10	49.5
3	4:15	50.1

Wind Turbine Sound Sampling: Fairhaven 31 August 2012

AMBIENT SOUND- PRELIMINARY DATA

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 12:01 am		
Run #	mm:ss	dB(A)
1	4:20	48.2
1	4:25	47.4
1	4:30	47.6
1	4:35	47.8
1	4:40	47.3
1	4:45	48.5
1	4:50	49.3
1	4:55	49.3
1	5:00	47.8

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 12:09 am		
Run #	mm:ss	dB(A)
2	4:20	48.4
2	4:25	50.2
2	4:30	49.3
2	4:35	52.9
2	4:40	50.4
2	4:45	48.2
2	4:50	48.1
2	4:55	48.7
2	5:00	49

3 Shawmut Ave- on ground		
30-Aug-12		
Time: 12:16 am		
Run #	mm:ss	dB(A)
3	4:20	50
3	4:25	49.3
3	4:30	49.3
3	4:35	50
3	4:40	50.1
3	4:45	48.7
3	4:50	48.8
3	4:55	49.1
3	5:00	49.2

L90	47.6	dBA
Range	46.6	to
	49.6	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	48.5	dBA	Leq	49.1	dBA	Leq	49.2	dBA
L90	47	dBA	L90	47.7	dBA	L90	48.3	dBA

Met Data

WS at Hub	6.5	m/s
WS at West Is.	3.1	m/s
WD at Hub	236	degrees
WD at West Is.	WSW	degrees
BP	29.99	in
Humidity	70	%
Temp	70.2	degr F

Wind Turbine Sound Sampling: Fairhaven 31 August 2012

IMPACT SOUND- PRELIMINARY DATA

3 Shawmut Ave- Deck		
31-Aug-12		
Time: 12:52 am		
Run #	mm:ss	dB(A)
1	5	48.2
1	10	48.6
1	15	48.8
1	20	49.1
1	25	48.7
1	30	48.4
1	35	48.1
1	40	47.8
1	45	48.2
1	50	48.2
1	55	48
1	60	48.5
1	1:05	47.9
1	1:10	48.3
1	1:15	47.9
1	1:20	47.9
1	1:25	47.6
1	1:30	47.8
1	1:35	48
1	1:40	47.9
1	1:45	47.9
1	1:50	48
1	1:55	48
1	2:00	48
1	2:05	48.1
1	2:10	48.3
1	2:15	48.3
1	2:20	48.5
1	2:25	48.2
1	2:30	47.7
1	2:35	48.6
1	2:40	48.2
1	2:45	48.1
1	2:50	48.3
1	2:55	48
1	3:00	48
1	3:05	47.9
1	3:10	47.7
1	3:15	47.5
1	3:20	47.9
1	3:25	47.9
1	3:30	47.5
1	3:35	47.8
1	3:40	47.6
1	3:45	47.2
1	3:50	47.1
1	3:55	47.6
1	4:00	47.8
1	4:05	47.7
1	4:10	47.8
1	4:15	47.6
1	4:20	47.5
1	4:25	47.9
1	4:30	47.7

3 Shawmut Ave- Deck		
31-Aug-12		
Time: 12:58 am		
Run #	mm:ss	dB(A)
2	5	47.5
2	10	47.2
2	15	46.8
2	20	46.7
2	25	46.7
2	30	46.8
2	35	47.1
2	40	46.9
2	45	47.2
2	50	46.9
2	55	46.7
2	60	46.9
2	1:05	47.5
2	1:10	47.6
2	1:15	47.1
2	1:20	47.3
2	1:25	47
2	1:30	46.9
2	1:35	47.1
2	1:40	46.7
2	1:45	46.6
2	1:50	47.3
2	1:55	47.3
2	2:00	47.3
2	2:05	46.8
2	2:10	46.7
2	2:15	46.7
2	2:20	46.9
2	2:25	47.1
2	2:30	46.8
2	2:35	46.7
2	2:40	47
2	2:45	46.9
2	2:50	47.2
2	2:55	46.9
2	3:00	47
2	3:05	47.3
2	3:10	46.8
2	3:15	47.4
2	3:20	47.5
2	3:25	47.9
2	3:30	46.7
2	3:35	46.6
2	3:40	47.1
2	3:45	47
2	3:50	47.2
2	3:55	47.3
2	4:00	47.1
2	4:05	47.4
2	4:10	47.8
2	4:15	47.2
2	4:20	47.1
2	4:25	47.1
2	4:30	47.2

3 Shawmut Ave- Deck		
31-Aug-12		
Time: 1:06 am		
Run #	mm:ss	dB(A)
3	5	47.1
3	10	46.7
3	15	47
3	20	46.9
3	25	46.9
3	30	46.8
3	35	46.8
3	40	47.3
3	45	47.3
3	50	46.8
3	55	46.8
3	60	46.8
3	1:05	46.8
3	1:10	46.9
3	1:15	46.8
3	1:20	46.8
3	1:25	47
3	1:30	46.9
3	1:35	47
3	1:40	47
3	1:45	46.9
3	1:50	46.7
3	1:55	46.8
3	2:00	47.2
3	2:05	47
3	2:10	46.6
3	2:15	46.6
3	2:20	46.9
3	2:25	47.8
3	2:30	47
3	2:35	46.8
3	2:40	54.1
3	2:45	47.1
3	2:50	46.6
3	2:55	46.9
3	3:00	46.7
3	3:05	46.4
3	3:10	46.6
3	3:15	46.8
3	3:20	46.9
3	3:25	46.9
3	3:30	47.3
3	3:35	47.1
3	3:40	47.1
3	3:45	47.2
3	3:50	47.6
3	3:55	47.2
3	4:00	46.9
3	4:05	46.5
3	4:10	46.1
3	4:15	46.2
3	4:20	46.6
3	4:25	47
3	4:30	46.9

Lmax 1

Lmax 2

x x x

Wind Turbine Sound Sampling: Fairhaven 31 August 2012
IMPACT SOUND- PRELIMINARY DATA

3 Shawmut Ave- Deck		
31-Aug-12		
Time: 12:52 am		
Run #	mm:ss	dB(A)
1	4:35	47.4
1	4:40	47.5
1	4:45	47.3
1	4:50	47.7
1	4:55	47.6
1	5:00	47.1

3 Shawmut Ave- Deck		
31-Aug-12		
Time: 12:58 am		
Run #	mm:ss	dB(A)
2	4:35	47.4
2	4:40	46.7
2	4:45	47.1
2	4:50	47.2
2	4:55	47.3
2	5:00	47.2

3 Shawmut Ave- Deck		
31-Aug-12		
Time: 1:06 am		
Run #	mm:ss	dB(A)
3	4:35	47.9
3	4:40	46.8
3	4:45	46.5
3	4:50	46.6
3	4:55	46.9
3	5:00	46.5

Lmax 3

Lmax	48.3	dBA	
<i>Leq</i>	47.3	dBA	
<i>Range</i>	46.1	to	49.1 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	47.9	dBA
L10	48.3	dBA
L50	47.8	dBA

Leq		
Leq	47.1	dBA
L10	47.3	dBA
L50	46.9	dBA

Leq		
Leq	47.2	dBA
L10	47.3	dBA
L50	46.8	dBA

Met Data		
WS at Hub	4.6	m/s
WS at West Is.	2.9	m/s
WD at Hub	247	degrees
WD at West Is.	WSW	
BP	30.01	in
Humidity	72	%
Temp	70.5	degr F

Wind Turbine Sound Sampling: Fairhaven 31 August 2013

AMBIENT SOUND- PRELIMINARY DATA

3 Shawmut Ave- on deck		
31-Aug-12		
Time: 12:28 am		
Run #	mm:ss	dB(A)
1	5	48.8
1	10	48.5
1	15	48.3
1	20	48.3
1	25	48.2
1	30	48.5
1	35	48.2
1	40	48.7
1	45	48.9
1	50	48.7
1	55	48.7
1	60	48.6
1	1:05	49
1	1:10	48.7
1	1:15	48.6
1	1:20	48.8
1	1:25	48.6
1	1:30	48.7
1	1:35	48.9
1	1:40	48.7
1	1:45	48.7
1	1:50	49
1	1:55	50.3
1	2:00	48.2
1	2:05	47.8
1	2:10	48.1
1	2:15	47.8
1	2:20	48
1	2:25	47.4
1	2:30	47.7
1	2:35	47.6
1	2:40	47.8
1	2:45	47.8
1	2:50	47.7
1	2:55	47.6
1	3:00	47.9
1	3:05	48.2
1	3:10	48.5
1	3:15	56.1
1	3:20	48.8
1	3:25	49.4
1	3:30	48.5
1	3:35	48.5
1	3:40	48.6
1	3:45	48.6
1	3:50	48.1
1	3:55	47.9
1	4:00	48.2
1	4:05	47.9

3 Shawmut Ave- on deck		
31-Aug-12		
Time: 12:35 am		
Run #	mm:ss	dB(A)
2	5	48.9
2	10	47.8
2	15	47.7
2	20	47.9
2	25	48
2	30	47.6
2	35	48
2	40	48
2	45	48.4
2	50	48
2	55	48
2	60	47.9
2	1:05	47.8
2	1:10	48.2
2	1:15	49.4
2	1:20	48.1
2	1:25	48.6
2	1:30	49.3
2	1:35	48.6
2	1:40	48.3
2	1:45	48.8
2	1:50	48.5
2	1:55	48.6
2	2:00	48.8
2	2:05	48.5
2	2:10	48.8
2	2:15	48.2
2	2:20	47.9
2	2:25	48.2
2	2:30	48.8
2	2:35	48.5
2	2:40	48.5
2	2:45	48.7
2	2:50	48
2	2:55	48.4
2	3:00	48.2
2	3:05	48.3
2	3:10	48.2
2	3:15	48.2
2	3:20	48.1
2	3:25	48.4
2	3:30	48.4
2	3:35	48.5
2	3:40	48.5
2	3:45	48.8
2	3:50	48.7
2	3:55	48.1
2	4:00	47.8
2	4:05	47.7

3 Shawmut Ave- on deck		
31-Aug-12		
Time: 12:42 am		
Run #	mm:ss	dB(A)
3	5	48.7
3	10	48.7
3	15	48.5
3	20	48.8
3	25	48.5
3	30	48.1
3	35	48.2
3	40	47.9
3	45	48.3
3	50	48.2
3	55	48.1
3	60	48.2
3	1:05	48.2
3	1:10	48.7
3	1:15	48.4
3	1:20	48.7
3	1:25	48.3
3	1:30	48.1
3	1:35	47.8
3	1:40	48
3	1:45	47.7
3	1:50	47.9
3	1:55	48.1
3	2:00	48.2
3	2:05	48.2
3	2:10	48
3	2:15	48
3	2:20	48.1
3	2:25	47.9
3	2:30	47.7
3	2:35	47.6
3	2:40	48.1
3	2:45	48.2
3	2:50	48
3	2:55	47.7
3	3:00	48
3	3:05	47.9
3	3:10	47.8
3	3:15	48.5
3	3:20	49
3	3:25	48.4
3	3:30	47.8
3	3:35	47.6
3	3:40	47.5
3	3:45	47.8
3	3:50	48
3	3:55	47.8
3	4:00	47.8
3	4:05	47.8

Wind Turbine Sound Sampling: Fairhaven 31 August 2013

AMBIENT SOUND- PRELIMINARY DATA

3 Shawmut Ave- on deck		
31-Aug-12		
Time: 12:28 am		
Run #	mm:ss	dB(A)
1	4:10	48.1
1	4:15	48.1
1	4:20	48.3
1	4:25	48.2
1	4:30	48.3
1	4:35	48.3
1	4:40	48.5
1	4:45	48.3
1	4:50	48.1
1	4:55	48.1
1	5:00	48.2

3 Shawmut Ave- on deck		
31-Aug-12		
Time: 12:35 am		
Run #	mm:ss	dB(A)
2	4:10	47.9
2	4:15	48
2	4:20	48
2	4:25	48.3
2	4:30	48.1
2	4:35	47.9
2	4:40	48.2
2	4:45	48.1
2	4:50	48.2
2	4:55	48.7
2	5:00	49.4

3 Shawmut Ave- on deck		
31-Aug-12		
Time: 12:42 am		
Run #	mm:ss	dB(A)
3	4:10	47.8
3	4:15	48.1
3	4:20	48.2
3	4:25	48.2
3	4:30	48
3	4:35	47.8
3	4:40	47.9
3	4:45	47.9
3	4:50	47.8
3	4:55	47.8
3	5:00	47.8

L90	47.8	dBA
Range	47.4	to

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	49.3	dBA	Leq	48.5	dBA	Leq	48.1	dBA
L90	47.7	dBA	L90	47.7	dBA	L90	47.6	dBA

Met Data

WS at Hub	6.7	m/s
WS at West Is.	2	m/s
WD at Hub	248	degrees
WD at West Is.	WSW	degrees
BP	30	in
Humidity	71	%
Temp	70.3	degr F

Wind Turbine Sound Sampling: Fairhaven 31 August 2012

IMPACT SOUND- PRELIMINARY DATA

3 Teal Circle Impact		
31-Aug-12		
Time: 1:33 am		
Run #	mm:ss	dB(A)
1	5	44.9
1	10	45
1	15	44.8
1	20	44.8
1	25	44.9
1	30	45.2
1	35	44.8
1	40	45.2
1	45	45.3
1	50	45
1	55	45.1
1	60	45.1
1	1:05	45.1
1	1:10	45.3
1	1:15	45.5
1	1:20	45.2
1	1:25	45
1	1:30	45.3
1	1:35	45.1
1	1:40	45.4
1	1:45	45.4
1	1:50	45
1	1:55	45.4
1	2:00	45.4
1	2:05	45.6
1	2:10	45.7
1	2:15	45.4
1	2:20	45.4
1	2:25	44.7
1	2:30	44.9
1	2:35	45.6
1	2:40	45.8
1	2:45	45.1
1	2:50	45.7
1	2:55	45.4
1	3:00	45.4
1	3:05	44.9
1	3:10	45.3
1	3:15	45.2
1	3:20	45.4
1	3:25	45.4
1	3:30	44.7
1	3:35	44.5
1	3:40	44.1
1	3:45	45.3
1	3:50	45
1	3:55	45.1
1	4:00	46.4
1	4:05	45.9
1	4:10	45.9
1	4:15	45.7
1	4:20	45.1
1	4:25	45.5
1	4:30	45.2

3 Teal Circle Impact		
31-Aug-12		
Time: 1:41 am		
Run #	mm:ss	dB(A)
2	5	45.7
2	10	47.3
2	15	45.8
2	20	46.4
2	25	47
2	30	47.2
2	35	46.8
2	40	45.5
2	45	45.7
2	50	45.7
2	55	45.4
2	60	45.4
2	1:05	45.5
2	1:10	45.3
2	1:15	45.7
2	1:20	45.3
2	1:25	45.1
2	1:30	45.3
2	1:35	46
2	1:40	45.1
2	1:45	45.1
2	1:50	45.5
2	1:55	45.4
2	2:00	45.2
2	2:05	45.2
2	2:10	45.6
2	2:15	45.8
2	2:20	45.7
2	2:25	45.8
2	2:30	45.9
2	2:35	45.5
2	2:40	46.4
2	2:45	45.5
2	2:50	46.3
2	2:55	46
2	3:00	46.1
2	3:05	46.3
2	3:10	46
2	3:15	45
2	3:20	46.2
2	3:25	46
2	3:30	46
2	3:35	45.9
2	3:40	46.3
2	3:45	46
2	3:50	45.6
2	3:55	46.1
2	4:00	45.1
2	4:05	46.2
2	4:10	46.6
2	4:15	46.5
2	4:20	46.5
2	4:25	46.2
2	4:30	45

3 Teal Circle Impact		
31-Aug-12		
Time: 1:50 am		
Run #	mm:ss	dB(A)
3	5	45.6
3	10	45.1
3	15	45.3
3	20	45.4
3	25	45.6
3	30	45.5
3	35	45.2
3	40	45.2
3	45	45.5
3	50	45.3
3	55	45.4
3	60	45.2
3	1:05	45.3
3	1:10	45.3
3	1:15	45.4
3	1:20	45.2
3	1:25	45.5
3	1:30	45.5
3	1:35	45.4
3	1:40	45.3
3	1:45	45.3
3	1:50	45.6
3	1:55	45.5
3	2:00	45.4
3	2:05	45.7
3	2:10	46.4
3	2:15	45.6
3	2:20	45.5
3	2:25	45.4
3	2:30	45
3	2:35	45.1
3	2:40	45
3	2:45	45
3	2:50	44.9
3	2:55	45.1
3	3:00	45.1
3	3:05	45
3	3:10	45.2
3	3:15	45.1
3	3:20	45.5
3	3:25	45.7
3	3:30	45.4
3	3:35	45.3
3	3:40	45.3
3	3:45	45.4
3	3:50	45.2
3	3:55	45.1
3	4:00	45
3	4:05	45.5
3	4:10	45.7
3	4:15	45.4
3	4:20	45.5
3	4:25	45.5
3	4:30	45.3

Lmax 1
Lmax 2

Wind Turbine Sound Sampling: Fairhaven 31 August 2012
IMPACT SOUND- PRELIMINARY DATA

3 Teal Circle Impact		
31-Aug-12		
Time: 1:33 am		
Run #	mm:ss	dB(A)
1	4:35	45.3
1	4:40	45.4
1	4:45	45.2
1	4:50	x
1	4:55	45.4
1	5:00	45.2

3 Teal Circle Impact		
31-Aug-12		
Time: 1:41 am		
Run #	mm:ss	dB(A)
2	4:35	45.9
2	4:40	46.3
2	4:45	45.7
2	4:50	45.8
2	4:55	45.2
2	5:00	45.9

3 Teal Circle Impact		
31-Aug-12		
Time: 1:50 am		
Run #	mm:ss	dB(A)
3	4:35	45.8
3	4:40	45.8
3	4:45	45.2
3	4:50	45.7
3	4:55	46.2
3	5:00	45.7

Lmax 3
x

Lmax	46.1	dBA
<i>Leq</i>	45.4	dBA
Range	44.1	to 46.6 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	45.4	dBA
L10	45.6	dBA
L50	45.2	dBA

Leq	45.9	dBA
L10	46.4	dBA
L50	45.7	dBA

Leq	45.5	dBA
L10	45.7	dBA
L50	45.3	dBA

Met Data		
WS at Hub	6	m/s
WS at West Is.	1.9	m/s
WD at Hub	245	degrees
WD at West Is.	WSW	degrees
BP	30.01	in
Humidity	72	%
Temp	69.4	degr F

Wind Turbine Sound Sampling: Fairhaven 31 August 2012

AMBIENT SOUND- PRELIMINARY DATA

3 Teal Circle		
31-Aug-12		
Time: 1:57 am		
Run #	mm:ss	dB(A)
1	5	45.1
1	10	44.8
1	15	45
1	20	44.4
1	25	44.3
1	30	44.7
1	35	44.5
1	40	44.6
1	45	44.4
1	50	44.5
1	55	44.6
1	60	44.5
1	1:05	44.4
1	1:10	44.3
1	1:15	44.8
1	1:20	44.6
1	1:25	44.4
1	1:30	44.6
1	1:35	44.3
1	1:40	44.4
1	1:45	44.6
1	1:50	44.7
1	1:55	44.9
1	2:00	44.5
1	2:05	44.9
1	2:10	44.7
1	2:15	44.8
1	2:20	44.6
1	2:25	44.5
1	2:30	44.3
1	2:35	44.7
1	2:40	44.8
1	2:45	44.4
1	2:50	44.6
1	2:55	44.3
1	3:00	44.1
1	3:05	44.5
1	3:10	44.2
1	3:15	44.4
1	3:20	44.5
1	3:25	44.5
1	3:30	44.7
1	3:35	44.5
1	3:40	44.1
1	3:45	44.5
1	3:50	44.6
1	3:55	44.5
1	4:00	44.7

3 Teal Circle		
31-Aug-12		
Time: 2:06 am		
Run #	mm:ss	dB(A)
2	5	45.2
2	10	44.7
2	15	44.7
2	20	44.6
2	25	44.7
2	30	44.4
2	35	44.8
2	40	44.6
2	45	44.8
2	50	44.7
2	55	44.6
2	60	44.7
2	1:05	44.7
2	1:10	44.7
2	1:15	44.8
2	1:20	44.4
2	1:25	44.8
2	1:30	45.1
2	1:35	44.8
2	1:40	44.4
2	1:45	44.6
2	1:50	44.4
2	1:55	44.8
2	2:00	44.5
2	2:05	44.6
2	2:10	44.7
2	2:15	45
2	2:20	45
2	2:25	44.5
2	2:30	44.4
2	2:35	45
2	2:40	45
2	2:45	46
2	2:50	45.6
2	2:55	45
2	3:00	45.1
2	3:05	44.8
2	3:10	45.3
2	3:15	45.3
2	3:20	44.9
2	3:25	45.5
2	3:30	45.6
2	3:35	45.4
2	3:40	45.3
2	3:45	45.4
2	3:50	45.4
2	3:55	45
2	4:00	44.6

3 Teal Circle		
31-Aug-12		
Time: 2:12 am		
Run #	mm:ss	dB(A)
3	5	46.3
3	10	46.8
3	15	45.4
3	20	46.2
3	25	45.4
3	30	45.2
3	35	44.9
3	40	45.2
3	45	45.4
3	50	44.9
3	55	45
3	60	44.7
3	1:05	44.7
3	1:10	44.7
3	1:15	45.2
3	1:20	45.1
3	1:25	45.1
3	1:30	44.6
3	1:35	44.8
3	1:40	44.8
3	1:45	44.9
3	1:50	44.6
3	1:55	44.9
3	2:00	45
3	2:05	44.7
3	2:10	44.8
3	2:15	44.7
3	2:20	44.9
3	2:25	44.7
3	2:30	44.9
3	2:35	44.7
3	2:40	44.7
3	2:45	44.8
3	2:50	44.5
3	2:55	44.7
3	3:00	44.7
3	3:05	44.9
3	3:10	44.6
3	3:15	44.7
3	3:20	45.8
3	3:25	45.4
3	3:30	45.1
3	3:35	45.1
3	3:40	45
3	3:45	44.9
3	3:50	45.4
3	3:55	45.1
3	4:00	45.5

Wind Turbine Sound Sampling: Fairhaven 31 August 2012

AMBIENT SOUND- PRELIMINARY DATA

3 Teal Circle		
31-Aug-12		
Time: 1:57 am		
Run #	mm:ss	dB(A)
1	4:05	44.8
1	4:10	44.7
1	4:15	45.2
1	4:20	44.9
1	4:25	45.3
1	4:30	45.1
1	4:35	44.5
1	4:40	44.4
1	4:45	44.4
1	4:50	44.6
1	4:55	44.4
1	5:00	44.7

3 Teal Circle		
31-Aug-12		
Time: 2:06 am		
Run #	mm:ss	dB(A)
2	4:05	44.2
2	4:10	44.9
2	4:15	44.9
2	4:20	44.7
2	4:25	44.6
2	4:30	44.9
2	4:35	44.9
2	4:40	44.7
2	4:45	45.1
2	4:50	45.2
2	4:55	45.1
2	5:00	44.8

3 Teal Circle		
31-Aug-12		
Time: 2:12 am		
Run #	mm:ss	dB(A)
3	4:05	46
3	4:10	45.7
3	4:15	45.6
3	4:20	44.9
3	4:25	44.6
3	4:30	44.6
3	4:35	44.1
3	4:40	44.4
3	4:45	44.6
3	4:50	44.6
3	4:55	44.5
3	5:00	44.5

L90	44.4	dBA
Range	44.1	to
	46.8	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	44.6	dBA
L90	44.2	dBA
Leq	45	dBA
L90	44.4	dBA
Leq	45.2	dBA
L90	44.5	dBA

Met Data		
WS at Hub	6.3	m/s
WS at West ls.	1.9	m/s
WD at Hub	241	degrees
WD at West ls.	SW	degrees
BP	30.01	in
Humidity	72	%
Temp	69	degr F

Wind Turbine Sound Sampling Summary: Fairhaven 31 August 2012
PRELIMINARY DATA

LOCATION				
	Parameter	3 Shawmut Ave- on ground	3 Shawmut Ave- on deck	3 Teal Cir
Hand Log data (dBA)	Lmax	48.5	Resulte invalid. Hub wind speeds are not comparable when comparing WS at time of impact and ambient sampling	46.1
	L90	47.6		44.4
	Diff	0.9		1.7
	Range Turbine on	45.6 - 48.9		44.1 - 46.6
	Range Turbine Off	46.6 - 49.6		44.1 - 46.8
MET	Wind Direction	WSW	WSW	WSW
	Relationship to WT	Downwind to right	Downwind to right	upwind to left
	Wind Speed Hub	6.5 - 7.2	4.6 - 6.7	6.0 - 6.3

Re-Sampling of
Conditions of
8/8/2012

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

IMPACT SOUND- PRELIMINARY DATA

7 Pierces Point Road		
26-Sep-12		
Time: 6:07 pm		
Run #	mm:ss	dB(A)
1	5	49.4
1	10	48.8
1	15	49.7
1	20	50
1	25	51.3
1	30	49.1
1	35	51.2
1	40	51.7
1	45	52.5
1	50	53.2
1	55	53.3
1	60	53.9
1	1:05	54.6
1	1:10	52.6
1	1:15	53.1
1	1:20	51.6
1	1:25	52
1	1:30	49.6
1	1:35	50
1	1:40	48.8
1	1:45	51.3
1	1:50	54.1
1	1:55	56.3
1	2:00	55.6
1	2:05	55.7
1	2:10	52.8
1	2:15	51.4
1	2:20	52
1	2:25	53.3
1	2:30	53.1
1	2:35	53.5
1	2:40	51.8
1	2:45	51.4
1	2:50	54.6
1	2:55	52.9
1	3:00	53.6
1	3:05	52.3
1	3:10	51.5
1	3:15	50.3
1	3:20	51.2
1	3:25	50.1
1	3:30	49.5
1	3:35	48.8
1	3:40	50.7
1	3:45	50.7
1	3:50	49.7
1	3:55	50.1
1	4:00	49.2
1	4:05	50.7
1	4:10	50.2
1	4:15	52.4
1	4:20	53.9

7 Pierces Point Road		
26-Sep-12		
Time: 6:12 pm		
Run #	mm:ss	dB(A)
2	5	52.8
2	10	52.8
2	15	54.3
2	20	52.8
2	25	51.7
2	30	51.2
2	35	49.9
2	40	50.6
2	45	50.6
2	50	49.1
2	55	48.8
2	60	48.9
2	1:05	48.1
2	1:10	49.3
2	1:15	49.3
2	1:20	52.8
2	1:25	52.3
2	1:30	50.6
2	1:35	51.1
2	1:40	58.7
2	1:45	49.4
2	1:50	48.9
2	1:55	48.4
2	2:00	49.8
2	2:05	50.8
2	2:10	51.2
2	2:15	52.5
2	2:20	51.4
2	2:25	50
2	2:30	51.3
2	2:35	50.8
2	2:40	54.1
2	2:45	56
2	2:50	58.4
2	2:55	58.8
2	3:00	56.7
2	3:05	54.7
2	3:10	53.3
2	3:15	53.2
2	3:20	51.8
2	3:25	51
2	3:30	51.5
2	3:35	55.3
2	3:40	55.7
2	3:45	57.6
2	3:50	59.2
2	3:55	57.4
2	4:00	53.7
2	4:05	52.6
2	4:10	52.1
2	4:15	55
2	4:20	54.3

7 Pierces Point Road		
26-Sep-12		
Time: 6:18 pm		
Run #	mm:ss	dB(A)
3	5	50.8
3	10	49.9
3	15	50.1
3	20	51.9
3	25	50.5
3	30	50.4
3	35	50.7
3	40	52.2
3	45	51.2
3	50	50.6
3	55	51.1
3	60	49.6
3	1:05	50.7
3	1:10	52.1
3	1:15	51.1
3	1:20	50.8
3	1:25	50.4
3	1:30	49.3
3	1:35	50.5
3	1:40	50.7
3	1:45	51.4
3	1:50	50.9
3	1:55	50
3	2:00	51.1
3	2:05	51
3	2:10	49.7
3	2:15	49.1
3	2:20	50.9
3	2:25	50.9
3	2:30	51.9
3	2:35	52.2
3	2:40	52.8
3	2:45	53.3
3	2:50	52.8
3	2:55	51.9
3	3:00	51.7
3	3:05	52.7
3	3:10	52.4
3	3:15	51.4
3	3:20	51.1
3	3:25	52
3	3:30	52.6
3	3:35	50.8
3	3:40	51.4
3	3:45	50.2
3	3:50	51
3	3:55	52.9
3	4:00	54.2
3	4:05	52.5
3	4:10	53.5
3	4:15	56.8
3	4:20	55.4

L max 2

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

IMPACT SOUND- PRELIMINARY DATA

7 Pierces Point Road		
26-Sep-12		
Time: 6:07 pm		
Run #	mm:ss	dB(A)
1	4:25	51.6
1	4:30	50.3
1	4:35	51.4
1	4:40	51.3
1	4:45	52.6
1	4:50	54.4
1	4:55	53.8
1	5:00	54.4

7 Pierces Point Road		
26-Sep-12		
Time: 6:12 pm		
Run #	mm:ss	dB(A)
2	4:25	52.3
2	4:30	50.4
2	4:35	50.8
2	4:40	51.9
2	4:45	56.1
2	4:50	52.7
2	4:55	52.8
2	5:00	52.3

7 Pierces Point Road		
26-Sep-12		
Time: 6:18 pm		
Run #	mm:ss	dB(A)
3	4:25	55.7
3	4:30	53.6
3	4:35	54.6
3	4:40	57.4
3	4:45	55.6
3	4:50	55.2
3	4:55	55.5
3	5:00	54.1

Lmax	53.3	dBA
Leq	50.8	dBA
Range	48.1	to
	54.3	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	52.3	dBA
L10	54.2	dBA
L50	51.7	dBA
Leq	53.2	dBA
L10	56	dBA
L50	51.5	dBA
Leq	52.4	dBA
L10	55.2	dBA
L50	51.3	dBA

Met Data		
WS at Hub	10.7	m/s
WS at West Is.	3.4	m/s
WD at Hub	210	degrees
WD at West Is.	SW	
BP	30.07	in
Humidity	37	%
Temp	69.4	degr F

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

AMBIENT SOUND- PRELIMINARY DATA

7 Pierces Pt Rd		
26-Sep-12		
Time: 5:30 pm		
Run #	mm:ss	dB(A)
1	5	46.7
1	10	45.6
1	15	46.9
1	20	51.3
1	25	51.7
1	30	48.7
1	35	46.9
1	40	46.3
1	45	45.5
1	50	44.5
1	55	44.6
1	60	43
1	1:05	43.1
1	1:10	43.2
1	1:15	44.2
1	1:20	45.7
1	1:25	48.4
1	1:30	48.8
1	1:35	47.9
1	1:40	49.8
1	1:45	48.9
1	1:50	48.4
1	1:55	47.4
1	2:00	47.2
1	2:05	47.2
1	2:10	50.3
1	2:15	57.7
1	2:20	55.5
1	2:25	55.3
1	2:30	51.7
1	2:35	51.6
1	2:40	49.4
1	2:45	48.1
1	2:50	46.7
1	2:55	48.1
1	3:00	51.9
1	3:05	51.8
1	3:10	49.9
1	3:15	47.9
1	3:20	46.7
1	3:25	44.9
1	3:30	45.4
1	3:35	48.3
1	3:40	49.5
1	3:45	49.1
1	3:50	46.7
1	3:55	46.4
1	4:00	46.6
1	4:05	45.7

7 Pierces Pt Rd		
26-Sep-12		
Time: 5:38 pm		
Run #	mm:ss	dB(A)
2	5	47.1
2	10	46.4
2	15	45.8
2	20	46.1
2	25	45.7
2	30	45.2
2	35	45.5
2	40	45.5
2	45	45.5
2	50	45.6
2	55	45.8
2	60	53.5
2	1:05	50.1
2	1:10	48.5
2	1:15	51.1
2	1:20	49.9
2	1:25	47.7
2	1:30	47.5
2	1:35	46
2	1:40	46.5
2	1:45	47.1
2	1:50	47.3
2	1:55	48.7
2	2:00	49
2	2:05	46.1
2	2:10	47
2	2:15	46.9
2	2:20	46.3
2	2:25	47.3
2	2:30	48.1
2	2:35	49.9
2	2:40	49.3
2	2:45	51.6
2	2:50	48
2	2:55	45.1
2	3:00	45
2	3:05	46.1
2	3:10	49.9
2	3:15	51.5
2	3:20	51.6
2	3:25	50.5
2	3:30	47.6
2	3:35	47.8
2	3:40	47.6
2	3:45	44.8
2	3:50	48.4
2	3:55	54.7
2	4:00	52.1
2	4:05	48.7

7 Pierces Pt Rd		
26-Sep-12		
Time: 5:46 pm		
Run #	mm:ss	dB(A)
3	5	55.8
3	10	55
3	15	55.1
3	20	51.5
3	25	50.5
3	30	48.8
3	35	48.7
3	40	49.3
3	45	46
3	50	44.6
3	55	45.2
3	60	46.6
3	1:05	47.8
3	1:10	48.3
3	1:15	49.3
3	1:20	49.6
3	1:25	51.4
3	1:30	49.8
3	1:35	50.3
3	1:40	51.3
3	1:45	50.1
3	1:50	51.3
3	1:55	49.5
3	2:00	49.9
3	2:05	49.5
3	2:10	50.7
3	2:15	50.4
3	2:20	49.9
3	2:25	49.9
3	2:30	47.2
3	2:35	48.8
3	2:40	47.8
3	2:45	47.3
3	2:50	48.3
3	2:55	48.1
3	3:00	48.2
3	3:05	47.1
3	3:10	46
3	3:15	45.4
3	3:20	46
3	3:25	45.3
3	3:30	45.6
3	3:35	45.4
3	3:40	44.4
3	3:45	44.2
3	3:50	49.3
3	3:55	47.2
3	4:00	45.4
3	4:05	45.4

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

AMBIENT SOUND- PRELIMINARY DATA

7 Pierces Pt Rd		
26-Sep-12		
Time: 5:30 pm		
Run #	mm:ss	dB(A)
1	4:10	46
1	4:15	43.4
1	4:20	43.5
1	4:25	46.6
1	4:30	44.8
1	4:35	45.3
1	4:40	46.9
1	4:45	46.4
1	4:50	46.2
1	4:55	44.8
1	5:00	44.4

7 Pierces Pt Rd		
26-Sep-12		
Time: 5:38 pm		
Run #	mm:ss	dB(A)
2	4:10	50.4
2	4:15	55.6
2	4:20	53
2	4:25	49
2	4:30	46.1
2	4:35	46.1
2	4:40	45.5
2	4:45	44.5
2	4:50	45.7
2	4:55	47
2	5:00	47.5

7 Pierces Pt Rd		
26-Sep-12		
Time: 5:46 pm		
Run #	mm:ss	dB(A)
3	4:10	44.7
3	4:15	45.1
3	4:20	45.7
3	4:25	46.4
3	4:30	47.3
3	4:35	46.3
3	4:40	44.8
3	4:45	44.8
3	4:50	44.3
3	4:55	44.6
3	5:00	46

L90	44.8	dBA
Range	43	to
	51.5	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	49	dBA	Leq	48.8	dBA	Leq	49.1	dBA
L90	44.2	dBA	L90	45.3	dBA	L90	44.8	dBA

Met Data

WS at Hub	9.7	m/s
WS at West Is.	2.2	m/s
WD at Hub	203	degrees
WD at West Is.	SSW	
BP	30.07	in
Humidity	37	%
Temp	69.4	degr F

Wind Turbine Sound Sampling: Fairhaven 26 September 2012
IMPACT SOUND- PRELIMINARY DATA

3 Teal Cir		
26-Sep-12		
Time: 8:12 pm		
Run #	mm:ss	dB(A)
1	5	49.6
1	10	47.8
1	15	47.3
1	20	48.1
1	25	48.4
1	30	49.1
1	35	48.8
1	40	48.1
1	45	48.5
1	50	48.9
1	55	49
1	60	48.8
1	1:05	48.9
1	1:10	48.2
1	1:15	47.8
1	1:20	47.2
1	1:25	47.3
1	1:30	47.7
1	1:35	48.2
1	1:40	48.3
1	1:45	48.3
1	1:50	49.4
1	1:55	49.3
1	2:00	47.5
1	2:05	47.2
1	2:10	47.9
1	2:15	46.8
1	2:20	47.3
1	2:25	47
1	2:30	46.4
1	2:35	46.3
1	2:40	46.5
1	2:45	47.6
1	2:50	48
1	2:55	48.9
1	3:00	48.4
1	3:05	48.1
1	3:10	53.5
1	3:15	54.9
1	3:20	51.5
1	3:25	50.2
1	3:30	49.1
1	3:35	48.4
1	3:40	48.4
1	3:45	47.4
1	3:50	47.9
1	3:55	48.1
1	4:00	48.9
1	4:05	48.9
1	4:10	50.7
1	4:15	52.6
1	4:20	49.2
1	4:25	49.6
1	4:30	49.3

L max 1

3 Teal Cir		
26-Sep-12		
Time: 8:18 pm		
Run #	mm:ss	dB(A)
2	5	48
2	10	47.3
2	15	48.9
2	20	49.9
2	25	50.6
2	30	49.4
2	35	48.8
2	40	49.3
2	45	48.7
2	50	49
2	55	49
2	60	49.4
2	1:05	49.2
2	1:10	48.8
2	1:15	48.7
2	1:20	48
2	1:25	49.2
2	1:30	51
2	1:35	50.1
2	1:40	48.5
2	1:45	48.2
2	1:50	47.4
2	1:55	47.1
2	2:00	47.1
2	2:05	46.9
2	2:10	47
2	2:15	47.7
2	2:20	48.7
2	2:25	48.9
2	2:30	49.2
2	2:35	48.6
2	2:40	47.9
2	2:45	47.9
2	2:50	47.2
2	2:55	46.9
2	3:00	46.7
2	3:05	46.7
2	3:10	47.2
2	3:15	48
2	3:20	48.1
2	3:25	49.1
2	3:30	46.9
2	3:35	46.9
2	3:40	47.2
2	3:45	47.7
2	3:50	46.8
2	3:55	46.5
2	4:00	46.2
2	4:05	46.1
2	4:10	46.3
2	4:15	46.2
2	4:20	46.7
2	4:25	46.6
2	4:30	46.5

x

Lmax 2

3 Teal Cir		
26-Sep-12		
Time: 8:25 pm		
Run #	mm:ss	dB(A)
3	5	46.5
3	10	47.1
3	15	48
3	20	46.7
3	25	46.6
3	30	47.1
3	35	46.6
3	40	47.1
3	45	47.2
3	50	46.8
3	55	47.2
3	60	49.1
3	1:05	49.5
3	1:10	50.9
3	1:15	47.9
3	1:20	46.8
3	1:25	46.2
3	1:30	47.5
3	1:35	48.1
3	1:40	48.2
3	1:45	48.2
3	1:50	48.6
3	1:55	47.9
3	2:00	51.6
3	2:05	48.9
3	2:10	48.9
3	2:15	48.8
3	2:20	47.5
3	2:25	46.8
3	2:30	47
3	2:35	46.4
3	2:40	46.2
3	2:45	47.1
3	2:50	46.2
3	2:55	46.6
3	3:00	46.1
3	3:05	47.1
3	3:10	46.9
3	3:15	46.6
3	3:20	46.2
3	3:25	46.4
3	3:30	46.4
3	3:35	46.8
3	3:40	45.9
3	3:45	45.4
3	3:50	46.5
3	3:55	45.7
3	4:00	46.2
3	4:05	46.6
3	4:10	46.9
3	4:15	47
3	4:20	47.2
3	4:25	46.3
3	4:30	46.2

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 26 September 2012
IMPACT SOUND- PRELIMINARY DATA

3 Teal Cir		
26-Sep-12		
Time: 8:12 pm		
Run #	mm:ss	dB(A)
1	4:35	49.6
1	4:40	48.8
1	4:45	48.7
1	4:50	46.7
1	4:55	46.7
1	5:00	47.5

3 Teal Cir		
26-Sep-12		
Time: 8:18 pm		
Run #	mm:ss	dB(A)
2	4:35	47
2	4:40	46.5
2	4:45	46.8
2	4:50	47.1
2	4:55	46.9
2	5:00	46.1

3 Teal Cir		
26-Sep-12		
Time: 8:25 pm		
Run #	mm:ss	dB(A)
3	4:35	46
3	4:40	46.9
3	4:45	46.7
3	4:50	46.6
3	4:55	46.3
3	5:00	45.7

Lmax	49.2	dB(A)
Leq	47.4	dB(A)
Range	45.4	to 49.6 dB(A)

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	48.9	dB(A)
L10	49.7	dB(A)
L50	48.2	dB(A)
Leq	48.1	dB(A)
L10	49.4	dB(A)
L50	47.6	dB(A)
Leq	47.3	dB(A)
L10	48.6	dB(A)
L50	46.7	dB(A)

Met Data		
WS at Hub	8.7	m/s
WS at West Is.	2.3	m/s
WD at Hub	212	degrees
WD at West Is.	SW	
BP	30.07	in
Humidity	30	%
Temp	68.7	degr F

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

AMBIENT SOUND- PRELIMINARY DATA

3 Teal Circle		
26-Sep-12		
Time: 7:47 pm		
Run #	mm:ss	dB(A)
1	5	44.9
1	10	45.5
1	15	43.8
1	20	43.4
1	25	43.3
1	30	43.8
1	35	43.3
1	40	43.6
1	45	43.9
1	50	44.1
1	55	43.8
1	60	43.7
1	1:05	43.7
1	1:10	44.3
1	1:15	43.9
1	1:20	44.1
1	1:25	43.8
1	1:30	44.2
1	1:35	44.1
1	1:40	42.9
1	1:45	44.1
1	1:50	44.5
1	1:55	44.1
1	2:00	44.7
1	2:05	45
1	2:10	47.2
1	2:15	48.1
1	2:20	46.5
1	2:25	45.3
1	2:30	46
1	2:35	45.3
1	2:40	44.8
1	2:45	44.3
1	2:50	44
1	2:55	44.1
1	3:00	44.7
1	3:05	43.9
1	3:10	43.4
1	3:15	43.7
1	3:20	43.7
1	3:25	44.7
1	3:30	44.3
1	3:35	44.4
1	3:40	44.2
1	3:45	44.2
1	3:50	44
1	3:55	43.8

3 Teal Circle		
26-Sep-12		
Time: 7:53 pm		
Run #	mm:ss	dB(A)
2	5	45.2
2	10	46.8
2	15	44.1
2	20	44.6
2	25	44.5
2	30	44
2	35	43.9
2	40	43.9
2	45	44.2
2	50	43.9
2	55	44.5
2	60	44.1
2	1:05	44.1
2	1:10	43.2
2	1:15	43.7
2	1:20	44.1
2	1:25	43.7
2	1:30	43.4
2	1:35	44.7
2	1:40	43.7
2	1:45	43.2
2	1:50	43.3
2	1:55	43.3
2	2:00	43.3
2	2:05	43.9
2	2:10	43.9
2	2:15	43.3
2	2:20	45.7
2	2:25	48.5
2	2:30	44.7
2	2:35	44.2
2	2:40	43.6
2	2:45	44.8
2	2:50	46
2	2:55	45.5
2	3:00	44.9
2	3:05	44.5
2	3:10	44.6
2	3:15	44.1
2	3:20	43.7
2	3:25	44
2	3:30	43.6
2	3:35	44.6
2	3:40	45.6
2	3:45	45.4
2	3:50	44.8
2	3:55	44.5

3 Teal Circle		
26-Sep-12		
Time: 7:58 pm		
Run #	mm:ss	dB(A)
3	5	46.6
3	10	46.3
3	15	45.6
3	20	45.7
3	25	45.7
3	30	45.7
3	35	46.4
3	40	45.3
3	45	45
3	50	46.1
3	55	46.2
3	60	45.1
3	1:05	44.7
3	1:10	44.6
3	1:15	44.7
3	1:20	43.8
3	1:25	44
3	1:30	43.9
3	1:35	43.8
3	1:40	43.4
3	1:45	43.6
3	1:50	43.8
3	1:55	44.4
3	2:00	46.3
3	2:05	45
3	2:10	48.3
3	2:15	48.1
3	2:20	45.6
3	2:25	44.1
3	2:30	43.6
3	2:35	43.8
3	2:40	43.5
3	2:45	43.5
3	2:50	43.3
3	2:55	43.3
3	3:00	43.2
3	3:05	43.3
3	3:10	43.4
3	3:15	43.2
3	3:20	42.8
3	3:25	43.3
3	3:30	43.3
3	3:35	43
3	3:40	43.1
3	3:45	43.2
3	3:50	43.3
3	3:55	43.4

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

AMBIENT SOUND- PRELIMINARY DATA

3 Teal Circle		
26-Sep-12		
Time: 7:47 pm		
Run #	mm:ss	dB(A)
1	4:00	43.3
1	4:05	43.5
1	4:10	43
1	4:15	44.2
1	4:20	44.6
1	4:25	44.5
1	4:30	43.9
1	4:35	43.5
1	4:40	44.2
1	4:45	44.4
1	4:50	43
1	4:55	43.2
1	5:00	43.2

3 Teal Circle		
26-Sep-12		
Time: 7:53 pm		
Run #	mm:ss	dB(A)
2	4:00	44.3
2	4:05	44.6
2	4:10	44.1
2	4:15	44.3
2	4:20	44.2
2	4:25	44
2	4:30	45.1
2	4:35	47.2
2	4:40	49.2
2	4:45	48
2	4:50	47
2	4:55	46.7
2	5:00	45.2

3 Teal Circle		
26-Sep-12		
Time: 7:58 pm		
Run #	mm:ss	dB(A)
3	4:00	43.7
3	4:05	44
3	4:10	44.7
3	4:15	45.4
3	4:20	45.8
3	4:25	45.2
3	4:30	45
3	4:35	45.3
3	4:40	44.5
3	4:45	46.9
3	4:50	46.2
3	4:55	46.2
3	5:00	45.5

L90	43.3	dBA
Range	42.8	to
	46.4	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	46.6	dBA	Leq	45.1	dBA	Leq	44.9	dBA
L90	43.3	dBA	L90	43.4	dBA	L90	43.1	dBA

Met Data

WS at Hub	7.2	m/s
WS at West Is.	3	m/s
WD at Hub	208	degrees
WD at West Is.	SSW	
BP	30.07	in
Humidity	30	%
Temp	68.5	degr F

Wind Turbine Sound Sampling: Fairhaven 26 September 2012
IMPACT SOUND- PRELIMINARY DATA

16 Mill Rd.		
26-Sep-12		
Time: 8:45 pm		
Run #	mm:ss	dB(A)
1	5	48.9
1	10	47.4
1	15	47.5
1	20	46.9
1	25	47.9
1	30	48.5
1	35	47.3
1	40	46.8
1	45	47.3
1	50	48.4
1	55	48.8
1	60	50.2
1	1:05	51.5
1	1:10	49
1	1:15	46
1	1:20	45.6
1	1:25	45.1
1	1:30	44.7
1	1:35	45.9
1	1:40	45.6
1	1:45	45.4
1	1:50	44.8
1	1:55	45.5
1	2:00	45.9
1	2:05	46.1
1	2:10	45.8
1	2:15	46.3
1	2:20	45.5
1	2:25	47.8
1	2:30	45.9
1	2:35	47.2
1	2:40	47.2
1	2:45	46.7
1	2:50	45.7
1	2:55	46.9
1	3:00	45.9
1	3:05	46.1
1	3:10	47.8
1	3:15	48.2
1	3:20	48.2
1	3:25	47.5
1	3:30	48.1
1	3:35	48.3
1	3:40	51.4
1	3:45	69.2
1	3:50	57.6
1	3:55	48.3
1	4:00	47.6
1	4:05	45.9
1	4:10	46.2
1	4:15	46.9
1	4:20	44.9
1	4:25	45.5
1	4:30	46.8

16 Mill Rd.		
26-Sep-12		
Time: 8:57 pm		
Run #	mm:ss	dB(A)
2	5	46.7
2	10	46.5
2	15	46.3
2	20	46
2	25	46.8
2	30	45.1
2	35	45.2
2	40	56.1
2	45	53.6
2	50	69.7
2	55	67.2
2	60	52.4
2	1:05	47.6
2	1:10	47.2
2	1:15	48.3
2	1:20	47.6
2	1:25	46.9
2	1:30	47.3
2	1:35	46.8
2	1:40	45.6
2	1:45	46.5
2	1:50	45.8
2	1:55	45.8
2	2:00	46
2	2:05	45.3
2	2:10	46
2	2:15	46.7
2	2:20	46.6
2	2:25	47.9
2	2:30	48
2	2:35	48.7
2	2:40	47.9
2	2:45	47.9
2	2:50	47.7
2	2:55	46.3
2	3:00	47.1
2	3:05	47.3
2	3:10	48.5
2	3:15	46.8
2	3:20	47.2
2	3:25	46.8
2	3:30	47.1
2	3:35	47.1
2	3:40	46.2
2	3:45	46
2	3:50	49
2	3:55	49.1
2	4:00	49.1
2	4:05	49.4
2	4:10	49
2	4:15	49.1
2	4:20	48.9
2	4:25	49
2	4:30	47

16 Mill Rd.		
26-Sep-12		
Time: 9:03 pm		
Run #	mm:ss	dB(A)
3	5	48.5
3	10	47.9
3	15	48.6
3	20	48.6
3	25	49.5
3	30	48.4
3	35	49.6
3	40	48.8
3	45	46.3
3	50	46.1
3	55	47.1
3	60	46.9
3	1:05	46.8
3	1:10	46.9
3	1:15	45.9
3	1:20	45.8
3	1:25	48.7
3	1:30	50.4
3	1:35	49.8
3	1:40	48.9
3	1:45	40.8
3	1:50	47.8
3	1:55	48.5
3	2:00	49
3	2:05	47.7
3	2:10	46.2
3	2:15	47.2
3	2:20	46.6
3	2:25	46.1
3	2:30	46.4
3	2:35	46.2
3	2:40	45.6
3	2:45	45.5
3	2:50	46.7
3	2:55	45.8
3	3:00	45.8
3	3:05	45.4
3	3:10	45.7
3	3:15	45.8
3	3:20	46.5
3	3:25	46.7
3	3:30	47.1
3	3:35	47.1
3	3:40	47.4
3	3:45	47.7
3	3:50	48.7
3	3:55	48.7
3	4:00	49.2
3	4:05	50
3	4:10	59.8
3	4:15	59.1
3	4:20	52.1
3	4:25	49.3
3	4:30	48.9

Wind Turbine Sound Sampling: Fairhaven 26 September 2012
IMPACT SOUND- PRELIMINARY DATA

16 Mill Rd.		
26-Sep-12		
Time: 8:45 pm		
Run #	mm:ss	dB(A)
1	4:35	45.3
1	4:40	46
1	4:45	47
1	4:50	47.1
1	4:55	46.4
1	5:00	46

16 Mill Rd.		
26-Sep-12		
Time: 8:57 pm		
Run #	mm:ss	dB(A)
2	4:35	46.4
2	4:40	47
2	4:45	45.9
2	4:50	45.1
2	4:55	46
2	5:00	47.4

16 Mill Rd.		
26-Sep-12		
Time: 9:03 pm		
Run #	mm:ss	dB(A)
3	4:35	47.5
3	4:40	47.2
3	4:45	48.1
3	4:50	47.1
3	4:55	46.6
3	5:00	46.5

Lmax	48.0	dBA
Leq	46.0	dBA
Range	40.8	to 48.3 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	51.5	dBA
L10	49.6	dBA
L50	46.7	dBA
Leq	54	dBA
L10	49.5	dBA
L50	46.9	dBA
Leq	50.2	dBA
L10	49.7	dBA
L50	47.4	dBA

Met Data		
WS at Hub	7.3	m/s
WS at West Is.	3.1	m/s
WD at Hub	210	degrees
WD at West Is.	SW	
BP	30.08	in
Humidity	28	%
Temp	68.8	degr F

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

AMBIENT SOUND- PRELIMINARY DATA

16 Mill Rd.		
26-Sep-12		
Time: 9:15 pm		
Run #	mm:ss	dB(A)
1	5	49.6
1	10	50
1	15	49.5
1	20	51.3
1	25	50.3
1	30	50.1
1	35	49.5
1	40	49.3
1	45	48.8
1	50	48.8
1	55	48.5
1	60	48.5
1	1:05	48.5
1	1:10	48.9
1	1:15	48.4
1	1:20	49.2
1	1:25	49.4
1	1:30	49.9
1	1:35	49.9
1	1:40	48.2
1	1:45	46.7
1	1:50	46.5
1	1:55	46.9
1	2:00	44.9
1	2:05	46.2
1	2:10	46
1	2:15	45.7
1	2:20	45.4
1	2:25	45.9
1	2:30	45
1	2:35	44.7
1	2:40	45.7
1	2:45	47.5
1	2:50	45.8
1	2:55	46.7
1	3:00	45.4
1	3:05	46.9
1	3:10	45.2
1	3:15	44.7
1	3:20	44.6
1	3:25	45.8
1	3:30	45.2
1	3:35	45
1	3:40	45.9
1	3:45	45.3
1	3:50	52.3
1	3:55	63.3
1	4:00	55.1
1	4:05	51
1	4:10	45.4
1	4:15	44.9
1	4:20	47.9

16 Mill Rd.		
26-Sep-12		
Time: 9:22 pm		
Run #	mm:ss	dB(A)
2	5	45.7
2	10	46.2
2	15	46.7
2	20	45.8
2	25	45.6
2	30	46.8
2	35	47.1
2	40	47
2	45	46.7
2	50	48.2
2	55	49.4
2	60	48.4
2	1:05	49.1
2	1:10	48.9
2	1:15	48.6
2	1:20	48
2	1:25	49.6
2	1:30	47.9
2	1:35	46.8
2	1:40	46.5
2	1:45	46.4
2	1:50	44.6
2	1:55	44.5
2	2:00	45.1
2	2:05	46.4
2	2:10	46.4
2	2:15	46.2
2	2:20	46.2
2	2:25	46.7
2	2:30	46.7
2	2:35	46.6
2	2:40	46.8
2	2:45	46.9
2	2:50	46.7
2	2:55	47.2
2	3:00	47.8
2	3:05	48.2
2	3:10	48.5
2	3:15	48.7
2	3:20	49.3
2	3:25	49.2
2	3:30	47.9
2	3:35	48.3
2	3:40	49.3
2	3:45	54.8
2	3:50	60.7
2	3:55	47.1
2	4:00	44
2	4:05	43.7
2	4:10	45.1
2	4:15	48.1
2	4:20	47.1

16 Mill Rd.		
26-Sep-12		
Time: 9:28 pm		
Run #	mm:ss	dB(A)
3	5	48.2
3	10	48.6
3	15	47.6
3	20	48.2
3	25	49.1
3	30	50.1
3	35	49.5
3	40	49.7
3	45	50.3
3	50	48.9
3	55	48
3	60	47.8
3	1:05	49.5
3	1:10	49
3	1:15	49.3
3	1:20	48.6
3	1:25	48.8
3	1:30	48.4
3	1:35	49.2
3	1:40	47.9
3	1:45	47.6
3	1:50	47.6
3	1:55	47.3
3	2:00	47.6
3	2:05	47.6
3	2:10	48.7
3	2:15	48.6
3	2:20	48.5
3	2:25	48.7
3	2:30	48.4
3	2:35	48.2
3	2:40	47.9
3	2:45	48.7
3	2:50	48.1
3	2:55	49.1
3	3:00	48
3	3:05	48.4
3	3:10	48.1
3	3:15	48.1
3	3:20	48.1
3	3:25	48.7
3	3:30	49.1
3	3:35	49.2
3	3:40	49.8
3	3:45	50
3	3:50	52.2
3	3:55	64.9
3	4:00	67.9
3	4:05	55.7
3	4:10	50.1
3	4:15	53.8
3	4:20	49.8

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

AMBIENT SOUND- PRELIMINARY DATA

16 Mill Rd.		
26-Sep-12		
Time: 9:15 pm		
Run #	mm:ss	dB(A)
1	4:25	47.8
1	4:30	48.7
1	4:35	48.2
1	4:40	48.9
1	4:45	49.8
1	4:50	48.2
1	4:55	47.6
1	5:00	47.1

16 Mill Rd.		
26-Sep-12		
Time: 9:22 pm		
Run #	mm:ss	dB(A)
2	4:25	48.8
2	4:30	49.3
2	4:35	47.6
2	4:40	47.4
2	4:45	47.2
2	4:50	47.1
2	4:55	48
2	5:00	47.7

16 Mill Rd.		
26-Sep-12		
Time: 9:28 pm		
Run #	mm:ss	dB(A)
3	4:25	48.9
3	4:30	50.1
3	4:35	49.7
3	4:40	49.3
3	4:45	49.2
3	4:50	48.8
3	4:55	48.9
3	5:00	48.6

L90	45.4	dBA
Range	43.7	to
	49.9	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	49.8	dBA	Leq	50.8	dBA	Leq	56.6	dBA
L90	45	dBA	L90	45.6	dBA	L90	47.8	dBA

Met Data

WS at Hub	6.5	m/s
WS at West Is.	2.8	m/s
WD at Hub	204	degrees
WD at West Is.	SW	
BP	30.08	in
Humidity	28	%
Temp	68.8	degr F

Wind Turbine Sound Sampling: Fairhaven 26 September 2012
IMPACT SOUND- PRELIMINARY DATA

12 Little Bay Rd		
26-Sep-13		
Time: 6:43 pm		
Run #	mm:ss	dB(A)
1	5	52.8
1	10	50.5
1	15	51.5
1	20	52.2
1	25	53.3
1	30	51.4
1	35	50.8
1	40	50.8
1	45	49.9
1	50	49.8
1	55	49.1
1	60	50.4
1	1:05	50.9
1	1:10	49.6
1	1:15	49.9
1	1:20	49.8
1	1:25	50.2
1	1:30	50.5
1	1:35	52.4
1	1:40	51.7
1	1:45	53.2
1	1:50	53.5
1	1:55	52.8
1	2:00	51.3
1	2:05	52.9
1	2:10	50.9
1	2:15	51.1
1	2:20	50
1	2:25	50.5
1	2:30	52.1
1	2:35	51.3
1	2:40	50.3
1	2:45	50.4
1	2:50	50.2
1	2:55	50.8
1	3:00	51.1
1	3:05	52.4
1	3:10	50.1
1	3:15	50.4
1	3:20	50.9
1	3:25	51
1	3:30	50.4
1	3:35	50
1	3:40	49.8
1	3:45	50.7
1	3:50	50.8
1	3:55	53.6
1	4:00	52.8
1	4:05	51.4
1	4:10	52.4
1	4:15	53.3
1	4:20	55
1	4:25	53.9
1	4:30	52.5

12 Little Bay Rd		
26-Sep-13		
Time: 6:50 pm		
Run #	mm:ss	dB(A)
2	5	51.9
2	10	50.5
2	15	50.6
2	20	50.9
2	25	50.3
2	30	50.6
2	35	50.7
2	40	50.1
2	45	51.5
2	50	50.5
2	55	51.2
2	60	52
2	1:05	51.3
2	1:10	49.9
2	1:15	50
2	1:20	50.4
2	1:25	50.2
2	1:30	51.1
2	1:35	50.2
2	1:40	50.1
2	1:45	50.1
2	1:50	51.1
2	1:55	51.4
2	2:00	51.4
2	2:05	51.4
2	2:10	52.5
2	2:15	52.4
2	2:20	52.4
2	2:25	51.9
2	2:30	52.4
2	2:35	50.8
2	2:40	50.6
2	2:45	50.6
2	2:50	50.6
2	2:55	50.2
2	3:00	50.2
2	3:05	50.3
2	3:10	49.9
2	3:15	49.3
2	3:20	50.2
2	3:25	50.7
2	3:30	50.4
2	3:35	49.7
2	3:40	49.7
2	3:45	50.6
2	3:50	50.9
2	3:55	50.7
2	4:00	50.4
2	4:05	50.5
2	4:10	49.9
2	4:15	52.1
2	4:20	52.2
2	4:25	52.4
2	4:30	51.6

12 Little Bay Rd		
26-Sep-13		
Time: 6:59 pm		
Run #	mm:ss	dB(A)
3	5	50.2
3	10	50
3	15	51
3	20	50.8
3	25	49.2
3	30	51.7
3	35	51.3
3	40	50.5
3	45	50.6
3	50	50.8
3	55	50.8
3	60	50.8
3	1:05	50.8
3	1:10	50.5
3	1:15	50.4
3	1:20	49.8
3	1:25	50.8
3	1:30	51
3	1:35	50.2
3	1:40	50.5
3	1:45	49.9
3	1:50	50
3	1:55	49.8
3	2:00	50.3
3	2:05	50.9
3	2:10	49.8
3	2:15	51.4
3	2:20	51.1
3	2:25	50.3
3	2:30	50.1
3	2:35	51.5
3	2:40	51
3	2:45	51.7
3	2:50	50.8
3	2:55	52.6
3	3:00	52.6
3	3:05	53.2
3	3:10	51.7
3	3:15	51.5
3	3:20	50.9
3	3:25	51.1
3	3:30	51
3	3:35	53.7
3	3:40	53.2
3	3:45	52.2
3	3:50	51
3	3:55	50.5
3	4:00	50.7
3	4:05	52.2
3	4:10	52
3	4:15	51
3	4:20	50.2
3	4:25	51.4
3	4:30	51.7

Lmax 1

Lmax 2

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 26 September 2012
IMPACT SOUND- PRELIMINARY DATA

12 Little Bay Rd		
26-Sep-13		
Time: 6:43 pm		
Run #	mm:ss	dB(A)
1	4:35	51.3
1	4:40	52.2
1	4:45	51.1
1	4:50	50.5
1	4:55	50.3
1	5:00	51.3

12 Little Bay Rd		
26-Sep-13		
Time: 6:50 pm		
Run #	mm:ss	dB(A)
2	4:35	51.4
2	4:40	51.8
2	4:45	51.3
2	4:50	51.3
2	4:55	50.6
2	5:00	50.2

12 Little Bay Rd		
26-Sep-13		
Time: 6:59 pm		
Run #	mm:ss	dB(A)
3	4:35	50.8
3	4:40	50.8
3	4:45	50.5
3	4:50	49.9
3	4:55	49.9
3	5:00	49.8

Lmax	52.3	dB(A)	
Leq	50.7	dB(A)	
Range	49.1	to	52.4 dB(A)

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	51.6	dB(A)
L10	53	dB(A)
L50	50.9	dB(A)
Leq	51.1	dB(A)
L10	52.2	dB(A)
L50	50.6	dB(A)
Leq	51	dB(A)
L10	52.2	dB(A)
L50	50.7	dB(A)

Met Data		
WS at Hub	9.5	m/s
WS at West Is.	4.3	m/s
WD at Hub	214	degrees
WD at West Is.	SSW	
BP	30.07	in
Humidity	34	%
Temp	68.9	degr F

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
26-Sep-12		
Time: 7:12 pm		
Run #	mm:ss	dB(A)
1	5	47.3
1	10	46.4
1	15	47
1	20	48.1
1	25	47
1	30	46.7
1	35	46.6
1	40	47
1	45	46.8
1	50	47.2
1	55	47.5
1	60	47.4
1	1:05	47.4
1	1:10	48.2
1	1:15	48.2
1	1:20	48.2
1	1:25	48.6
1	1:30	47.4
1	1:35	47.5
1	1:40	47.7
1	1:45	48.5
1	1:50	47.9
1	1:55	48.8
1	2:00	48.6
1	2:05	48.4
1	2:10	48.2
1	2:15	47.8
1	2:20	47.2
1	2:25	47.2
1	2:30	47.6
1	2:35	47.7
1	2:40	47.1
1	2:45	47.3
1	2:50	47.2
1	2:55	47
1	3:00	47.3
1	3:05	47.2
1	3:10	48
1	3:15	47.8
1	3:20	47.5
1	3:25	47.6
1	3:30	48.3
1	3:35	47.1
1	3:40	48.4
1	3:45	47.8
1	3:50	47.8
1	3:55	47.2
1	4:00	47.2
1	4:05	47.6
1	4:10	49.8
1	4:15	49.4
1	4:20	48.4

12 Little Bay Rd		
26-Sep-12		
Time: 7:18 pm		
Run #	mm:ss	dB(A)
2	5	48.5
2	10	47.2
2	15	47.6
2	20	48.5
2	25	48.4
2	30	47.2
2	35	46.7
2	40	46.7
2	45	47
2	50	48.2
2	55	47.9
2	60	47.1
2	1:05	47.1
2	1:10	47.2
2	1:15	48.1
2	1:20	47.5
2	1:25	47.9
2	1:30	47.3
2	1:35	48
2	1:40	47.6
2	1:45	47.7
2	1:50	47
2	1:55	46.6
2	2:00	46.6
2	2:05	46.6
2	2:10	47.1
2	2:15	47.7
2	2:20	47.1
2	2:25	46.7
2	2:30	46.8
2	2:35	47.9
2	2:40	48.6
2	2:45	49.7
2	2:50	49.7
2	2:55	48.9
2	3:00	48.1
2	3:05	47.3
2	3:10	47.2
2	3:15	48.3
2	3:20	48.2
2	3:25	48
2	3:30	47
2	3:35	46.8
2	3:40	47.6
2	3:45	47.5
2	3:50	48
2	3:55	48
2	4:00	50.1
2	4:05	49.5
2	4:10	47.4
2	4:15	46.7
2	4:20	46.4

12 Little Bay Rd		
26-Sep-12		
Time: 7:26 pm		
Run #	mm:ss	dB(A)
3	5	47.8
3	10	47
3	15	46.7
3	20	46.7
3	25	46.6
3	30	46.8
3	35	46.5
3	40	46.4
3	45	46.4
3	50	46.3
3	55	45.9
3	60	46
3	1:05	46.1
3	1:10	46.1
3	1:15	46.2
3	1:20	46.1
3	1:25	46.2
3	1:30	46.3
3	1:35	46.7
3	1:40	46.4
3	1:45	46.2
3	1:50	46.5
3	1:55	46
3	2:00	46
3	2:05	45.9
3	2:10	45.7
3	2:15	45.9
3	2:20	46.1
3	2:25	45.7
3	2:30	45.7
3	2:35	45.9
3	2:40	46
3	2:45	46.2
3	2:50	46.2
3	2:55	46.1
3	3:00	45.9
3	3:05	46
3	3:10	46
3	3:15	45.9
3	3:20	46
3	3:25	46
3	3:30	46
3	3:35	45.8
3	3:40	45.8
3	3:45	45.6
3	3:50	45.9
3	3:55	46
3	4:00	46
3	4:05	46
3	4:10	47.5
3	4:15	47.5
3	4:20	47.2

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
26-Sep-12		
Time: 7:12 pm		
Run #	mm:ss	dB(A)
1	4:25	49.2
1	4:30	50
1	4:35	48.5
1	4:40	49.4
1	4:45	48.2
1	4:50	48.2
1	4:55	49.5
1	5:00	47.6

12 Little Bay Rd		
26-Sep-12		
Time: 7:18 pm		
Run #	mm:ss	dB(A)
2	4:25	46.7
2	4:30	46.4
2	4:35	47.6
2	4:40	46.3
2	4:45	46.4
2	4:50	46.5
2	4:55	46.3
2	5:00	46.1

12 Little Bay Rd		
26-Sep-12		
Time: 7:26 pm		
Run #	mm:ss	dB(A)
3	4:25	46.5
3	4:30	46.1
3	4:35	45.8
3	4:40	45.7
3	4:45	46.1
3	4:50	46.4
3	4:55	46.4
3	5:00	46.2

L90	46	dBA	
Range	45.6	to	48.9 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	48.2	dBA	Leq	47.8	dBA	Leq	46.5	dBA
L90	46.9	dBA	L90	46.4	dBA	L90	45.7	dBA

Met Data

WS at Hub	7.9	m/s
WS at West Is.	3.1	m/s
WD at Hub	210	degrees
WD at West Is.	SSW	
BP	30.08	in
Humidity	32	%
Temp	68.8	degr F

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

IMPACT SOUND- PRELIMINARY DATA

3 Shawmut Rd		
26-Sep-12		
Time: 4:25 pm		
Run #	mm:ss	dB(A)
1	5	46.5
1	10	46.5
1	15	46.3
1	20	46.1
1	25	45.5
1	30	47.1
1	35	46.8
1	40	46.9
1	45	47.5
1	50	47.3
1	55	47.5
1	60	46.4
1	1:05	48.2
1	1:10	49
1	1:15	49.3
1	1:20	46.8
1	1:25	47.3
1	1:30	47.2
1	1:35	46.4
1	1:40	47.1
1	1:45	49
1	1:50	47.9
1	1:55	47.7
1	2:00	50.2
1	2:05	50.7
1	2:10	49.1
1	2:15	47.7
1	2:20	48
1	2:25	48
1	2:30	48.8
1	2:35	48.3
1	2:40	49.2
1	2:45	49.4
1	2:50	49.5
1	2:55	49.2
1	3:00	48.7
1	3:05	50
1	3:10	49
1	3:15	50.6
1	3:20	50.9
1	3:25	48.1
1	3:30	47.2
1	3:35	49.9
1	3:40	51.6
1	3:45	49.5
1	3:50	48.3
1	3:55	49.1
1	4:00	48.9
1	4:05	48.5
1	4:10	47.9
1	4:15	48.1
1	4:20	46.9

3 Shawmut Rd		
26-Sep-12		
Time: 4:32 pm		
Run #	mm:ss	dB(A)
2	5	48.3
2	10	47.6
2	15	47.1
2	20	46.4
2	25	47
2	30	47.1
2	35	48.1
2	40	46.7
2	45	46.7
2	50	47.1
2	55	47.3
2	60	46.7
2	1:05	49.6
2	1:10	49.3
2	1:15	48.4
2	1:20	48.2
2	1:25	49.9
2	1:30	47.1
2	1:35	50
2	1:40	47.8
2	1:45	47.9
2	1:50	47.4
2	1:55	47.3
2	2:00	47.8
2	2:05	49.9
2	2:10	47.6
2	2:15	47.9
2	2:20	46.5
2	2:25	47.6
2	2:30	47.3
2	2:35	47.7
2	2:40	46.8
2	2:45	47.8
2	2:50	48.3
2	2:55	49.4
2	3:00	49.4
2	3:05	49.1
2	3:10	48
2	3:15	46.2
2	3:20	46.4
2	3:25	46.5
2	3:30	47.7
2	3:35	47.2
2	3:40	48.9
2	3:45	47.7
2	3:50	47.5
2	3:55	46.9
2	4:00	46.1
2	4:05	48
2	4:10	47.5
2	4:15	46.5
2	4:20	48.1

3 Shawmut Rd		
26-Sep-12		
Time:		
Run #	mm:ss	dB(A)
3	5	51.6
3	10	48.7
3	15	48.3
3	20	47.5
3	25	47.1
3	30	48.5
3	35	47.6
3	40	46.4
3	45	46.4
3	50	46.2
3	55	47.3
3	60	47.6
3	1:05	46
3	1:10	45.2
3	1:15	46.1
3	1:20	46.5
3	1:25	49.2
3	1:30	48.4
3	1:35	46.8
3	1:40	47.4
3	1:45	46.5
3	1:50	49.7
3	1:55	48.2
3	2:00	46.8
3	2:05	46.7
3	2:10	47.5
3	2:15	46.2
3	2:20	46.3
3	2:25	46.8
3	2:30	47
3	2:35	46.6
3	2:40	45.6
3	2:45	45.7
3	2:50	46.2
3	2:55	45.9
3	3:00	47.3
3	3:05	46.9
3	3:10	47
3	3:15	45.6
3	3:20	46.4
3	3:25	46.4
3	3:30	46.8
3	3:35	47.1
3	3:40	47.7
3	3:45	45.6
3	3:50	46.8
3	3:55	45.8
3	4:00	47
3	4:05	46.5
3	4:10	46.7
3	4:15	47.2
3	4:20	45.7

432 Lmax 3 x

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

IMPACT SOUND- PRELIMINARY DATA

3 Shawmut Rd		
26-Sep-12		
Time: 4:25 pm		
Run #	mm:ss	dB(A)
1	4:25	48.5
1	4:30	50.6
1	4:35	48.5
1	4:40	46.7
1	4:45	47.9
1	4:50	48.6
1	4:55	51
1	5:00	49.1

3 Shawmut Rd		
26-Sep-12		
Time: 4:32 pm		
Run #	mm:ss	dB(A)
2	4:25	46.5
2	4:30	47.3
2	4:35	47.1
2	4:40	46.9
2	4:45	46.6
2	4:50	46.7
2	4:55	47
2	5:00	47.6

3 Shawmut Rd		
26-Sep-12		
Time:		
Run #	mm:ss	dB(A)
3	4:25	47.6
3	4:30	47.2
3	4:35	48.8
3	4:40	48.3
3	4:45	47.2
3	4:50	52.4
3	4:55	52.6
3	5:00	50.9

Lmax	49.1	dBA
Leq	47.2	dBA
Range	45.2	to 49.2 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	48.6	dBA
L10	50.2	dBA
L50	48.1	dBA
Leq	47.8	dBA
L10	49.3	dBA
L50	47.4	dBA
Leq	47.9	dBA
L10	49.1	dBA
L50	46.9	dBA

Met Data		
WS at Hub	nd*	m/s
WS at West Is.	2.4	m/s
WD at Hub	nd*	degrees
WD at West Is.	South	
BP	30.06	in
Humidity	41	%
Temp	69.4	degr F

* SCADA data provided by Fairhaven Wind LLC did not cover the time period of this sampling event

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

AMBIENT SOUND- PRELIMINARY DATA

3 Shawmut Rd		
26-Sep-12		
Time: 4:52pm		
Run #	mm:ss	dB(A)
1	5	48.1
1	10	45.9
1	15	44.5
1	20	42.9
1	25	43.6
1	30	43.4
1	35	43.2
1	40	42
1	45	42
1	50	42.5
1	55	42
1	60	42.5
1	1:05	42.5
1	1:10	43.2
1	1:15	44
1	1:20	42.7
1	1:25	43.6
1	1:30	44.1
1	1:35	43
1	1:40	43.6
1	1:45	46.5
1	1:50	54.2
1	1:55	49.1
1	2:00	46
1	2:05	45.7
1	2:10	44
1	2:15	44.4
1	2:20	44.1
1	2:25	44.2
1	2:30	43.7
1	2:35	42.3
1	2:40	42.4
1	2:45	43.2
1	2:50	46.3
1	2:55	46.8
1	3:00	45.5
1	3:05	46.3
1	3:10	44.7
1	3:15	45.1
1	3:20	45.2
1	3:25	42.7
1	3:30	42.9
1	3:35	42.9
1	3:40	43.5
1	3:45	43.4
1	3:50	43.7
1	3:55	44.5
1	4:00	46.2

3 Shawmut Rd		
26-Sep-12		
Time: 4:58 pm		
Run #	mm:ss	dB(A)
2	5	44.5
2	10	46.6
2	15	48.2
2	20	47.6
2	25	47.9
2	30	45
2	35	45
2	40	45.1
2	45	43.9
2	50	42.6
2	55	42.7
2	60	44.1
2	1:05	47.8
2	1:10	46.7
2	1:15	44.9
2	1:20	48.4
2	1:25	46.8
2	1:30	46
2	1:35	44.9
2	1:40	44.5
2	1:45	45.2
2	1:50	45.1
2	1:55	46.8
2	2:00	45.7
2	2:05	45.5
2	2:10	44.7
2	2:15	43.8
2	2:20	42.9
2	2:25	42.6
2	2:30	44.2
2	2:35	43.9
2	2:40	44.9
2	2:45	43.7
2	2:50	45.4
2	2:55	46.8
2	3:00	48.8
2	3:05	49
2	3:10	45.7
2	3:15	43.7
2	3:20	43.3
2	3:25	43.9
2	3:30	43.8
2	3:35	44.1
2	3:40	46.8
2	3:45	45.6
2	3:50	44.7
2	3:55	44.8
2	4:00	43

3 Shawmut Rd		
26-Sep-12		
Time: 5:04 pm		
Run #	mm:ss	dB(A)
3	5	44.9
3	10	47
3	15	47
3	20	48.6
3	25	44.1
3	30	44.2
3	35	43.5
3	40	47
3	45	45.5
3	50	46.6
3	55	45.2
3	60	46
3	1:05	45.3
3	1:10	44.2
3	1:15	45.8
3	1:20	45.6
3	1:25	45.2
3	1:30	46.2
3	1:35	44.3
3	1:40	44.2
3	1:45	44.8
3	1:50	44.9
3	1:55	45.2
3	2:00	47.8
3	2:05	47.2
3	2:10	45.8
3	2:15	46.9
3	2:20	46.4
3	2:25	46.3
3	2:30	45.1
3	2:35	45.7
3	2:40	45.1
3	2:45	44.9
3	2:50	45.9
3	2:55	45.7
3	3:00	44.7
3	3:05	45.1
3	3:10	43.9
3	3:15	43.4
3	3:20	44.3
3	3:25	43.6
3	3:30	45
3	3:35	45.5
3	3:40	44.4
3	3:45	45.5
3	3:50	48.1
3	3:55	46.8
3	4:00	45

Wind Turbine Sound Sampling: Fairhaven 26 September 2012

AMBIENT SOUND- PRELIMINARY DATA

3 Shawmut Rd		
26-Sep-12		
Time: 4:52pm		
Run #	mm:ss	dB(A)
1	4:05	45.5
1	4:10	44.3
1	4:15	44.5
1	4:20	44.1
1	4:25	45.2
1	4:30	46.9
1	4:35	45.9
1	4:40	45.6
1	4:45	43.9
1	4:50	43.7
1	4:55	45.8
1	5:00	46.4

3 Shawmut Rd		
26-Sep-12		
Time: 4:58 pm		
Run #	mm:ss	dB(A)
2	4:05	43.7
2	4:10	43.7
2	4:15	43.8
2	4:20	46.2
2	4:25	46.2
2	4:30	44.9
2	4:35	47.5
2	4:40	47.8
2	4:45	45.9
2	4:50	45.7
2	4:55	46.2
2	5:00	45.3

3 Shawmut Rd		
26-Sep-12		
Time: 5:04 pm		
Run #	mm:ss	dB(A)
3	4:05	46.6
3	4:10	44
3	4:15	44.3
3	4:20	42.9
3	4:25	44.9
3	4:30	45.3
3	4:35	44.5
3	4:40	45.2
3	4:45	46.1
3	4:50	45.6
3	4:55	46.7
3	5:00	44.9

L90 **42.9** dBA
 Range 42 to 48.4 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	45.8	dBA	Leq	45.7	dBA	Leq	45.6	dBA
L90	42.4	dBA	L90	43.3	dBA	L90	43.9	dBA

Met Data		
WS at Hub	nd*	m/s
WS at West ls.	4	m/s
WD at Hub	nd*	degrees
WD at West ls.	SSW	
BP	30.07	in
Humidity	38	%
Temp	69	degr F

* SCADA data provided by Fairhaven Wind LLC did not cover the time period of this sampling event

Wind Turbine Sound Sampling Summary: Fairhaven 26 September 2012
PRELIMINARY DATA

LOCATION						
	Parameter	7 Pierces Pt Road	3 Shawmut St	16 Mill Rd.	12 Little Bay Rd	3 Teal Cir
Hand Log data (dB(A))	Lmax	53.3	49.1	48.0	52.3	49.2
	L90	44.8	42.9	45.4	46.0	43.3
	Diff	8.5	6.2	2.6	6.3	5.9
	Range Turbine on	48.1 - 54.3	45.2 - 49.2	40.8 - 48.3	49.1 - 52.4	45.4 - 49.6
	Range Turbine Off	43 - 51.5	42 - 48.4	43.7 - 49.9	45.6 - 48.9	42.8 - 46.4
MET	Wind Direction	SSW	SSW	SW	SW	SW
	Relationship to WT	Downwind offset right	Downwind offset right	Downwind offset left	Upwind	Perpendicular to the left
	Wind Speed Hub	9.7 - 10.7 m/s	nd*	6.5 - 7.3 m/s	7.9 - 9.5 m/s	7.2 - 8.7 m/s

* SCADA data provided by Fairhaven Wind LLC did not cover the time period of this sampling event

Wind Turbine Sound Sampling: Fairhaven 9 October 2012

IMPACT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
9-Oct-12		
Time: 11:44 pm		
Run #	mm:ss	dB(A)
1	5	43
1	10	42.5
1	15	42.6
1	20	42.6
1	25	42.6
1	30	43.7
1	35	43.1
1	40	43.7
1	45	44.2
1	50	44.1
1	55	42.6
1	60	41.8
1	1:05	42.2
1	1:10	42.1
1	1:15	41.7
1	1:20	43.4
1	1:25	43.9
1	1:30	42.8
1	1:35	43
1	1:40	44.1
1	1:45	44.2
1	1:50	42.3
1	1:55	43.2
1	2:00	43.7
1	2:05	44.5
1	2:10	43.8
1	2:15	43.7
1	2:20	43.9
1	2:25	43.8
1	2:30	43.6
1	2:35	43.5
1	2:40	42.9
1	2:45	43.7
1	2:50	44.5
1	2:55	43.3
1	3:00	42.9
1	3:05	42.3
1	3:10	45.7
1	3:15	43.5
1	3:20	42.5
1	3:25	44.2
1	3:30	43.6
1	3:35	42.9
1	3:40	42.7
1	3:45	42.8
1	3:50	43.1
1	3:55	43.5
1	4:00	42.8
1	4:05	43.4
1	4:10	43.6
1	4:15	43.1
1	4:20	42.8

12 Little Bay Rd		
9-Oct-12		
Time: 11:50 pm		
Run #	mm:ss	dB(A)
2	5	43.2
2	10	42.3
2	15	42.2
2	20	42.1
2	25	42.2
2	30	42.7
2	35	44.1
2	40	42.8
2	45	43
2	50	42.6
2	55	43.2
2	60	43.3
2	1:05	42.6
2	1:10	43.1
2	1:15	43.9
2	1:20	42.4
2	1:25	42.5
2	1:30	42.9
2	1:35	43.1
2	1:40	44.3
2	1:45	44
2	1:50	43.2
2	1:55	42.1
2	2:00	42.1
2	2:05	42.8
2	2:10	43.1
2	2:15	42.3
2	2:20	42.6
2	2:25	42.9
2	2:30	43.1
2	2:35	42.8
2	2:40	42.8
2	2:45	42.2
2	2:50	41.8
2	2:55	42.7
2	3:00	42.1
2	3:05	43.2
2	3:10	41.9
2	3:15	42.8
2	3:20	44
2	3:25	44.1
2	3:30	42.8
2	3:35	41.8
2	3:40	42.1
2	3:45	43.5
2	3:50	42.8
2	3:55	44.5
2	4:00	43.6
2	4:05	42.3
2	4:10	43
2	4:15	42.7
2	4:20	42.3

12 Little Bay Rd		
9-Oct-12		
Time: 11:57 pm		
Run #	mm:ss	dB(A)
3	5	44
3	10	43.7
3	15	44.5
3	20	43.9
3	25	44.1
3	30	44
3	35	44.1
3	40	45.4
3	45	44.5
3	50	45.5
3	55	46.6
3	60	45.7
3	1:05	45.6
3	1:10	45.4
3	1:15	44.7
3	1:20	44.5
3	1:25	44.7
3	1:30	44.6
3	1:35	44.6
3	1:40	44.2
3	1:45	44.3
3	1:50	44.3
3	1:55	45.1
3	2:00	43.5
3	2:05	43.5
3	2:10	43.8
3	2:15	45.1
3	2:20	44.2
3	2:25	44.7
3	2:30	44.1
3	2:35	44.2
3	2:40	44.6
3	2:45	44
3	2:50	44.1
3	2:55	43.7
3	3:00	44.4
3	3:05	44.3
3	3:10	43.9
3	3:15	44.8
3	3:20	44.6
3	3:25	45.1
3	3:30	45.5
3	3:35	45.2
3	3:40	45.5
3	3:45	45.6
3	3:50	46.6
3	3:55	45.6
3	4:00	45.6
3	4:05	45.5
3	4:10	46.2
3	4:15	46.4
3	4:20	45.6

Lmax 3

Lmax 2

Lmax 1

Wind Turbine Sound Sampling: Fairhaven 9 October 2012

IMPACT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
9-Oct-12		
Time: 11:44 pm		
Run #	mm:ss	dB(A)
1	4:25	43.8
1	4:30	43.2
1	4:35	42.6
1	4:40	42.7
1	4:45	43
1	4:50	43.6
1	4:55	42.3
1	5:00	42.4

12 Little Bay Rd		
9-Oct-12		
Time: 11:50 pm		
Run #	mm:ss	dB(A)
2	4:25	42.9
2	4:30	43.6
2	4:35	43.5
2	4:40	43.7
2	4:45	43.5
2	4:50	43.2
2	4:55	44.2
2	5:00	44.7

12 Little Bay Rd		
9-Oct-12		
Time: 11:57 pm		
Run #	mm:ss	dB(A)
3	4:25	45.7
3	4:30	46
3	4:35	45.3
3	4:40	46
3	4:45	45.9
3	4:50	45.7
3	4:55	45.9
3	5:00	45.7

Lmax	44.7	dBA
Leq	43.4	dBA
Range	41.7	to 45.4 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	43.3	dBA
L10	44	dBA
L50	43.1	dBA
Leq	43.1	dBA
L10	44	dBA
L50	42.8	dBA
Leq	45	dBA
L10	45.9	dBA
L50	44.7	dBA

Met Data		
WS at Hub	5.0	m/s
WS at West Is.	2.5	m/s
WD at Hub	36	degrees
WD at West Is.	NE	
BP	30.14	in
Humidity	43	%
Temp	56.3	degr F

Wind Turbine Sound Sampling: Fairhaven 10 October 2012

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
10-Oct-12		
Time: 12:09 am		
Run #	mm:ss	dB(A)
1	5	42.2
1	10	42.2
1	15	42.4
1	20	41.7
1	25	41.3
1	30	41.3
1	35	42.3
1	40	41.5
1	45	41.5
1	50	43.3
1	55	44.8
1	60	41.5
1	1:05	41.1
1	1:10	41.9
1	1:15	41.8
1	1:20	40.8
1	1:25	40.9
1	1:30	41.6
1	1:35	42.1
1	1:40	41.8
1	1:45	42.4
1	1:50	40.8
1	1:55	40.6
1	2:00	40.4
1	2:05	41.7
1	2:10	40.2
1	2:15	42.1
1	2:20	39.3
1	2:25	39.1
1	2:30	39.4
1	2:35	39.4
1	2:40	40.5
1	2:45	40.8
1	2:50	40.9
1	2:55	41.3
1	3:00	41.8
1	3:05	41.7
1	3:10	41.4
1	3:15	40.6
1	3:20	39.4
1	3:25	40.3
1	3:30	41.8
1	3:35	41.2
1	3:40	40.2
1	3:45	39.7
1	3:50	39.8
1	3:55	40.4

12 Little Bay Rd		
10-Oct-12		
Time: 12:15 am		
Run #	mm:ss	dB(A)
2	5	40.7
2	10	40.2
2	15	39.7
2	20	39.6
2	25	39.4
2	30	39.2
2	35	39.2
2	40	39.4
2	45	39.6
2	50	39.3
2	55	38.6
2	60	38.9
2	1:05	38.9
2	1:10	39.7
2	1:15	39.9
2	1:20	39
2	1:25	39.4
2	1:30	39.2
2	1:35	39.3
2	1:40	39.8
2	1:45	40.4
2	1:50	39.3
2	1:55	37.7
2	2:00	38.8
2	2:05	38.3
2	2:10	38.3
2	2:15	38.7
2	2:20	39
2	2:25	39.2
2	2:30	39.2
2	2:35	39.6
2	2:40	39.7
2	2:45	39.4
2	2:50	39.4
2	2:55	39.2
2	3:00	39
2	3:05	39.5
2	3:10	38.7
2	3:15	39
2	3:20	38.8
2	3:25	38.9
2	3:30	39
2	3:35	39.7
2	3:40	38.4
2	3:45	38.2
2	3:50	39.4
2	3:55	39

12 Little Bay Rd		
10-Oct-12		
Time: 12:22 am		
Run #	mm:ss	dB(A)
3	5	41.8
3	10	41.5
3	15	43.7
3	20	42.4
3	25	41.5
3	30	41.4
3	35	40.8
3	40	39.3
3	45	39.4
3	50	39.3
3	55	38.7
3	60	38.9
3	1:05	39.1
3	1:10	39.5
3	1:15	40.1
3	1:20	39.9
3	1:25	42
3	1:30	39.5
3	1:35	40
3	1:40	40.2
3	1:45	41.7
3	1:50	41.3
3	1:55	39.6
3	2:00	39.5
3	2:05	39.1
3	2:10	39.1
3	2:15	39.1
3	2:20	39.3
3	2:25	39.3
3	2:30	38.9
3	2:35	39.3
3	2:40	39.9
3	2:45	41.5
3	2:50	44
3	2:55	41.9
3	3:00	40.3
3	3:05	40.7
3	3:10	40.5
3	3:15	40.3
3	3:20	40.1
3	3:25	40.4
3	3:30	39.5
3	3:35	39.3
3	3:40	39.4
3	3:45	39.4
3	3:50	39.7
3	3:55	39.5

Wind Turbine Sound Sampling: Fairhaven 10 October 2012

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
10-Oct-12		
Time: 12:09 am		
Run #	mm:ss	dB(A)
1	4:00	40.2
1	4:05	40.3
1	4:10	41.1
1	4:15	40.7
1	4:20	41
1	4:25	40.1
1	4:30	40.1
1	4:35	39.4
1	4:40	38.9
1	4:45	39.4
1	4:50	40.4
1	4:55	41.4
1	5:00	43.1

12 Little Bay Rd		
10-Oct-12		
Time: 12:15 am		
Run #	mm:ss	dB(A)
2	4:00	38.5
2	4:05	38.6
2	4:10	38.5
2	4:15	38.9
2	4:20	38.3
2	4:25	39.1
2	4:30	38.1
2	4:35	38.7
2	4:40	39
2	4:45	38.8
2	4:50	39
2	4:55	39.5
2	5:00	38.9

12 Little Bay Rd		
10-Oct-12		
Time: 12:22 am		
Run #	mm:ss	dB(A)
3	4:00	39.6
3	4:05	40.1
3	4:10	39.7
3	4:15	39.6
3	4:20	39.8
3	4:25	39.1
3	4:30	40.2
3	4:35	39.6
3	4:40	40.4
3	4:45	40.6
3	4:50	39.5
3	4:55	40
3	5:00	40

L90	38.8	dBA
Range	37.7	to
	43.1	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	41.2	dBA	Leq	39.2	dBA	Leq	40.4	dBA
L90	39.4	dBA	L90	38.4	dBA	L90	39	dBA

Met Data

WS at Hub	5.4	m/s
WS at West Is.	4.1	m/s
WD at Hub	25	degrees
WD at West Is.	NE	
BP	30.12	in
Humidity	43	%
Temp	56.3	degr F

Wind Turbine Sound Sampling: Fairhaven 10 October 2012

IMPACT SOUND - PRELIMINARY DATA

3 Teal Circle		
10-Oct-12		
Time: 1:08 am		
Run #	mm:ss	dB(A)
1	5	40.5
1	10	41.2
1	15	40.6
1	20	40.2
1	25	42
1	30	40.1
1	35	39.2
1	40	38.7
1	45	39.5
1	50	40.2
1	55	41.1
1	60	40
1	1:05	40
1	1:10	41.5
1	1:15	42.4
1	1:20	41.8
1	1:25	42.6
1	1:30	42.8
1	1:35	41.5
1	1:40	40.1
1	1:45	39.4
1	1:50	38.6
1	1:55	39.3
1	2:00	40.6
1	2:05	41.1
1	2:10	41
1	2:15	40.6
1	2:20	42.8
1	2:25	43.4
1	2:30	42
1	2:35	42.4
1	2:40	40.6
1	2:45	40.7
1	2:50	39.4
1	2:55	39.3
1	3:00	39.6
1	3:05	39.9
1	3:10	40.2
1	3:15	40
1	3:20	39.4
1	3:25	39.8
1	3:30	39.3
1	3:35	39.1
1	3:40	39
1	3:45	38.7
1	3:50	38.7
1	3:55	39.3
1	4:00	39.3
1	4:05	39.7
1	4:10	41.5
1	4:15	40.1
1	4:20	38.8

3 Teal Circle		
10-Oct-12		
Time: 1:15 am		
Run #	mm:ss	dB(A)
2	5	39.4
2	10	41.7
2	15	40.9
2	20	39.8
2	25	40.1
2	30	39.9
2	35	40.2
2	40	39.7
2	45	40.2
2	50	39
2	55	37.7
2	60	38.1
2	1:05	38.5
2	1:10	38.5
2	1:15	38.5
2	1:20	38.9
2	1:25	38.5
2	1:30	39.4
2	1:35	41.1
2	1:40	39.9
2	1:45	40.4
2	1:50	39.3
2	1:55	38.8
2	2:00	38.8
2	2:05	38.6
2	2:10	39.4
2	2:15	41.1
2	2:20	41.2
2	2:25	41.1
2	2:30	40.5
2	2:35	40.6
2	2:40	40.1
2	2:45	40.4
2	2:50	40.6
2	2:55	40.3
2	3:00	40
2	3:05	39.1
2	3:10	39
2	3:15	39.7
2	3:20	39.1
2	3:25	39.3
2	3:30	39.4
2	3:35	40.6
2	3:40	40.1
2	3:45	40.4
2	3:50	40.2
2	3:55	39.4
2	4:00	39.6
2	4:05	39.9
2	4:10	39.3
2	4:15	39.2
2	4:20	39

3 Teal Circle		
10-Oct-12		
Time: 1:22 am		
Run #	mm:ss	dB(A)
3	5	40.2
3	10	38.9
3	15	40.2
3	20	39.7
3	25	41.4
3	30	39.6
3	35	39.9
3	40	38.9
3	45	38.7
3	50	39.1
3	55	41.1
3	60	40.7
3	1:05	41.2
3	1:10	40.4
3	1:15	42.1
3	1:20	39.3
3	1:25	39.8
3	1:30	41.2
3	1:35	40.2
3	1:40	40.9
3	1:45	40.7
3	1:50	40.5
3	1:55	38.7
3	2:00	39.3
3	2:05	40.1
3	2:10	39.3
3	2:15	38.2
3	2:20	39
3	2:25	39.8
3	2:30	39.2
3	2:35	38.7
3	2:40	38
3	2:45	38
3	2:50	38.7
3	2:55	38.5
3	3:00	39.8
3	3:05	39.1
3	3:10	40
3	3:15	39
3	3:20	39.9
3	3:25	40.2
3	3:30	40.2
3	3:35	40.4
3	3:40	40.1
3	3:45	40.6
3	3:50	40.6
3	3:55	41
3	4:00	40.5
3	4:05	40
3	4:10	40.1
3	4:15	41.1
3	4:20	40

Lmax 2

Lmax 3

Lmax 1

x

x

x

x

Wind Turbine Sound Sampling: Fairhaven 10 October 2012

IMPACT SOUND - PRELIMINARY DATA

3 Teal Circle		
10-Oct-12		
Time: 1:08 am		
Run #	mm:ss	dB(A)
1	4:25	38.9
1	4:30	39.5
1	4:35	41.2
1	4:40	40
1	4:45	39.9
1	4:50	40.9
1	4:55	41
1	5:00	48.6

3 Teal Circle		
10-Oct-12		
Time: 1:15 am		
Run #	mm:ss	dB(A)
2	4:25	39.6
2	4:30	38.6
2	4:35	38.4
2	4:40	38.6
2	4:45	38.3
2	4:50	39.1
2	4:55	38.8
2	5:00	38.7

3 Teal Circle		
10-Oct-12		
Time: 1:22 am		
Run #	mm:ss	dB(A)
3	4:25	40.3
3	4:30	39.2
3	4:35	40
3	4:40	40.2
3	4:45	39.9
3	4:50	40.7
3	4:55	40.2
3	5:00	39.8

Lmax	42.4	dBA
Leq	39.9	dBA
Range	37.7	to 43.4 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	40.7	dBA
L10	42.1	dBA
L50	40.1	dBA
Leq	39.7	dBA
L10	40.7	dBA
L50	39.4	dBA
Leq	40.1	dBA
L10	40.8	dBA
L50	39.9	dBA

Met Data		
WS at Hub	3.7	m/s
WS at West Is.	2.7	m/s
WD at Hub	36	degrees
WD at West Is.	ENE	
BP	30.12	in
Humidity	43	%
Temp	56.3	degr F

Wind Turbine Sound Sampling: Fairhaven 10 October 2013

AMBIENT SOUND - PRELIMINARY DATA

3 Teal Circle		
10-Oct-12		
Time: 12:40 am		
Run #	mm:ss	dB(A)
1	5	37.3
1	10	35.1
1	15	35.8
1	20	38
1	25	36.1
1	30	34.3
1	35	34.2
1	40	33.9
1	45	33.9
1	50	34.2
1	55	33.7
1	60	33.5
1	1:05	35
1	1:10	33.3
1	1:15	34
1	1:20	33.9
1	1:25	34
1	1:30	34.6
1	1:35	34.3
1	1:40	34.2
1	1:45	35.8
1	1:50	33.7
1	1:55	33.7
1	2:00	33.9
1	2:05	33.9
1	2:10	33.8
1	2:15	33.6
1	2:20	33.9
1	2:25	34
1	2:30	33.6
1	2:35	33.5
1	2:40	33.3
1	2:45	33.8
1	2:50	34.2
1	2:55	33.7
1	3:00	34
1	3:05	34.2
1	3:10	34.4
1	3:15	34.6
1	3:20	34
1	3:25	35.4
1	3:30	34.8
1	3:35	34.9
1	3:40	35.1
1	3:45	35.7
1	3:50	37.3
1	3:55	36.3

3 Teal Circle		
10-Oct-12		
Time: 12:46 am		
Run #	mm:ss	dB(A)
2	5	41.6
2	10	35.8
2	15	34.9
2	20	34.9
2	25	34.9
2	30	41.3
2	35	41.2
2	40	36.1
2	45	34.9
2	50	34.3
2	55	34.6
2	60	34.6
2	1:05	34.9
2	1:10	35.3
2	1:15	37.2
2	1:20	35.8
2	1:25	35.3
2	1:30	34.8
2	1:35	34.9
2	1:40	35.1
2	1:45	35.2
2	1:50	35.1
2	1:55	34.2
2	2:00	34.4
2	2:05	34.9
2	2:10	34.8
2	2:15	35.1
2	2:20	34.8
2	2:25	34.6
2	2:30	34.6
2	2:35	35
2	2:40	35.2
2	2:45	35.1
2	2:50	35.1
2	2:55	35.9
2	3:00	37.1
2	3:05	36.5
2	3:10	35.9
2	3:15	36
2	3:20	35.9
2	3:25	36
2	3:30	35.2
2	3:35	35.2
2	3:40	34.5
2	3:45	35.1
2	3:50	35.2
2	3:55	35.3

3 Teal Circle		
10-Oct-12		
Time: 12:53 am		
Run #	mm:ss	dB(A)
3	5	36.5
3	10	38.6
3	15	35.1
3	20	35.9
3	25	35.5
3	30	35.8
3	35	36.6
3	40	37.4
3	45	38
3	50	36.4
3	55	36
3	60	36.3
3	1:05	36
3	1:10	35.8
3	1:15	35.1
3	1:20	35.5
3	1:25	36.9
3	1:30	37.2
3	1:35	37.3
3	1:40	36.3
3	1:45	35.5
3	1:50	35.1
3	1:55	35.9
3	2:00	34.9
3	2:05	34.9
3	2:10	34.9
3	2:15	34.6
3	2:20	35.2
3	2:25	35.2
3	2:30	35
3	2:35	35.1
3	2:40	35.3
3	2:45	35.7
3	2:50	34.9
3	2:55	34.6
3	3:00	34.6
3	3:05	35.1
3	3:10	35.1
3	3:15	34.1
3	3:20	35.4
3	3:25	35.1
3	3:30	35.2
3	3:35	34.8
3	3:40	35.2
3	3:45	34.7
3	3:50	34.9
3	3:55	35

Wind Turbine Sound Sampling: Fairhaven 10 October 2013

AMBIENT SOUND - PRELIMINARY DATA

3 Teal Circle		
10-Oct-12		
Time: 12:40 am		
Run #	mm:ss	dB(A)
1	4:00	36.9
1	4:05	36.8
1	4:10	35.6
1	4:15	35.8
1	4:20	35.9
1	4:25	35.4
1	4:30	35.6
1	4:35	37.4
1	4:40	36.3
1	4:45	35.6
1	4:50	35.3
1	4:55	35.1
1	5:00	34.9

3 Teal Circle		
10-Oct-12		
Time: 12:46 am		
Run #	mm:ss	dB(A)
2	4:00	34
2	4:05	34.8
2	4:10	34.4
2	4:15	34.9
2	4:20	34.8
2	4:25	35.3
2	4:30	35
2	4:35	34.8
2	4:40	34.1
2	4:45	34.3
2	4:50	34.2
2	4:55	33.9
2	5:00	34.2

3 Teal Circle		
10-Oct-12		
Time: 12:53 am		
Run #	mm:ss	dB(A)
3	4:00	35.3
3	4:05	35.2
3	4:10	35.2
3	4:15	35.9
3	4:20	36.8
3	4:25	36.8
3	4:30	37.3
3	4:35	35.6
3	4:40	35.7
3	4:45	35.8
3	4:50	35.9
3	4:55	35.9
3	5:00	35.9

L90	33.9	dBA	
Range	33.3	to	37.3 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	35.3	dBA	Leq	36.9	dBA	Leq	36.2	dBA
L90	33.6	dBA	L90	34.3	dBA	L90	34.7	dBA

Met Data

WS at Hub	4.5	m/s
WS at West Is.	4.2	m/s
WD at Hub	31	degrees
WD at West Is.	NE	
BP	30.12	in
Humidity	43	%
Temp	56.3	degr F

Wind Turbine Sound Sampling: Fairhaven 10 October 2012

IMPACT SOUND - PRELIMINARY DATA

16 Mill Rd		
10-Oct-12		
Time: 1:50 am		
Run #	mm:ss	dB(A)
1	5	36.5
1	10	36.4
1	15	35
1	20	36.4
1	25	35.8
1	30	35
1	35	35.5
1	40	35.2
1	45	35.6
1	50	35.8
1	55	35.7
1	60	35.5
1	1:05	35.5
1	1:10	37.1
1	1:15	35.2
1	1:20	35.8
1	1:25	36.1
1	1:30	36
1	1:35	36.1
1	1:40	36
1	1:45	37.3
1	1:50	35.8
1	1:55	36.7
1	2:00	36.5
1	2:05	36.1
1	2:10	36.4
1	2:15	36.9
1	2:20	36.8
1	2:25	36.1
1	2:30	35.9
1	2:35	36
1	2:40	35.7
1	2:45	35.5
1	2:50	36
1	2:55	35.6
1	3:00	35.2
1	3:05	35.8
1	3:10	35.6
1	3:15	35.2
1	3:20	35.3
1	3:25	36.5
1	3:30	35.1
1	3:35	35.3
1	3:40	35.2
1	3:45	35.2
1	3:50	35.5
1	3:55	35.5
1	4:00	35.9
1	4:05	35.5
1	4:10	36.1
1	4:15	35.7

16 Mill Rd		
10-Oct-12		
Time: 1:56 am		
Run #	mm:ss	dB(A)
2	5	36.9
2	10	34.8
2	15	34.8
2	20	35.5
2	25	36.1
2	30	35.6
2	35	35.2
2	40	35
2	45	35.4
2	50	35.8
2	55	36.2
2	60	35.2
2	1:05	35.5
2	1:10	35.7
2	1:15	35.1
2	1:20	35.2
2	1:25	35
2	1:30	35.8
2	1:35	35.4
2	1:40	36.3
2	1:45	36.1
2	1:50	37.1
2	1:55	36.4
2	2:00	37.3
2	2:05	36.5
2	2:10	35.6
2	2:15	36.1
2	2:20	36
2	2:25	36.6
2	2:30	36.2
2	2:35	37
2	2:40	36.8
2	2:45	35.8
2	2:50	35.7
2	2:55	35.4
2	3:00	35.4
2	3:05	35.7
2	3:10	35.6
2	3:15	35.5
2	3:20	36
2	3:25	36.5
2	3:30	35.7
2	3:35	35.7
2	3:40	35.8
2	3:45	35.6
2	3:50	35.3
2	3:55	35.8
2	4:00	35.7
2	4:05	35.6
2	4:10	35.2
2	4:15	35.5

16 Mill Rd		
10-Oct-12		
Time: 2:01 am		
Run #	mm:ss	dB(A)
3	5	38.3
3	10	36.3
3	15	36.3
3	20	36
3	25	36.3
3	30	35.6
3	35	36
3	40	35.6
3	45	35.4
3	50	34.7
3	55	35
3	60	35.4
3	1:05	35.6
3	1:10	35.2
3	1:15	34.9
3	1:20	35.4
3	1:25	35.5
3	1:30	34.4
3	1:35	35
3	1:40	35.8
3	1:45	35.9
3	1:50	35.4
3	1:55	35.1
3	2:00	35.9
3	2:05	34.7
3	2:10	35.2
3	2:15	34.5
3	2:20	34.6
3	2:25	35.8
3	2:30	34.1
3	2:35	35
3	2:40	34.7
3	2:45	35.6
3	2:50	34.7
3	2:55	35.3
3	3:00	35.4
3	3:05	36.3
3	3:10	36.6
3	3:15	39.4
3	3:20	36.9
3	3:25	38.5
3	3:30	38.9
3	3:35	37.8
3	3:40	35.4
3	3:45	35.1
3	3:50	35.2
3	3:55	34.6
3	4:00	34.1
3	4:05	34.2
3	4:10	34
3	4:15	34.6

Lmax 1

x
Lmax 2

x
Lmax 3

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IMPACT SOUND - PRELIMINARY DATA

16 Mill Rd		
10-Oct-12		
Time: 1:50 am		
Run #	mm:ss	dB(A)
1	4:20	35.4
1	4:25	35.6
1	4:30	35.1
1	4:35	35.1
1	4:40	35.4
1	4:45	36.4
1	4:50	36.3
1	4:55	35.6
1	5:00	35.6

16 Mill Rd		
10-Oct-12		
Time: 1:56 am		
Run #	mm:ss	dB(A)
2	4:20	34.9
2	4:25	34.9
2	4:30	34.7
2	4:35	35
2	4:40	35.6
2	4:45	35.4
2	4:50	35.6
2	4:55	35.4
2	5:00	35.6

16 Mill Rd		
10-Oct-12		
Time: 2:01 am		
Run #	mm:ss	dB(A)
3	4:20	35.7
3	4:25	35.4
3	4:30	36.8
3	4:35	40.9
3	4:40	36.4
3	4:45	34.9
3	4:50	35.1
3	4:55	35.4
3	5:00	34.6

Lmax	36.6	dBA
Leq	35.5	dBA
Range	34	to
		36.9
		dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	35.9	dBA	Leq	35.9	dBA	Leq	35.8	dBA
L10	36.5	dBA	L10	36.4	dBA	L10	36.9	dBA
L50	35.6	dBA	L50	35.6	dBA	L50	35.2	dBA

Met Data

WS at Hub	3.3	m/s
WS at West Is.	2.4	m/s
WD at Hub	25	degrees
WD at West Is.	NE	
BP	30.12	in
Humidity	43	%
Temp	56.3	degr F

Wind Turbine Sound Sampling: Fairhaven 10 October 2012

AMBIENT SOUND - PRELIMINARY DATA

16 Mill Rd		
10-Oct-12		
Time: 2:11 am		
Run #	mm:ss	dB(A)
1	5	32.5
1	10	32.3
1	15	33.8
1	20	38.4
1	25	33.8
1	30	33
1	35	32.6
1	40	32.1
1	45	31.9
1	50	31.3
1	55	31.3
1	60	31.3
1	1:05	31.5
1	1:10	31.3
1	1:15	31.8
1	1:20	31.2
1	1:25	31.3
1	1:30	31.1
1	1:35	31.1
1	1:40	31.3
1	1:45	33.2
1	1:50	31.5
1	1:55	31
1	2:00	31.2
1	2:05	31.5
1	2:10	31.1
1	2:15	31.1
1	2:20	31.1
1	2:25	31.5
1	2:30	31.3
1	2:35	31.7
1	2:40	31
1	2:45	31.3
1	2:50	31.3
1	2:55	31.3
1	3:00	31.1
1	3:05	31.5
1	3:10	31
1	3:15	31.2
1	3:20	31.1
1	3:25	31.3
1	3:30	31.1
1	3:35	30.9
1	3:40	31
1	3:45	31.3
1	3:50	31.6
1	3:55	32.8
1	4:00	34.7

16 Mill Rd		
10-Oct-12		
Time: 2:18 am		
Run #	mm:ss	dB(A)
2	5	34.6
2	10	32.7
2	15	32.8
2	20	33.7
2	25	32.3
2	30	30.8
2	35	30.8
2	40	31.1
2	45	31.2
2	50	32
2	55	32.4
2	60	32
2	1:05	32.1
2	1:10	32.3
2	1:15	32.6
2	1:20	32.6
2	1:25	32
2	1:30	32.3
2	1:35	38.5
2	1:40	46.9
2	1:45	50
2	1:50	50
2	1:55	50
2	2:00	45.9
2	2:05	39.4
2	2:10	33.2
2	2:15	34.2
2	2:20	34.9
2	2:25	33.1
2	2:30	31.8
2	2:35	31.5
2	2:40	31.1
2	2:45	31.1
2	2:50	31.6
2	2:55	31.6
2	3:00	31.5
2	3:05	31.3
2	3:10	31.2
2	3:15	31.1
2	3:20	31.1
2	3:25	34.2
2	3:30	31.5
2	3:35	31.3
2	3:40	31.6
2	3:45	31.6
2	3:50	31
2	3:55	30.8
2	4:00	31.8

16 Mill Rd		
10-Oct-12		
Time: 2:23 am		
Run #	mm:ss	dB(A)
3	5	33.1
3	10	32.1
3	15	32.3
3	20	32.2
3	25	31.8
3	30	31.5
3	35	31.8
3	40	31.3
3	45	31.5
3	50	31.9
3	55	31.7
3	60	31.7
3	1:05	31.7
3	1:10	31.8
3	1:15	31.9
3	1:20	32
3	1:25	31.6
3	1:30	31.5
3	1:35	31.7
3	1:40	31.5
3	1:45	32.3
3	1:50	31.7
3	1:55	31.8
3	2:00	31.7
3	2:05	31.5
3	2:10	31.7
3	2:15	31.6
3	2:20	32.8
3	2:25	31.7
3	2:30	31.5
3	2:35	31.3
3	2:40	31.5
3	2:45	31.5
3	2:50	31.6
3	2:55	31.5
3	3:00	31.8
3	3:05	31.6
3	3:10	31.5
3	3:15	31.5
3	3:20	31.7
3	3:25	32
3	3:30	31.7
3	3:35	32.4
3	3:40	31.3
3	3:45	31.2
3	3:50	31.3
3	3:55	31.5
3	4:00	31.3

Wind Turbine Sound Sampling: Fairhaven 10 October 2012

AMBIENT SOUND - PRELIMINARY DATA

16 Mill Rd		
10-Oct-12		
Time: 2:11 am		
Run #	mm:ss	dB(A)
1	4:05	42.1
1	4:10	35.4
1	4:15	33.5
1	4:20	34.1
1	4:25	34.3
1	4:30	34.2
1	4:35	35.4
1	4:40	32.8
1	4:45	32.1
1	4:50	31.6
1	4:55	31.5
1	5:00	31.9

16 Mill Rd		
10-Oct-12		
Time: 2:18 am		
Run #	mm:ss	dB(A)
2	4:05	31.5
2	4:10	30.9
2	4:15	31.2
2	4:20	31.5
2	4:25	31.6
2	4:30	31.9
2	4:35	32.1
2	4:40	31.9
2	4:45	31.7
2	4:50	31.5
2	4:55	32.1
2	5:00	31.6

16 Mill Rd		
10-Oct-12		
Time: 2:23 am		
Run #	mm:ss	dB(A)
3	4:05	31.5
3	4:10	31.5
3	4:15	31.8
3	4:20	31.5
3	4:25	31.5
3	4:30	32.4
3	4:35	32.2
3	4:40	32
3	4:45	31.9
3	4:50	32.1
3	4:55	32
3	5:00	32.2

L90	31.1	dBA
Range	30.8	to
	34.6	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	32.7	dBA	Leq	44.2	dBA	Leq	32.1	dBA
L90	31	dBA	L90	30.9	dBA	L90	31.2	dBA

Met Data

WS at Hub	3.2	m/s
WS at West Is.	3.3	m/s
WD at Hub	37	degrees
WD at West Is.	NE	
BP	30.11	in
Humidity	43	%
Temp	56.3	degr F

Wind Turbine Sound Sampling Summary: Fairhaven 10 October 2012
PRELIMINARY DATA

LOCATION				
	Parameter	16 Mill Rd	12 Little Bay Rd	3 Teal St
Hand Log data (dBA)	Lmax	36.6	44.8	42.4
	L90	31.1	38.8	33.9
	Diff	5.5	6.0	8.5
	Range Turbine on	34 - 36.6	41.7- 44.8	37.7-42.4
	Range Turbine Off	30.8 - 34.6	37.7 - 43.1	33.3 - 37.3
MET	Wind Direction	NE	NE	NE
	Relationship to WT	Perpendicular to right	Downwind and left	Downwind
	Wind Speed Hub	3.2 - 3.3	5.0 - 5.4	3.7 - 4.5

Wind Turbine Sound Sampling Fairhaven 15 October 2012

IMPACT SOUND - PRELIMINARY DATA

16 Mill St		
15-Oct-12		
Time: 1:38 am		
Run #	mm:ss	dB(A)
1	5	43.5
1	10	42.5
1	15	42.3
1	20	42.3
1	25	44.1
1	30	44.1
1	35	44.6
1	40	44.5
1	45	45.1
1	50	43.8
1	55	43.1
1	60	44.7
1	1:05	44.6
1	1:10	44.5
1	1:15	44.1
1	1:20	43.2
1	1:25	42.1
1	1:30	44.7
1	1:35	43.7
1	1:40	46.2
1	1:45	44.3
1	1:50	43.7
1	1:55	43.4
1	2:00	44.2
1	2:05	45.4
1	2:10	45
1	2:15	43
1	2:20	43.8
1	2:25	42.8
1	2:30	42.2
1	2:35	42.7
1	2:40	44.8
1	2:45	43.9
1	2:50	43.2
1	2:55	42.8
1	3:00	43
1	3:05	44.5
1	3:10	43
1	3:15	43.3
1	3:20	43.4
1	3:25	42.8
1	3:30	42.7
1	3:35	44.5
1	3:40	44.3
1	3:45	44.6
1	3:50	44.5
1	3:55	44.5
1	4:00	42.9
1	4:05	43.2
1	4:10	44.5
1	4:15	44.3
1	4:20	43
1	4:25	44
1	4:30	43.8

16 Mill St		
15-Oct-12		
Time: 1:44 am		
Run #	mm:ss	dB(A)
2	5	46.3
2	10	45.9
2	15	44.7
2	20	43.9
2	25	43.6
2	30	43.9
2	35	44.2
2	40	45.1
2	45	46.3
2	50	47.5
2	55	49
2	60	46.7
2	1:05	45.9
2	1:10	46.6
2	1:15	46
2	1:20	44.4
2	1:25	44.6
2	1:30	43.3
2	1:35	43.9
2	1:40	44.1
2	1:45	44.6
2	1:50	44.3
2	1:55	44.4
2	2:00	43.3
2	2:05	43.7
2	2:10	43.5
2	2:15	42.9
2	2:20	44.6
2	2:25	44.1
2	2:30	45.4
2	2:35	45.5
2	2:40	44.9
2	2:45	43.6
2	2:50	43.2
2	2:55	43.8
2	3:00	44.6
2	3:05	45.7
2	3:10	44.8
2	3:15	44.9
2	3:20	44.8
2	3:25	45.9
2	3:30	45.6
2	3:35	44.7
2	3:40	45.1
2	3:45	45.3
2	3:50	46
2	3:55	46.4
2	4:00	45.7
2	4:05	44.3
2	4:10	44.9
2	4:15	45.3
2	4:20	45.3
2	4:25	46.8
2	4:30	47.3

16 Mill St		
15-Oct-12		
Time: 1:50 am		
Run #	mm:ss	dB(A)
3	5	45.4
3	10	45.3
3	15	45.4
3	20	45.4
3	25	48.3
3	30	49
3	35	47.9
3	40	46.6
3	45	45
3	50	45.1
3	55	44.8
3	60	45.2
3	1:05	48.4
3	1:10	46
3	1:15	46.9
3	1:20	47.8
3	1:25	46.6
3	1:30	46
3	1:35	44.1
3	1:40	44.6
3	1:45	45
3	1:50	44.7
3	1:55	43.4
3	2:00	45.7
3	2:05	47.5
3	2:10	49.3
3	2:15	46.7
3	2:20	48
3	2:25	46.9
3	2:30	47.6
3	2:35	47.7
3	2:40	46.3
3	2:45	46.9
3	2:50	45.7
3	2:55	44.9
3	3:00	45.5
3	3:05	45.3
3	3:10	43.6
3	3:15	44.4
3	3:20	44.1
3	3:25	44.3
3	3:30	45.5
3	3:35	48.6
3	3:40	49.4
3	3:45	47.4
3	3:50	47.1
3	3:55	45.6
3	4:00	43.8
3	4:05	45.4
3	4:10	46.5
3	4:15	44.5
3	4:20	44.5
3	4:25	44.2
3	4:30	43.3

Lmax 3

Lmax 2

Wind Turbine Sound Sampling Fairhaven 15 October 2012
IMPACT SOUND - PRELIMINARY DATA

16 Mill St		
15-Oct-12		
Time: 1:38 am		
Run #	mm:ss	dB(A)
1	4:35	44.2
1	4:40	45.2
1	4:45	46
1	4:50	46.2
1	4:55	46.3
1	5:00	45

16 Mill St		
15-Oct-12		
Time: 1:44 am		
Run #	mm:ss	dB(A)
2	4:35	46.8
2	4:40	48.1
2	4:45	44.2
2	4:50	44.5
2	4:55	46
2	5:00	45.5

16 Mill St		
15-Oct-12		
Time: 1:50 am		
Run #	mm:ss	dB(A)
3	4:35	43.6
3	4:40	45.9
3	4:45	49.1
3	4:50	49.1
3	4:55	48.5
3	5:00	47

Lmax	46.1	dBA
Leq	44.3	dBA
Range	42.1	to
		46.5
		dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	44.1	dBA
L10	45.2	dBA
L50	43.9	dBA
Leq	45.3	dBA
L10	46.7	dBA
L50	44.9	dBA
Leq	46.4	dBA
L10	48.3	dBA
L50	45.8	dBA

Met Data		
WS at Hub	9.3	m/s
WS at West Is.	4	m/s
WD at Hub	200	degrees
WD at West Is.	SSW	
BP	29.98	in
Humidity	50	%
Temp	63.8	degr F

*Generator on So Turbine not operating
Results invalid*

Wind Turbine Sound Sampling: Fairhaven 15 October 13

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
15-Oct-12		
Time : 1:58 AM		
Run #	mm:ss	dB(A)
1	5	42.9
1	10	42
1	15	43.9
1	20	47.2
1	25	48.4
1	30	46.1
1	35	46.2
1	40	47.4
1	45	46
1	50	44.6
1	55	45
1	60	46.9
1	1:05	47
1	1:10	43.9
1	1:15	45.3
1	1:20	48.1
1	1:25	50.7
1	1:30	48.6
1	1:35	50
1	1:40	50.4
1	1:45	50.9
1	1:50	48.9
1	1:55	48.2
1	2:00	48
1	2:05	45.9
1	2:10	45.7
1	2:15	44.3
1	2:20	43.3
1	2:25	45.1
1	2:30	46.3
1	2:35	46.7
1	2:40	46.2
1	2:45	44.9
1	2:50	43.2
1	2:55	41.7
1	3:00	41.8
1	3:05	43
1	3:10	42.5
1	3:15	41.8
1	3:20	42.5
1	3:25	45.1
1	3:30	44.6
1	3:35	44.1
1	3:40	43.2
1	3:45	43.3
1	3:50	43.3
1	3:55	45.2

12 Little Bay Rd		
15-Oct-12		
Time: 2:04 am		
Run #	mm:ss	dB(A)
2	5	42
2	10	42.1
2	15	44.9
2	20	47.1
2	25	47.2
2	30	45.8
2	35	45.5
2	40	43
2	45	42.9
2	50	42.3
2	55	44.1
2	60	48.9
2	1:05	45.5
2	1:10	51.6
2	1:15	46.4
2	1:20	44.6
2	1:25	42.5
2	1:30	42.5
2	1:35	42.5
2	1:40	41.7
2	1:45	40.4
2	1:50	40.8
2	1:55	40.6
2	2:00	40
2	2:05	39.9
2	2:10	40.5
2	2:15	41.9
2	2:20	42.4
2	2:25	41
2	2:30	41.9
2	2:35	43.1
2	2:40	42.1
2	2:45	42.4
2	2:50	42.9
2	2:55	42.7
2	3:00	41.3
2	3:05	40.8
2	3:10	42.4
2	3:15	43.5
2	3:20	46.3
2	3:25	43.1
2	3:30	43.8
2	3:35	44.2
2	3:40	44
2	3:45	43.2
2	3:50	44.8
2	3:55	41.6

12 Little Bay Rd		
15-Oct-12		
Time 2:10 AM		
Run #	mm:ss	dB(A)
3	5	40.8
3	10	39.8
3	15	40.7
3	20	42.7
3	25	41.2
3	30	40.8
3	35	42.8
3	40	47.2
3	45	46.8
3	50	49.8
3	55	50.7
3	60	47.2
3	1:05	46.8
3	1:10	43.6
3	1:15	43.2
3	1:20	43.4
3	1:25	43.7
3	1:30	42.5
3	1:35	43.1
3	1:40	43.7
3	1:45	44.4
3	1:50	42.2
3	1:55	42.9
3	2:00	43.6
3	2:05	42.5
3	2:10	41.1
3	2:15	41.8
3	2:20	42.2
3	2:25	43.5
3	2:30	44.4
3	2:35	42.1
3	2:40	41.9
3	2:45	42.1
3	2:50	40.8
3	2:55	41.5
3	3:00	42.2
3	3:05	42.8
3	3:10	43.3
3	3:15	45.1
3	3:20	46.2
3	3:25	46.3
3	3:30	44.5
3	3:35	44.6
3	3:40	45.5
3	3:45	45.2
3	3:50	44.7
3	3:55	45.5

Wind Turbine Sound Sampling: Fairhaven 15 October 13

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
15-Oct-12		
Time : 1:58 AM		
Run #	mm:ss	dB(A)
1	4:00	48.9
1	4:05	47.1
1	4:10	47.1
1	4:15	50.2
1	4:20	48.2
1	4:25	46.2
1	4:30	44.1
1	4:35	43.4
1	4:40	43.5
1	4:45	42.6
1	4:50	42.7
1	4:55	44
1	5:00	42.8

12 Little Bay Rd		
15-Oct-12		
Time: 2:04 am		
Run #	mm:ss	dB(A)
2	4:00	43.4
2	4:05	44
2	4:10	43.6
2	4:15	43.9
2	4:20	43.9
2	4:25	43.7
2	4:30	48.1
2	4:35	43.8
2	4:40	44.6
2	4:45	43.6
2	4:50	44.9
2	4:55	44.4
2	5:00	45.6

12 Little Bay Rd		
15-Oct-12		
Time 2:10 AM		
Run #	mm:ss	dB(A)
3	4:00	43.2
3	4:05	42.8
3	4:10	41.6
3	4:15	41.8
3	4:20	40.7
3	4:25	41.7
3	4:30	42.1
3	4:35	42.2
3	4:40	41.7
3	4:45	42.7
3	4:50	44.7
3	4:55	42.6
3	5:00	44.4

L90	41.5	
Range	39.8	to
		48.4

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	46.3	dBA	Leq	44.2	dBA	Leq	44.1	dBA
L90	42.4	dBA	L90	40.8	dBA	L90	41	dBA

Met Data

WS at Hub	10.4	m/s
WS at West Is.	4.2	m/s
WD at Hub	193	degrees
WD at West Is.	SSW	
BP	29.97	in
Humidity	49.6	%
Temp	63.8	degr F

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

IMPACT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
15-Oct-12		
Time: 2:52 AM		
Run #	mm:ss	dB(A)
1	5	50.3
1	10	51.1
1	15	50.1
1	20	49.5
1	25	49.1
1	30	50.1
1	35	49.8
1	40	48.8
1	45	48.6
1	50	48.8
1	55	51
1	60	51.5
1	1:05	50.7
1	1:10	48.8
1	1:15	50.3
1	1:20	51.1
1	1:25	49.2
1	1:30	49.8
1	1:35	50.3
1	1:40	50.4
1	1:45	51.8
1	1:50	50.6
1	1:55	50.4
1	2:00	50.3
1	2:05	49.8
1	2:10	50.6
1	2:15	52
1	2:20	51.9
1	2:25	52.9
1	2:30	50.5
1	2:35	50.2
1	2:40	50.2
1	2:45	53.8
1	2:50	52.2
1	2:55	50.5
1	3:00	49.8
1	3:05	50.9
1	3:10	51.2
1	3:15	51.1
1	3:20	51.3
1	3:25	54.6
1	3:30	51.6
1	3:35	50.1
1	3:40	51.6
1	3:45	51.8
1	3:50	49.9
1	3:55	49.5
1	4:00	49.5
1	4:05	50.3
1	4:10	51.2
1	4:15	50.2
1	4:20	50.4

Lmax 1

12 Little Bay Rd		
15-Oct-12		
Time: 2:57 AM		
Run #	mm:ss	dB(A)
2	5	50.3
2	10	49.5
2	15	51.7
2	20	52.9
2	25	51.6
2	30	50.8
2	35	49.9
2	40	49.8
2	45	50.4
2	50	49.8
2	55	49.1
2	60	49.7
2	1:05	49.3
2	1:10	49.5
2	1:15	49.6
2	1:20	49.3
2	1:25	50
2	1:30	49.8
2	1:35	51
2	1:40	51.6
2	1:45	51.1
2	1:50	49.9
2	1:55	49.9
2	2:00	50.7
2	2:05	50.1
2	2:10	50.7
2	2:15	52
2	2:20	51
2	2:25	50.8
2	2:30	51
2	2:35	51.4
2	2:40	49.8
2	2:45	49.6
2	2:50	49.9
2	2:55	50.5
2	3:00	50.8
2	3:05	50.4
2	3:10	49.4
2	3:15	50.5
2	3:20	51.1
2	3:25	53
2	3:30	50.5
2	3:35	49.8
2	3:40	50.3
2	3:45	50.2
2	3:50	49.8
2	3:55	49.8
2	4:00	49.2
2	4:05	50.2
2	4:10	50.7
2	4:15	51.4
2	4:20	51

Lmax 2

12 Little Bay Rd		
15-Oct-12		
Time: 3:04 AM		
Run #	mm:ss	dB(A)
3	5	50.7
3	10	49.8
3	15	51.1
3	20	51.2
3	25	52.7
3	30	51.1
3	35	49.4
3	40	49.9
3	45	50.3
3	50	49
3	55	48.8
3	60	50
3	1:05	49
3	1:10	49.2
3	1:15	49.4
3	1:20	50.3
3	1:25	50.7
3	1:30	50.3
3	1:35	49.8
3	1:40	51
3	1:45	51.9
3	1:50	51
3	1:55	49.4
3	2:00	49.3
3	2:05	49.6
3	2:10	50.4
3	2:15	50.9
3	2:20	51.1
3	2:25	52.2
3	2:30	51.7
3	2:35	50.8
3	2:40	51.8
3	2:45	50.7
3	2:50	49.8
3	2:55	50.3
3	3:00	50.7
3	3:05	50.5
3	3:10	49.8
3	3:15	49.4
3	3:20	49.3
3	3:25	49.3
3	3:30	49.6
3	3:35	49.3
3	3:40	48.9
3	3:45	49.9
3	3:50	49.6
3	3:55	50.7
3	4:00	51.4
3	4:05	51.1
3	4:10	50.7
3	4:15	49.4
3	4:20	49.1

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

IMPACT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
15-Oct-12		
Time: 2:52 AM		
Run #	mm:ss	dB(A)
1	4:25	50
1	4:30	51.9
1	4:35	50.5
1	4:40	49.4
1	4:45	50.8
1	4:50	50.5
1	4:55	52
1	5:00	53.7

12 Little Bay Rd		
15-Oct-12		
Time: 2:57 AM		
Run #	mm:ss	dB(A)
2	4:25	50
2	4:30	49.6
2	4:35	50.1
2	4:40	51.1
2	4:45	52.1
2	4:50	51.4
2	4:55	50.2
2	5:00	49.7

12 Little Bay Rd		
15-Oct-12		
Time: 3:04 AM		
Run #	mm:ss	dB(A)
3	4:25	50.4
3	4:30	50.1
3	4:35	50.2
3	4:40	51.2
3	4:45	50.2
3	4:50	49.3
3	4:55	49.5
3	5:00	50.2

Lmax	51.0	dBA
Leq	50.0	dBA
Range	48.6	to 51.5 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	50.8	dBA
L10	52.1	dBA
L50	50.3	dBA

Leq	50.5	dBA
L10	51.5	dBA
L50	50.2	dBA

Leq	50.3	dBA
L10	51.4	dBA
L50	50	dBA

Met Data		
WS at Hub	12.1	m/s
WS at West Is.	5.1	m/s
WD at Hub	200	degrees
WD at West Is.	South	
BP	29.95	in
Humidity	51	%
Temp	63.6	degr F

*Generator on So Turbine not operating
Results invalid*

Wind Turbine Sound Sampling: Fairhaven 15 October 2013

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
15-Oct-12		
Time: 2:28 am		
Run #	mm:ss	dB(A)
1	5	46
1	10	46.8
1	15	47.9
1	20	48.5
1	25	48.4
1	30	48.5
1	35	47.6
1	40	47.7
1	45	47.9
1	50	48.6
1	55	47.8
1	60	47.7
1	1:05	47.9
1	1:10	47.6
1	1:15	48.5
1	1:20	50.3
1	1:25	49.9
1	1:30	48.4
1	1:35	49.6
1	1:40	50.8
1	1:45	49.7
1	1:50	48.8
1	1:55	49.6
1	2:00	49.3
1	2:05	48.2
1	2:10	50.3
1	2:15	49.6
1	2:20	48.6
1	2:25	48.2
1	2:30	47.7
1	2:35	47.9
1	2:40	48.5
1	2:45	47.9
1	2:50	47.2
1	2:55	47.2
1	3:00	49.1
1	3:05	49.1
1	3:10	51
1	3:15	51.9
1	3:20	49.8
1	3:25	47.5
1	3:30	47.8
1	3:35	47.5
1	3:40	48.6
1	3:45	48.5
1	3:50	47.5
1	3:55	48

12 Little Bay Rd		
15-Oct-12		
Time: 2:34 am		
Run #	mm:ss	dB(A)
2	5	48.6
2	10	48.4
2	15	49.1
2	20	50.1
2	25	48
2	30	47.9
2	35	47.9
2	40	47.7
2	45	48.9
2	50	48
2	55	46.9
2	60	46.8
2	1:05	47.1
2	1:10	48.3
2	1:15	47.9
2	1:20	48
2	1:25	47.6
2	1:30	49.2
2	1:35	50.1
2	1:40	51.2
2	1:45	48.8
2	1:50	48
2	1:55	47.9
2	2:00	48.5
2	2:05	48.5
2	2:10	47.7
2	2:15	47.4
2	2:20	47.6
2	2:25	47.7
2	2:30	47.3
2	2:35	47.8
2	2:40	48.2
2	2:45	47.9
2	2:50	47.7
2	2:55	48.8
2	3:00	47.8
2	3:05	47.3
2	3:10	47.6
2	3:15	48
2	3:20	48.1
2	3:25	47.9
2	3:30	48.1
2	3:35	48.1
2	3:40	49.2
2	3:45	51.3
2	3:50	48.1
2	3:55	47.1

12 Little Bay Rd		
15-Oct-12		
Time: 2:40 am		
Run #	mm:ss	dB(A)
3	5	48.2
3	10	47.9
3	15	47.3
3	20	47.7
3	25	48.8
3	30	46.3
3	35	46.8
3	40	48.1
3	45	49.8
3	50	48.2
3	55	47.8
3	60	46.7
3	1:05	46.6
3	1:10	46.9
3	1:15	48.2
3	1:20	47.8
3	1:25	48.6
3	1:30	48.1
3	1:35	48.2
3	1:40	50.3
3	1:45	48
3	1:50	47.7
3	1:55	47.4
3	2:00	47.1
3	2:05	48
3	2:10	47.1
3	2:15	47.7
3	2:20	48.8
3	2:25	46.8
3	2:30	47.1
3	2:35	47.6
3	2:40	47.5
3	2:45	46.2
3	2:50	48.6
3	2:55	47.6
3	3:00	50.6
3	3:05	49.5
3	3:10	48
3	3:15	47.9
3	3:20	47.2
3	3:25	47.3
3	3:30	46.9
3	3:35	46.8
3	3:40	47.3
3	3:45	47
3	3:50	47.6
3	3:55	48.7

Wind Turbine Sound Sampling: Fairhaven 15 October 2013

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
15-Oct-12		
Time: 2:28 am		
Run #	mm:ss	dB(A)
1	4:00	47.9
1	4:05	47.2
1	4:10	46.9
1	4:15	47.6
1	4:20	47.8
1	4:25	47.8
1	4:30	46.8
1	4:35	46.8
1	4:40	47.6
1	4:45	48.2
1	4:50	48.9
1	4:55	48.8
1	5:00	48.1

12 Little Bay Rd		
15-Oct-12		
Time: 2:34 am		
Run #	mm:ss	dB(A)
2	4:00	48
2	4:05	47.7
2	4:10	47.2
2	4:15	46.5
2	4:20	47.6
2	4:25	46.7
2	4:30	48.5
2	4:35	50.8
2	4:40	48.2
2	4:45	47.1
2	4:50	45.4
2	4:55	45.9
2	5:00	46.2

12 Little Bay Rd		
15-Oct-12		
Time: 2:40 am		
Run #	mm:ss	dB(A)
3	4:00	50.9
3	4:05	48.7
3	4:10	47.9
3	4:15	48.4
3	4:20	47.3
3	4:25	47.1
3	4:30	46.8
3	4:35	48.6
3	4:40	47.9
3	4:45	48.1
3	4:50	50.8
3	4:55	48.5
3	5:00	46.8

L90	46.8
Range	45.4 to 50.8

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	48.5	dBA	Leq	48.2	dBA	Leq	48	dBA
L90	46.8	dBA	L90	46.7	dBA	L90	46.7	dBA

Met Data

WS at Hub	10.8	m/s
WS at West Is.	3.6	m/s
WD at Hub	192	degrees
WD at West Is.	SSW	
BP	29.96	in
Humidity	51	%
Temp	63.6	degr F

Wind Turbine Sound Sampling: Fairhaven 15 October 2013

IMPACT SOUND - PRELIMINARY DATA

3 Teal Circle		
15-Oct-12		
Time: 3:21 am		
Run #	mm:ss	dB(A)
1	5	49.3
1	10	49.8
1	15	46.7
1	20	47.3
1	25	46.3
1	30	46.1
1	35	45.9
1	40	45.3
1	45	45.3
1	50	46.2
1	55	X
1	60	47.1
1	1:05	47.6
1	1:10	46.8
1	1:15	47.6
1	1:20	47.2
1	1:25	48.4
1	1:30	50.7
1	1:35	49.9
1	1:40	47.9
1	1:45	47.1
1	1:50	48.4
1	1:55	46.7
1	2:00	47.5
1	2:05	49.5
1	2:10	48
1	2:15	46.4
1	2:20	49
1	2:25	48.5
1	2:30	46.7
1	2:35	45.6
1	2:40	46.6
1	2:45	48.1
1	2:50	46.9
1	2:55	47
1	3:00	49.4
1	3:05	48.5
1	3:10	48.6
1	3:15	47.8
1	3:20	45.2
1	3:25	45.2
1	3:30	46.8
1	3:35	46.9
1	3:40	46.7
1	3:45	46.9
1	3:50	48.4
1	3:55	49.1
1	4:00	48.1
1	4:05	49.4
1	4:10	47.4
1	4:15	46.6
1	4:20	46.8

3 Teal Circle		
15-Oct-12		
Time: 3:27 am		
Run #	mm:ss	dB(A)
2	5	47.3
2	10	46.9
2	15	47.9
2	20	48.1
2	25	48.5
2	30	48.2
2	35	47.7
2	40	46.9
2	45	46.1
2	50	48.9
2	55	47.2
2	60	46.5
2	1:05	46.7
2	1:10	46.2
2	1:15	45.2
2	1:20	45.2
2	1:25	46.1
2	1:30	45.5
2	1:35	45.7
2	1:40	46.3
2	1:45	46.1
2	1:50	47.4
2	1:55	46.9
2	2:00	47.5
2	2:05	47
2	2:10	47.8
2	2:15	48
2	2:20	47.8
2	2:25	47.1
2	2:30	47.2
2	2:35	47.7
2	2:40	48.2
2	2:45	48.6
2	2:50	47.9
2	2:55	48.2
2	3:00	48.9
2	3:05	47.8
2	3:10	47.9
2	3:15	51.5
2	3:20	48.6
2	3:25	46.7
2	3:30	47.4
2	3:35	47.3
2	3:40	48.5
2	3:45	46.5
2	3:50	46.2
2	3:55	45.8
2	4:00	47.3
2	4:05	46.4
2	4:10	49.2
2	4:15	48.1
2	4:20	46.4

3 Teal Circle		
15-Oct-12		
Time: 3:33 am		
Run #	mm:ss	dB(A)
3	5	48.7
3	10	48
3	15	46.4
3	20	48.1
3	25	47.2
3	30	45.6
3	35	45.8
3	40	45.9
3	45	46.3
3	50	45.8
3	55	46.6
3	60	50.3
3	1:05	47.9
3	1:10	49.2
3	1:15	48.7
3	1:20	47.3
3	1:25	46.9
3	1:30	45.7
3	1:35	45.8
3	1:40	44.9
3	1:45	44.5
3	1:50	46.1
3	1:55	45.7
3	2:00	46.1
3	2:05	48.9
3	2:10	47.7
3	2:15	48.2
3	2:20	48.3
3	2:25	47.7
3	2:30	47.4
3	2:35	47.1
3	2:40	47.2
3	2:45	48
3	2:50	49.1
3	2:55	46.7
3	3:00	45.7
3	3:05	46.3
3	3:10	46
3	3:15	46.1
3	3:20	46.2
3	3:25	48.3
3	3:30	47.6
3	3:35	48.7
3	3:40	47.5
3	3:45	46.8
3	3:50	46.7
3	3:55	47.2
3	4:00	46.6
3	4:05	46
3	4:10	46.5
3	4:15	46
3	4:20	45.7

Lmax 2

x x

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 15 October 2013

IMPACT SOUND - PRELIMINARY DATA

3 Teal Circle		
15-Oct-12		
Time: 3:21 am		
Run #	mm:ss	dB(A)
1	4:25	46.9
1	4:30	46.3
1	4:35	46.6
1	4:40	49.1
1	4:45	48.4
1	4:50	47.1
1	4:55	47.3
1	5:00	47.1

Lmax 1

3 Teal Circle		
15-Oct-12		
Time: 3:27 am		
Run #	mm:ss	dB(A)
2	4:25	47.1
2	4:30	50.8
2	4:35	49.1
2	4:40	48.8
2	4:45	49
2	4:50	47.9
2	4:55	48.1
2	5:00	47.6

3 Teal Circle		
15-Oct-12		
Time: 3:33 am		
Run #	mm:ss	dB(A)
3	4:25	46.1
3	4:30	46.2
3	4:35	45.2
3	4:40	45.3
3	4:45	45.9
3	4:50	45.4
3	4:55	46.3
3	5:00	47.2

Lmax	49.0	dBA
Leq	46.9	dBA
Range	44.5	to 49.1 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	47.7	dBA
L10	49	dBA
L50	47.1	dBA

Leq	47.6	dBA
L10	48.9	dBA
L50	47.3	dBA

Leq	47.1	dBA
L10	48.7	dBA
L50	46.5	dBA

Met Data		
WS at Hub	12.3	m/s
WS at West Is.	5	m/s
WD at Hub	200	degrees
WD at West Is.	SW	
BP	29.93	in
Humidity	56	%
Temp	63.8	degr F

*Generator on So Turbine not operating
Results invalid*

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

AMBIENT SOUND - PRELIMINARY DATA

3 Teal Cir		
15-Oct-12		
Time: 3:43 am		
Run #	mm:ss	dB(A)
1	5	47.1
1	10	47.2
1	15	45.7
1	20	45.4
1	25	46.6
1	30	45.2
1	35	45.6
1	40	45
1	45	45.2
1	50	45.4
1	55	46.5
1	60	47.6
1	1:05	45.4
1	1:10	46.6
1	1:15	49
1	1:20	48.8
1	1:25	48.4
1	1:30	48
1	1:35	46.5
1	1:40	44.5
1	1:45	45.6
1	1:50	46.1
1	1:55	44.2
1	2:00	43.5
1	2:05	43.7
1	2:10	45.1
1	2:15	46.2
1	2:20	46.7
1	2:25	47.1
1	2:30	45.2
1	2:35	45.1
1	2:40	47.6
1	2:45	45.6
1	2:50	45.2
1	2:55	46.2
1	3:00	45.6
1	3:05	45.1
1	3:10	45.1
1	3:15	45.3
1	3:20	46.3
1	3:25	45.6
1	3:30	45.7
1	3:35	46.9
1	3:40	48.8
1	3:45	51.9
1	3:50	47.6
1	3:55	44.8

3 Teal Cir		
15-Oct-12		
Time: 3:48 am		
Run #	mm:ss	dB(A)
2	5	43.8
2	10	44.5
2	15	44.7
2	20	46.8
2	25	45.7
2	30	44.8
2	35	44.3
2	40	43.5
2	45	43.4
2	50	43.2
2	55	43.2
2	60	45.8
2	1:05	44.3
2	1:10	44.2
2	1:15	44.3
2	1:20	45.7
2	1:25	45
2	1:30	49.6
2	1:35	47.8
2	1:40	45.3
2	1:45	44.2
2	1:50	45.9
2	1:55	43.6
2	2:00	43.3
2	2:05	42.9
2	2:10	43.8
2	2:15	43.3
2	2:20	44.9
2	2:25	44.4
2	2:30	44.8
2	2:35	44.8
2	2:40	43.4
2	2:45	44.6
2	2:50	45.2
2	2:55	47.1
2	3:00	48
2	3:05	46.8
2	3:10	44.1
2	3:15	43.9
2	3:20	42.9
2	3:25	43.4
2	3:30	43.7
2	3:35	43.9
2	3:40	43.8
2	3:45	43.6
2	3:50	42.6
2	3:55	43.3

3 Teal Cir		
15-Oct-12		
Time: 3:55 am		
Run #	mm:ss	dB(A)
3	5	42.7
3	10	42
3	15	42.4
3	20	42.7
3	25	48.6
3	30	45
3	35	43.9
3	40	41.5
3	45	42
3	50	42.8
3	55	42.5
3	60	42.4
3	1:05	43.1
3	1:10	42.8
3	1:15	42.9
3	1:20	42.9
3	1:25	41.9
3	1:30	40.9
3	1:35	40.7
3	1:40	41.3
3	1:45	41.6
3	1:50	42.6
3	1:55	41.8
3	2:00	41.8
3	2:05	41.3
3	2:10	42.7
3	2:15	43.6
3	2:20	46.4
3	2:25	45.3
3	2:30	43.5
3	2:35	43
3	2:40	42.5
3	2:45	41.9
3	2:50	42
3	2:55	43.6
3	3:00	43.1
3	3:05	43.5
3	3:10	43.7
3	3:15	43.3
3	3:20	42.1
3	3:25	42.4
3	3:30	42.2
3	3:35	41.2
3	3:40	41.2
3	3:45	41
3	3:50	41.8
3	3:55	41.3

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

AMBIENT SOUND - PRELIMINARY DATA

3 Teal Cir		
15-Oct-12		
Time: 3:43 am		
Run #	mm:ss	dB(A)
1	4:00	45.5
1	4:05	45
1	4:10	46.1
1	4:15	45.2
1	4:20	45.8
1	4:25	45.2
1	4:30	45.1
1	4:35	44.8
1	4:40	44.3
1	4:45	45.5
1	4:50	44.9
1	4:55	46.7
1	5:00	45.2

3 Teal Cir		
15-Oct-12		
Time: 3:48 am		
Run #	mm:ss	dB(A)
2	4:00	43.8
2	4:05	43.4
2	4:10	44.8
2	4:15	43.8
2	4:20	43.3
2	4:25	44.2
2	4:30	43.1
2	4:35	43.1
2	4:40	43
2	4:45	43.3
2	4:50	42.9
2	4:55	43.5
2	5:00	43.3

3 Teal Cir		
15-Oct-12		
Time: 3:55 am		
Run #	mm:ss	dB(A)
3	4:00	41
3	4:05	41.1
3	4:10	41.7
3	4:15	41.8
3	4:20	41.3
3	4:25	41.8
3	4:30	41.3
3	4:35	41.6
3	4:40	41.5
3	4:45	41.8
3	4:50	42.4
3	4:55	42.5
3	5:00	40.8

L90	41.7	
Range	40.7	to
		48

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	46.5	dBA	Leq	44.6	dBA	Leq	42.7	dBA
L90	44.7	dBA	L90	42.9	dBA	L90	41	dBA

Met Data

WS at Hub	10.6	m/s
WS at West Is.	5.4	m/s
WD at Hub	191	degrees
WD at West Is.	South	
BP	29.92	in
Humidity	60	%
Temp	64.1	degr F

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

IMPACT SOUND - PRELIMINARY DATA

3 Shawmut St		
15-Oct-12		
Time: 1:06 am		
Run #	mm:ss	dB(A)
1	5	42.5
1	10	43.2
1	15	42.3
1	20	42.2
1	25	42.4
1	30	43.9
1	35	44.9
1	40	49.3
1	45	42.9
1	50	42
1	55	43.1
1	60	42.5
1	1:05	43
1	1:10	42.8
1	1:15	43.3
1	1:20	43.8
1	1:25	43.6
1	1:30	43.6
1	1:35	44.6
1	1:40	44.4
1	1:45	44.6
1	1:50	43.9
1	1:55	41.1
1	2:00	42.9
1	2:05	42.7
1	2:10	42.1
1	2:15	43
1	2:20	45
1	2:25	43.4
1	2:30	47.1
1	2:35	44.3
1	2:40	45.6
1	2:45	44.8
1	2:50	43.7
1	2:55	44.2
1	3:00	43.6
1	3:05	42.3
1	3:10	43.9
1	3:15	43.3
1	3:20	43.2
1	3:25	45.4
1	3:30	44.8
1	3:35	43.1
1	3:40	42.8
1	3:45	43.4
1	3:50	43.6
1	3:55	45.1
1	4:00	44.1
1	4:05	42.7
1	4:10	42.6
1	4:15	42.5
1	4:20	42.3

3 Shawmut St		
15-Oct-12		
Time: 1:13 am		
Run #	mm:ss	dB(A)
2	5	42.3
2	10	43.4
2	15	46.8
2	20	44.5
2	25	41.5
2	30	43.7
2	35	42.9
2	40	42.5
2	45	44.8
2	50	44.5
2	55	43.5
2	60	43.9
2	1:05	43.2
2	1:10	42.9
2	1:15	44.9
2	1:20	43.5
2	1:25	44.6
2	1:30	46
2	1:35	42.2
2	1:40	42.3
2	1:45	43.3
2	1:50	43.3
2	1:55	42
2	2:00	41.8
2	2:05	43.2
2	2:10	42.8
2	2:15	42.7
2	2:20	42.3
2	2:25	43.6
2	2:30	42.8
2	2:35	43.5
2	2:40	43.1
2	2:45	41.9
2	2:50	42.8
2	2:55	43.8
2	3:00	43.2
2	3:05	41.8
2	3:10	43.4
2	3:15	45.3
2	3:20	44
2	3:25	43.4
2	3:30	44
2	3:35	43
2	3:40	42.5
2	3:45	41.9
2	3:50	41.8
2	3:55	44.5
2	4:00	44.5
2	4:05	44.4
2	4:10	43.9
2	4:15	44.2
2	4:20	43

3 Shawmut St		
15-Oct-12		
Time: 1:18 am		
Run #	mm:ss	dB(A)
3	5	42.8
3	10	43.7
3	15	43.5
3	20	42.3
3	25	43.3
3	30	41.9
3	35	43.9
3	40	43.9
3	45	46.1
3	50	42.6
3	55	41.7
3	60	42.3
3	1:05	42.9
3	1:10	43.2
3	1:15	46.3
3	1:20	46.7
3	1:25	44.8
3	1:30	43.1
3	1:35	43.2
3	1:40	42.7
3	1:45	42.6
3	1:50	46.5
3	1:55	45
3	2:00	42.4
3	2:05	45.2
3	2:10	42.3
3	2:15	46.5
3	2:20	44.2
3	2:25	44.1
3	2:30	47.8
3	2:35	45.2
3	2:40	43.8
3	2:45	42
3	2:50	43.2
3	2:55	42.8
3	3:00	42.6
3	3:05	41.2
3	3:10	43.9
3	3:15	42.8
3	3:20	42.7
3	3:25	44.1
3	3:30	45.1
3	3:35	46.4
3	3:40	45.6
3	3:45	46.1
3	3:50	44.9
3	3:55	45.2
3	4:00	44.1
3	4:05	45.1
3	4:10	43.8
3	4:15	43
3	4:20	43.2

x

Lmax 1

x

x

Lmax 2

x

x

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

IMPACT SOUND - PRELIMINARY DATA

3 Shawmut St		
15-Oct-12		
Time: 1:06 am		
Run #	mm:ss	dB(A)
1	4:25	41.6
1	4:30	43.8
1	4:35	43.3
1	4:40	43.8
1	4:45	42.8
1	4:50	42.6
1	4:55	41.9
1	5:00	41.6

3 Shawmut St		
15-Oct-12		
Time: 1:13 am		
Run #	mm:ss	dB(A)
2	4:25	43.8
2	4:30	43
2	4:35	42.2
2	4:40	43
2	4:45	43
2	4:50	42.6
2	4:55	43.7
2	5:00	44.1

3 Shawmut St		
15-Oct-12		
Time: 1:18 am		
Run #	mm:ss	dB(A)
3	4:25	43.8
3	4:30	44.4
3	4:35	41.9
3	4:40	43.3
3	4:45	43.5
3	4:50	42.9
3	4:55	41.9
3	5:00	43.1

Lmax	45.1	dBA
Leq	43.2	dBA
Range	41.1	to 45.2 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	43.8	dBA
L01	47.9	dBA
L10	45.1	dBA
L50	43.2	dBA
Leq	43.4	dBA
L01	46.4	dBA
L10	44.6	dBA
L50	43.1	dBA
Leq	44	dBA
L01	47.4	dBA
L10	45.7	dBA
L50	43.4	dBA

Met Data		
WS at Hub	8.7	m/s
WS at West Is.	4.5	m/s
WD at Hub	198	degrees
WD at West Is.	SSW	
BP	30	in
Humidity	47	%
Temp	63.8	degr F

*Generator on So Turbine not operating
Results invalid*

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

AMBIENT SOUND - PRELIMINARY DATA

3 Shawmut Ave		
15-Oct-12		
Time: 12:40 AM		
Run #	mm:ss	dB(A)
1	5	42.1
1	10	40.8
1	15	44.5
1	20	44.5
1	25	42.7
1	30	43.4
1	35	44.9
1	40	45.1
1	45	42.9
1	50	41.8
1	55	39.9
1	60	41
1	1:05	41.7
1	1:10	43.3
1	1:15	41.2
1	1:20	41
1	1:25	40.8
1	1:30	42
1	1:35	43.9
1	1:40	39.3
1	1:45	41.1
1	1:50	39.3
1	1:55	40.4
1	2:00	40.3
1	2:05	39.7
1	2:10	41
1	2:15	41
1	2:20	41.2
1	2:25	41
1	2:30	41.2
1	2:35	40.5
1	2:40	41.5
1	2:45	40.9
1	2:50	42.2
1	2:55	40.1
1	3:00	39.8
1	3:05	39.1
1	3:10	39.4
1	3:15	38.2
1	3:20	37.6
1	3:25	39.1
1	3:30	39.7
1	3:35	42.1
1	3:40	41.9
1	3:45	41.8
1	3:50	39.7
1	3:55	38.5
1	4:00	41

3 Shawmut Ave		
15-Oct-12		
Time: 12:46 AM		
Run #	mm:ss	dB(A)
2	5	47.5
2	10	42.2
2	15	41.9
2	20	40.5
2	25	45.1
2	30	41.9
2	35	41.9
2	40	40.9
2	45	49
2	50	41.2
2	55	39.1
2	60	40.9
2	1:05	41.2
2	1:10	41.3
2	1:15	44
2	1:20	42.9
2	1:25	40.4
2	1:30	38.2
2	1:35	37.5
2	1:40	39.5
2	1:45	39.4
2	1:50	40.2
2	1:55	41.6
2	2:00	41.6
2	2:05	41.4
2	2:10	43
2	2:15	41.4
2	2:20	42.1
2	2:25	41.5
2	2:30	41.5
2	2:35	39.6
2	2:40	39.1
2	2:45	38.4
2	2:50	38.2
2	2:55	37.9
2	3:00	37.6
2	3:05	37.8
2	3:10	40.5
2	3:15	39.2
2	3:20	42.2
2	3:25	43.4
2	3:30	44.2
2	3:35	40.6
2	3:40	38.9
2	3:45	39.9
2	3:50	41.6
2	3:55	42
2	4:00	41.4

3 Shawmut Ave		
15-Oct-12		
Time: 12:52 AM		
Run #	mm:ss	dB(A)
3	5	42.2
3	10	42.2
3	15	40.9
3	20	39.8
3	25	39.7
3	30	39.8
3	35	39.5
3	40	44.9
3	45	47.6
3	50	45.1
3	55	43.8
3	60	43.3
3	1:05	44.1
3	1:10	43.7
3	1:15	41.6
3	1:20	41.1
3	1:25	41.9
3	1:30	40
3	1:35	40.3
3	1:40	41.6
3	1:45	41.6
3	1:50	42.7
3	1:55	44.1
3	2:00	41.5
3	2:05	40.7
3	2:10	41.3
3	2:15	41.1
3	2:20	42.5
3	2:25	42.6
3	2:30	41.3
3	2:35	39.3
3	2:40	39.5
3	2:45	39.2
3	2:50	38.5
3	2:55	40.5
3	3:00	42.8
3	3:05	42
3	3:10	40.6
3	3:15	39.6
3	3:20	41.5
3	3:25	42.5
3	3:30	43.7
3	3:35	44.6
3	3:40	44.9
3	3:45	43.4
3	3:50	40.5
3	3:55	40.6
3	4:00	39.7

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

AMBIENT SOUND - PRELIMINARY DATA

1	4:05	42.2
1	4:10	41
1	4:15	41.9
1	4:20	42.7
1	4:25	44
1	4:30	48.7
1	4:35	41.7
1	4:40	51.8
1	4:45	49.2
1	4:50	46.6
1	4:55	46.7
1	5:00	47.1

2	4:05	44.8
2	4:10	42.7
2	4:15	41.8
2	4:20	43
2	4:25	42.9
2	4:30	43.1
2	4:35	39.8
2	4:40	40.2
2	4:45	40.6
2	4:50	42.9
2	4:55	44.2
2	5:00	44.5

3	4:05	39.8
3	4:10	39.7
3	4:15	40.8
3	4:20	40.5
3	4:25	39.9
3	4:30	38.9
3	4:35	42.4
3	4:40	40
3	4:45	43.4
3	4:50	42
3	4:55	40.3
3	5:00	41.8

L90 **39.2**
Range 37.5 to 44.6

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	43.6	dBA	Leq	41.9	dBA	Leq	41.9	dBA
L90	39	dBA	L90	38.4	dBA	L90	39.4	dBA

Met Data

WS at Hub	8.9	m/s
WS at West Is.	3	m/s
WD at Hub	194	degrees
WD at West Is.	SSW	
BP	30.01	in
Humidity	49	%
Temp	63.7	degr F

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

IMPACT SOUND - PRELIMINARY DATA

7 Pierces Pt Road		
14-Oct-12		
Time: 11:42 PM		
Run #	mm:ss	dB(A)
1	5	50.9
1	10	50.2
1	15	49.9
1	20	49.1
1	25	49.4
1	30	49.6
1	35	51.1
1	40	50.3
1	45	50.3
1	50	51
1	55	50.2
1	60	50.5
1	1:05	50.3
1	1:10	50.1
1	1:15	50.2
1	1:20	51.3
1	1:25	51.3
1	1:30	51.3
1	1:35	49.9
1	1:40	50.2
1	1:45	50.2
1	1:50	52
1	1:55	50.6
1	2:00	50.9
1	2:05	49.8
1	2:10	51.3
1	2:15	51.8
1	2:20	50.9
1	2:25	51.3
1	2:30	51.3
1	2:35	51.3
1	2:40	51.8
1	2:45	50
1	2:50	52.4
1	2:55	51.5
1	3:00	50.1
1	3:05	50.7
1	3:10	49.8
1	3:15	50.8
1	3:20	52
1	3:25	50.1
1	3:30	50.9
1	3:35	52.1
1	3:40	51
1	3:45	50.8
1	3:50	51.4
1	3:55	51.1
1	4:00	51.8
1	4:05	51.7
1	4:10	52.2
1	4:15	50.7
1	4:20	49.6
1	4:25	48.3
1	4:30	50.9

7 Pierces Pt Road		
14-Oct-12		
Time: 11:48 PM		
Run #	mm:ss	dB(A)
2	5	50.7
2	10	50.1
2	15	50.5
2	20	50.5
2	25	51.8
2	30	51.8
2	35	50.3
2	40	51.6
2	45	51.5
2	50	50.5
2	55	51.3
2	60	51.5
2	1:05	51.2
2	1:10	49.6
2	1:15	51.7
2	1:20	51.4
2	1:25	50
2	1:30	50.2
2	1:35	53.4
2	1:40	51.6
2	1:45	51.2
2	1:50	50.7
2	1:55	52
2	2:00	50.6
2	2:05	49.9
2	2:10	50.8
2	2:15	51.5
2	2:20	51.6
2	2:25	54.2
2	2:30	52.8
2	2:35	50.7
2	2:40	50.5
2	2:45	52.8
2	2:50	54.9
2	2:55	52.5
2	3:00	52.3
2	3:05	51.3
2	3:10	51.4
2	3:15	50
2	3:20	51.4
2	3:25	53.3
2	3:30	53.3
2	3:35	53.4
2	3:40	51.8
2	3:45	51.4
2	3:50	49.2
2	3:55	50.1
2	4:00	51.3
2	4:05	50.8
2	4:10	50.6
2	4:15	50.1
2	4:20	51.3
2	4:25	50.7
2	4:30	50.6

7 Pierces Pt Road		
14-Oct-12		
Time: 11:54 PM		
Run #	mm:ss	dB(A)
3	5	50.3
3	10	51.1
3	15	50.5
3	20	50
3	25	50.9
3	30	51
3	35	52.6
3	40	50.9
3	45	50.4
3	50	51.6
3	55	50.1
3	60	50.2
3	1:05	50.3
3	1:10	50.6
3	1:15	50.8
3	1:20	49.3
3	1:25	50.9
3	1:30	50.9
3	1:35	51.5
3	1:40	50.3
3	1:45	52
3	1:50	50
3	1:55	50.4
3	2:00	49.7
3	2:05	49.5
3	2:10	51.2
3	2:15	52.3
3	2:20	50.7
3	2:25	51.2
3	2:30	50.2
3	2:35	48.9
3	2:40	49.4
3	2:45	50.9
3	2:50	51
3	2:55	50.5
3	3:00	50
3	3:05	50.9
3	3:10	50
3	3:15	50.4
3	3:20	49.4
3	3:25	49.8
3	3:30	50.1
3	3:35	49.5
3	3:40	50.5
3	3:45	51.4
3	3:50	51.3
3	3:55	50.4
3	4:00	52.6
3	4:05	53.3
3	4:10	53.3
3	4:15	51.5
3	4:20	51.1
3	4:25	50.8
3	4:30	52

Wind Turbine Sound Sampling: Fairhaven 15 October 2012
IMPACT SOUND - PRELIMINARY DATA

7 Pierces Pt Road		
14-Oct-12		
Time: 11:42 PM		
Run #	mm:ss	dB(A)
1	4:35	50
1	4:40	52.1
1	4:45	52
1	4:50	50.6
1	4:55	51.7
1	5:00	52.8

7 Pierces Pt Road		
14-Oct-12		
Time: 11:48 PM		
Run #	mm:ss	dB(A)
2	4:35	50.9
2	4:40	50.5
2	4:45	50
2	4:50	51.2
2	4:55	51.6
2	5:00	51.4

7 Pierces Pt Road		
14-Oct-12		
Time: 11:54 PM		
Run #	mm:ss	dB(A)
3	4:35	51.6
3	4:40	51.2
3	4:45	51.5
3	4:50	50.8
3	4:55	50.3
3	5:00	49.8

L Max 2

Lmax	51.5	dBA	
<i>Leq</i>	50.5	dBA	
<i>Range</i>	48.3	to	51.6 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	50.9	dBA
L10	51.9	dBA
L50	50.7	dBA

Leq		
Leq	51.4	dBA
L10	52.9	dBA
L50	50.9	dBA

Leq		
Leq	50.8	dBA
L10	51.8	dBA
L50	50.6	dBA

Met Data		
WS at Hub	7.4	m/s
WS at West Is.	5	m/s
WD at Hub	203	degrees
WD at West Is.	South	
BP	30.02	in
Humidity	51	%
Temp	63.6	degr F

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

AMBIENT SOUND - PRELIMINARY DATA

7 Pierces Pt Rd		
15-Oct-12		
Time: 12:05 AM		
Run #	mm:ss	dB(A)
1	5	41.5
1	10	42.1
1	15	42.7
1	20	42.5
1	25	43.3
1	30	44.2
1	35	47
1	40	44
1	45	46.4
1	50	49.1
1	55	46.4
1	60	44.2
1	1:05	45
1	1:10	45.2
1	1:15	43.3
1	1:20	42.8
1	1:25	42.2
1	1:30	42.1
1	1:35	42.2
1	1:40	42.2
1	1:45	42.1
1	1:50	42.4
1	1:55	41.6
1	2:00	42
1	2:05	42.2
1	2:10	42.4
1	2:15	44.1
1	2:20	44.5
1	2:25	44.3
1	2:30	43.3
1	2:35	43.6
1	2:40	46.3
1	2:45	47.2
1	2:50	47.4
1	2:55	44.9
1	3:00	42.9
1	3:05	44.2
1	3:10	45.6
1	3:15	44.4
1	3:20	43.9
1	3:25	43.7
1	3:30	42.9
1	3:35	42.2
1	3:40	42.1
1	3:45	42.3
1	3:50	45.4
1	3:55	46
1	4:00	46.1

7 Pierces Pt Rd		
15-Oct-12		
Time 12:11 AM		
Run #	mm:ss	dB(A)
2	5	43.3
2	10	43.5
2	15	43.9
2	20	42.8
2	25	42.3
2	30	42.5
2	35	42.1
2	40	42.4
2	45	41.5
2	50	41.1
2	55	41
2	60	41.6
2	1:05	42
2	1:10	41.8
2	1:15	41.8
2	1:20	43.5
2	1:25	45.6
2	1:30	49.7
2	1:35	49.6
2	1:40	50.5
2	1:45	47.1
2	1:50	44.7
2	1:55	43.7
2	2:00	44.2
2	2:05	44.6
2	2:10	43.6
2	2:15	43.9
2	2:20	44.7
2	2:25	45.9
2	2:30	46.5
2	2:35	45
2	2:40	44.9
2	2:45	46.1
2	2:50	45.7
2	2:55	43.5
2	3:00	42.8
2	3:05	42.5
2	3:10	42.7
2	3:15	42.4
2	3:20	43.1
2	3:25	45.6
2	3:30	44.8
2	3:35	43.2
2	3:40	43.5
2	3:45	43.5
2	3:50	43.4
2	3:55	45
2	4:00	45

7 Pierces Pt Rd		
15-Oct-12		
Time: 12:17 AM		
Run #	mm:ss	dB(A)
3	5	47.9
3	10	45.8
3	15	45.9
3	20	46.1
3	25	46.2
3	30	44.4
3	35	43.5
3	40	42.8
3	45	41.9
3	50	43.1
3	55	47.9
3	60	47.7
3	1:05	46.4
3	1:10	47.3
3	1:15	48
3	1:20	47.5
3	1:25	44.8
3	1:30	46.8
3	1:35	45.8
3	1:40	44.3
3	1:45	44.1
3	1:50	43.1
3	1:55	42.4
3	2:00	41.8
3	2:05	43.1
3	2:10	43.7
3	2:15	43.3
3	2:20	46
3	2:25	44.8
3	2:30	44.4
3	2:35	44
3	2:40	43.5
3	2:45	44.2
3	2:50	44.1
3	2:55	43.5
3	3:00	42.4
3	3:05	42.8
3	3:10	42.3
3	3:15	41.4
3	3:20	42.3
3	3:25	42.7
3	3:30	43.2
3	3:35	43.6
3	3:40	45.2
3	3:45	45.2
3	3:50	45.8
3	3:55	45.1
3	4:00	42.9

Wind Turbine Sound Sampling: Fairhaven 15 October 2012

AMBIENT SOUND - PRELIMINARY DATA

7 Pierces Pt Rd		
15-Oct-12		
Time: 12:05 AM		
Run #	mm:ss	dB(A)
1	4:05	44.3
1	4:10	42.4
1	4:15	42.1
1	4:20	42.8
1	4:25	42.9
1	4:30	43.2
1	4:35	43.1
1	4:40	42.9
1	4:45	42.9
1	4:50	45.2
1	4:55	46.6
1	5:00	46.3

7 Pierces Pt Rd		
15-Oct-12		
Time 12:11 AM		
Run #	mm:ss	dB(A)
2	4:05	44.7
2	4:10	46.4
2	4:15	47.2
2	4:20	45.5
2	4:25	43.5
2	4:30	43.3
2	4:35	42.9
2	4:40	42.6
2	4:45	41.9
2	4:50	41.9
2	4:55	43.1
2	5:00	43

7 Pierces Pt Rd		
15-Oct-12		
Time: 12:17 AM		
Run #	mm:ss	dB(A)
3	4:05	42.9
3	4:10	47.7
3	4:15	48.8
3	4:20	45.9
3	4:25	43.8
3	4:30	42.2
3	4:35	41.2
3	4:40	41.5
3	4:45	42.2
3	4:50	42.4
3	4:55	43.9
3	5:00	44.3

L90	42.1	dBA
Range	41	to
		46.2

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	44.3	dBA	Leq	44.6	dBA	Leq	44.8	dBA
L90	42	dBA	L90	41.8	dBA	L90	41.9	dBA

Met Data

WS at Hub	8.9	m/s
WS at West Is.	3.4	m/s
WD at Hub	194	degrees
WD at West Is.	South	
BP	30.02	in
Humidity	44	%
Temp	63.4	degr F

Wind Turbine Sound Sampling Summary: Fairhaven 15 October 2012

PRELIMINARY DATA

			LOCATION			
	Parameter	7 Peirce's Pt Road	3 Shawmut St	16 Mill Rd	12 Little Bay Rd	3 Teal St
Hand Log data (dBA)	Lmax	51.5	<i>Generator on South Turbine not operating. Results invalid</i>			
	L90	42.1				
	Diff	9.4				
	Range Turbine on	48.3-51.6				
	Range Turbine Off	41-50.5				
MET	Wind Direction	SW	SW	SW	SW	SW
	Sampling Location Relationship to WT	Downwind offset right	Downwind offset right	Downwind offset left	Upwind	Perpendicular to the left
	Wind Speed Hub	7.4 - 8.9 m/s	8.7 - 8.9 m/s	9.3 - 10.4 m/s	10.8 - 12.1 m/s	10.6 - 12.3 m/s

Wind Turbine Sound Sampling: Fairhaven 9 November 2012

IMPACT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
8-Nov-12		
Time: 11:46 pm		
Run #	mm:ss	dB(A)
1	5	47.9
1	10	48.6
1	15	48.1
1	20	47.9
1	25	47.9
1	30	49.1
1	35	51.3
1	40	50.9
1	45	50.9
1	50	50.3
1	55	50.7
1	60	49.9
1	1:05	49.4
1	1:10	48.4
1	1:15	47.6
1	1:20	47.1
1	1:25	47.7
1	1:30	47.6
1	1:35	48.3
1	1:40	47.6
1	1:45	48.4
1	1:50	49.1
1	1:55	49.7
1	2:00	49.8
1	2:05	51.1
1	2:10	49.8
1	2:15	50.4
1	2:20	49.9
1	2:25	49.4
1	2:30	49.4
1	2:35	48.3
1	2:40	48.1
1	2:45	47.6
1	2:50	47.9
1	2:55	48.2
1	3:00	48.5
1	3:05	48.5
1	3:10	48.5
1	3:15	48.5
1	3:20	49.4
1	3:25	49.7
1	3:30	50.3
1	3:35	50.4
1	3:40	51.1
1	3:45	52
1	3:50	50.6
1	3:55	50.8
1	4:00	49.2
1	4:05	49.3
1	4:10	49.1
1	4:15	48.5
1	4:20	48.6

12 Little Bay Rd		
8-Nov-12		
Time: 11:52 pm		
Run #	mm:ss	dB(A)
2	5	52.2
2	10	52.2
2	15	50.9
2	20	50.8
2	25	50.7
2	30	49
2	35	50.6
2	40	51
2	45	50.4
2	50	51.5
2	55	50.7
2	60	51.1
2	1:05	52
2	1:10	50.8
2	1:15	50.8
2	1:20	51.1
2	1:25	51.1
2	1:30	51.5
2	1:35	52.1
2	1:40	50.7
2	1:45	50
2	1:50	50.7
2	1:55	51.7
2	2:00	51.5
2	2:05	50.9
2	2:10	51.4
2	2:15	51.1
2	2:20	50.8
2	2:25	50.2
2	2:30	49.3
2	2:35	48.9
2	2:40	48.7
2	2:45	48.4
2	2:50	48.8
2	2:55	49.2
2	3:00	49.4
2	3:05	50
2	3:10	50.8
2	3:15	50.4
2	3:20	49.4
2	3:25	50.8
2	3:30	49.7
2	3:35	49.3
2	3:40	48.9
2	3:45	48.7
2	3:50	50.2
2	3:55	50.5
2	4:00	51.1
2	4:05	50.3
2	4:10	51.1
2	4:15	51.3
2	4:20	51.2

12 Little Bay Rd		
8-Nov-12		
Time: 11:58 pm		
Run #	mm:ss	dB(A)
3	5	50.9
3	10	52.3
3	15	51.6
3	20	50.6
3	25	50.3
3	30	51.6
3	35	51.7
3	40	50.7
3	45	50.9
3	50	51.4
3	55	51.2
3	60	50.8
3	1:05	51.2
3	1:10	52.4
3	1:15	51.9
3	1:20	51.2
3	1:25	50
3	1:30	49.8
3	1:35	49.4
3	1:40	49.6
3	1:45	49.1
3	1:50	49.2
3	1:55	49.6
3	2:00	49.5
3	2:05	49.1
3	2:10	48.9
3	2:15	48
3	2:20	48.5
3	2:25	48.5
3	2:30	48.1
3	2:35	48.8
3	2:40	49
3	2:45	47.6
3	2:50	47.7
3	2:55	47.5
3	3:00	47.2
3	3:05	47.2
3	3:10	47.5
3	3:15	46.6
3	3:20	47.2
3	3:25	48.1
3	3:30	47.4
3	3:35	48
3	3:40	48.7
3	3:45	50
3	3:50	50.8
3	3:55	50.7
3	4:00	50.4
3	4:05	50.3
3	4:10	51.8
3	4:15	51.6
3	4:20	51.2

Wind Turbine Sound Sampling: Fairhaven 9 November 2012

IMPACT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
8-Nov-12		
Time: 11:46 pm		
Run #	mm:ss	dB(A)
1	4:25	48.5
1	4:30	49.9
1	4:35	51.3
1	4:40	51.2
1	4:45	50.9
1	4:50	50.3
1	4:55	51.7
1	5:00	51

12 Little Bay Rd		
8-Nov-12		
Time: 11:52 pm		
Run #	mm:ss	dB(A)
2	4:25	50.1
2	4:30	51.3
2	4:35	52.9
2	4:40	53.3
2	4:45	52.8
2	4:50	50.4
2	4:55	51.7
2	5:00	52.9

12 Little Bay Rd		
8-Nov-12		
Time: 11:58 pm		
Run #	mm:ss	dB(A)
3	4:25	50.3
3	4:30	50.3
3	4:35	50.3
3	4:40	47.8
3	4:45	49
3	4:50	47.7
3	4:55	47.8
3	5:00	48.6

Lmax 3

Lmax	51.0	dBA	
<i>Leq</i>	49.0	dBA	
<i>Range</i>	46.6	to	51.5 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	49.6	dBA
L10	51	dBA
L50	49.2	dBA

Leq	50.8	dBA
L10	51.8	dBA
L50	50.7	dBA

Leq	49.8	dBA
L10	51.4	dBA
L50	49.5	dBA

Met Data		
WS at Hub	8.9	m/s
WS at West Is.	3.8	m/s
WD at Hub	337	degrees
WD at West Is.	NNW	
BP	29.72	in
Humidity	74	%
Temp	39.7	degr F

Wind Turbine Sound Sampling: Fairhaven 9 November 2012

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
8-Nov-12		
Time: 12:08 AM		
Run #	mm:ss	dB(A)
1	5	43.1
1	10	40.4
1	15	40.8
1	20	40.7
1	25	42.2
1	30	42.5
1	35	43.8
1	40	43.8
1	45	43.5
1	50	45.1
1	55	44.1
1	60	43.5
1	1:05	42.7
1	1:10	41.2
1	1:15	41.6
1	1:20	41.1
1	1:25	40.4
1	1:30	40.6
1	1:35	41.7
1	1:40	41.6
1	1:45	40.7
1	1:50	41.1
1	1:55	40.5
1	2:00	41.2
1	2:05	40.7
1	2:10	39.5
1	2:15	40.4
1	2:20	40.3
1	2:25	41.3
1	2:30	42.8
1	2:35	42.5
1	2:40	45.1
1	2:45	46.8
1	2:50	45.8
1	2:55	44.5
1	3:00	45.7
1	3:05	45.6
1	3:10	43.5
1	3:15	41
1	3:20	42.2
1	3:25	42.3
1	3:30	41.3
1	3:35	42.1
1	3:40	42.2
1	3:45	44.4
1	3:50	42.8
1	3:55	41.6
1	4:00	41.2
1	4:05	41.7
1	4:10	43.4
1	4:15	42.2
1	4:20	42.2

12 Little Bay Rd		
8-Nov-12		
Time: 12:22 am		
Run #	mm:ss	dB(A)
2	5	44.7
2	10	46.7
2	15	47.4
2	20	46.5
2	25	44.7
2	30	45.6
2	35	47.4
2	40	46.7
2	45	45
2	50	42.7
2	55	42.4
2	60	43
2	1:05	43.9
2	1:10	42.3
2	1:15	41.2
2	1:20	41.5
2	1:25	41.2
2	1:30	43.6
2	1:35	45.7
2	1:40	44
2	1:45	42.5
2	1:50	41.6
2	1:55	42.4
2	2:00	43.3
2	2:05	44.5
2	2:10	43.8
2	2:15	42.3
2	2:20	41.7
2	2:25	41.6
2	2:30	42.8
2	2:35	42.1
2	2:40	40.8
2	2:45	40.2
2	2:50	39.5
2	2:55	48.4
2	3:00	39.9
2	3:05	40.5
2	3:10	41.9
2	3:15	41.8
2	3:20	42.3
2	3:25	43.7
2	3:30	45.4
2	3:35	45.4
2	3:40	45.4
2	3:45	46.1
2	3:50	44.1
2	3:55	42
2	4:00	41.9
2	4:05	41.6
2	4:10	41.6
2	4:15	41.5
2	4:20	41.7

12 Little Bay Rd		
8-Nov-12		
Time: 12:29 am		
Run #	mm:ss	dB(A)
3	5	40.3
3	10	44
3	15	43.3
3	20	44.8
3	25	46.6
3	30	43.6
3	35	41.3
3	40	41.8
3	45	40.6
3	50	40.6
3	55	40.6
3	60	41.1
3	1:05	40.4
3	1:10	40.5
3	1:15	42.1
3	1:20	41.7
3	1:25	42
3	1:30	42.6
3	1:35	41.9
3	1:40	40.2
3	1:45	40.1
3	1:50	40.5
3	1:55	41.8
3	2:00	40.1
3	2:05	39.9
3	2:10	41.4
3	2:15	42.4
3	2:20	42.2
3	2:25	41.3
3	2:30	40.2
3	2:35	39.8
3	2:40	40.1
3	2:45	41.3
3	2:50	42.9
3	2:55	44.2
3	3:00	44
3	3:05	41.9
3	3:10	40.7
3	3:15	39.6
3	3:20	40.5
3	3:25	41
3	3:30	40.4
3	3:35	39.3
3	3:40	39
3	3:45	39.5
3	3:50	42.4
3	3:55	48.4
3	4:00	49.2
3	4:05	48.1
3	4:10	45.3
3	4:15	43.6
3	4:20	41.9

Wind Turbine Sound Sampling: Fairhaven 9 November 2012

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
8-Nov-12		
Time: 12:08 AM		
Run #	mm:ss	dB(A)
1	4:25	41.7
1	4:30	41.7
1	4:35	40.8
1	4:40	40.2
1	4:45	40.3
1	4:50	40.6
1	4:55	40.7
1	5:00	40.8

12 Little Bay Rd		
8-Nov-12		
Time: 12:22 am		
Run #	mm:ss	dB(A)
2	4:25	41.6
2	4:30	40.9
2	4:35	40.9
2	4:40	42
2	4:45	41.5
2	4:50	41.9
2	4:55	41.6
2	5:00	40.9

12 Little Bay Rd		
8-Nov-12		
Time: 12:29 am		
Run #	mm:ss	dB(A)
3	4:25	41.1
3	4:30	39.8
3	4:35	41.5
3	4:40	43.2
3	4:45	41.6
3	4:50	41.7
3	4:55	41.6
3	5:00	41.8

L90	40.3	dBA
Range	39	to

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	42.7	dBA	Leq	43.3	dBA	Leq	42.6	dBA
L90	40.3	dBA	L90	40.7	dBA	L90	39.8	dBA

Met Data

WS at Hub	7.8	m/s
WS at West Is.	4.4	m/s
WD at Hub	329	degrees
WD at West Is.	NNW	
BP	29.72	in
Humidity	79	%
Temp	39.8	degr F

Wind Turbine Sound Sampling: Fairhaven 9 November 2012
IMPACT SOUND - PRELIMINARY DATA

3 Teal Circle		
9-Nov-12		
Time: 1:15 am		
Run #	mm:ss	dB(A)
1	5	44
1	10	43.9
1	15	43.9
1	20	44
1	25	44.5
1	30	43.9
1	35	45.1
1	40	43.5
1	45	43
1	50	44.5
1	55	44.9
1	60	43.6
1	1:05	42.9
1	1:10	43.8
1	1:15	43.2
1	1:20	43.3
1	1:25	42.7
1	1:30	43.2
1	1:35	43.6
1	1:40	42.7
1	1:45	42.5
1	1:50	43
1	1:55	41.7
1	2:00	42.9
1	2:05	44.2
1	2:10	44
1	2:15	44.1
1	2:20	44.7
1	2:25	43.1
1	2:30	43
1	2:35	44.2
1	2:40	46
1	2:45	44.6
1	2:50	46.7
1	2:55	45.9
1	3:00	44.2
1	3:05	43.1
1	3:10	43.2
1	3:15	43.1
1	3:20	43.9
1	3:25	44.1
1	3:30	44.9
1	3:35	44.2
1	3:40	46
1	3:45	48.2
1	3:50	46.7
1	3:55	46.1

3 Teal Circle		
9-Nov-12		
Time 1:23 am		
Run #	mm:ss	dB(A)
2	5	43.9
2	10	44.7
2	15	43.8
2	20	43.4
2	25	43.5
2	30	44
2	35	44.9
2	40	42.5
2	45	42.9
2	50	43.6
2	55	43.1
2	60	43.5
2	1:05	43.5
2	1:10	43.7
2	1:15	43.8
2	1:20	44.3
2	1:25	45
2	1:30	46.9
2	1:35	47
2	1:40	46.6
2	1:45	48
2	1:50	49.4
2	1:55	47.5
2	2:00	47.1
2	2:05	48.1
2	2:10	46.8
2	2:15	47.3
2	2:20	46.8
2	2:25	45.1
2	2:30	45.6
2	2:35	45.2
2	2:40	45.5
2	2:45	45.3
2	2:50	46
2	2:55	46.1
2	3:00	45.6
2	3:05	44.5
2	3:10	45.3
2	3:15	45.1
2	3:20	47.1
2	3:25	43.5
2	3:30	43.2
2	3:35	42.9
2	3:40	43.9
2	3:45	43.5
2	3:50	44.1
2	3:55	45.9

3 Teal Circle		
9-Nov-12		
Time 1:29 am		
Run #	mm:ss	dB(A)
3	5	46.6
3	10	44.2
3	15	45.9
3	20	44.1
3	25	45.1
3	30	45.8
3	35	46.2
3	40	46.3
3	45	44.6
3	50	44.4
3	55	43.7
3	60	44
3	1:05	43.6
3	1:10	43.6
3	1:15	44
3	1:20	44
3	1:25	44.3
3	1:30	44
3	1:35	43.9
3	1:40	44.3
3	1:45	44.8
3	1:50	45.7
3	1:55	46
3	2:00	46.9
3	2:05	47.7
3	2:10	51.5
3	2:15	48.6
3	2:20	47.9
3	2:25	48.1
3	2:30	47.6
3	2:35	49.8
3	2:40	47.5
3	2:45	47
3	2:50	47.3
3	2:55	44.2
3	3:00	45.1
3	3:05	46.6
3	3:10	46.2
3	3:15	46.5
3	3:20	46.5
3	3:25	46.7
3	3:30	49
3	3:35	47.8
3	3:40	47.1
3	3:45	46.5
3	3:50	44.6
3	3:55	44.9

3 Teal Circle		
9-Nov-12		
Time 1:37 am		
Run #	mm:ss	dB(A)
4	5	44.5
4	10	43.4
4	15	45.6
4	20	46.2
4	25	47.2
4	30	46
4	35	44.7
4	40	45.1
4	45	45.7
4	50	44.5
4	55	45
4	60	44.2
4	1:05	45.2
4	1:10	44.1
4	1:15	43
4	1:20	44.7
4	1:25	43.9
4	1:30	43.6
4	1:35	41.4
4	1:40	44.7
4	1:45	44.2
4	1:50	43.5
4	1:55	43.1
4	2:00	43.2
4	2:05	43.9
4	2:10	43.6
4	2:15	43.8
4	2:20	44.4
4	2:25	43.4
4	2:30	42.7
4	2:35	41.9
4	2:40	41.9
4	2:45	41.6
4	2:50	40.4
4	2:55	42
4	3:00	41
4	3:05	42.1
4	3:10	42.5
4	3:15	42.2
4	3:20	42.4
4	3:25	43.3
4	3:30	42.9
4	3:35	42.4
4	3:40	42.5
4	3:45	42.9
4	3:50	44
4	3:55	44.6

3 Teal Circle		
9-Nov-12		
1:42 AM		
Run #	mm:ss	dB(A)
5	5	44.8
5	10	50.2
5	15	44.1
5	20	43.8
5	25	42.5
5	30	44.2
5	35	42.6
5	40	41.6
5	45	44.8
5	50	41.8
5	55	42.2
5	60	41.2
5	1:05	41.6
5	1:10	42
5	1:15	43
5	1:20	45.8
5	1:25	47.4
5	1:30	42.7
5	1:35	41.4
5	1:40	40.5
5	1:45	41.2
5	2:00	40.5
5	2:05	40.8
5	2:10	41.7
5	2:15	42.3
5	2:20	41.8
5	2:25	41
5	2:30	41
5	2:35	41.9
5	2:40	41.9
5	2:45	41.6
5	2:50	40.4
5	2:55	42
5	3:00	41
5	3:05	42.1
5	3:10	42.5
5	3:15	42.2
5	3:20	42.4
5	3:25	43.3
5	3:30	42.9
5	3:35	42.4
5	3:40	42.5
5	3:45	42.9
5	3:50	44
5	3:55	44.6

Wind Turbine Sound Sampling: Fairhaven 9 November 2012
IMPACT SOUND - PRELIMINARY DATA

3 Teal Circle		
9-Nov-12		
Time: 1:15 am		
Run #	mm:ss	dB(A)
1	4:00	44.7
1	4:05	44.8
1	4:10	45.2
1	4:15	46.7
1	4:20	43.1
1	4:25	43.2
1	4:30	nd
1	4:35	nd
1	4:40	nd
1	4:45	nd
1	4:50	nd
1	4:55	nd
1	5:00	nd

3 Teal Circle		
9-Nov-12		
Time 1:23 am		
Run #	mm:ss	dB(A)
2	4:00	46.4
2	4:05	46.1
2	4:10	45.5
2	4:15	nd
2	4:20	nd
2	4:25	nd
2	4:30	nd
2	4:35	nd
2	4:40	nd
2	4:45	nd
2	4:50	nd
2	4:55	nd
2	5:00	nd

3 Teal Circle		
9-Nov-12		
Time 1:29 am		
Run #	mm:ss	dB(A)
3	4:00	43.7
3	4:05	45.4
3	4:10	43.9
3	4:15	44.2
3	4:20	44.5
3	4:25	44.2
3	4:30	43.7
3	4:35	44.9
3	4:40	44.1
3	4:45	44.7
3	4:50	46.4
3	4:55	44.3
3	5:00	45.9

3 Teal Circle		
9-Nov-12		
Time 1:37 am		
Run #	mm:ss	dB(A)
4	4:00	43.8
4	4:05	44.4
4	4:10	45.2
4	4:15	46.7
4	4:20	47.9
4	4:25	47.7
4	4:30	46.7
4	4:35	43.9
4	4:40	43.2
4	4:45	43.9
4	4:50	45.9
4	4:55	44.6
4	5:00	44.7

3 Teal Circle		
9-Nov-12		
1:42 AM		
Run #	mm:ss	dB(A)
5	4:00	45
5	4:05	42.3
5	4:10	42.1
5	4:15	42.5
5	4:20	43.4
5	4:25	nd
5	4:30	nd
5	4:35	nd
5	4:40	nd
5	4:45	nd
5	4:50	nd
5	4:55	nd
5	5:00	nd

Lmax	45.8	dBA
Leq	43.8	dBA
Range	40.4	to
	46.8	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	50.6	dBA
L10	45.1	dBA
L50	42.2	dBA

Leq	44.3	dBA
L10	45.9	dBA
L50	43.9	dBA

Leq	45.9	dBA
L10	47.7	dBA
L50	45	dBA

Leq	45.9	dBA
L10	47.8	dBA
L50	45	dBA

Leq	44.6	dBA
L10	46.2	dBA
L50	44	dBA

Met Data		
WS at Hub	7.71	m/s
WS at West Is.	3.5	m/s
WD at Hub	338	degrees
WD at West Is.	NW	
BP	29.75	in
Humidity	62	%
Temp	40.6	degr F

*West Island weather data unavailable for time period
Used last reading (1:14 am) as an approximate because
when station data resumed (4:15 am) there were no significant
changes from 1:14 am reading*

Wind Turbine Sound Sampling: Fairhaven 9 November 2012

AMBIENT SOUND - PRELIMINARY DATA

3 Teal Circle		
9-Nov-12		
Time: 12:49 am		
Run #	mm:ss	dB(A)
1	5	45
1	10	42.5
1	15	41.2
1	20	42.1
1	25	41.5
1	30	41.3
1	35	40.8
1	40	41.6
1	45	40.7
1	50	38.9
1	55	39.3
1	60	39.8
1	1:05	39.9
1	1:10	40.7
1	1:15	39.5
1	1:20	38.6
1	1:25	39.6
1	1:30	38.5
1	1:35	40
1	1:40	39.2
1	1:45	39
1	1:50	38.7
1	1:55	38.5
1	2:00	38.1
1	2:05	38.4
1	2:10	38.6
1	2:15	38.3
1	2:20	39.2
1	2:25	39
1	2:30	39.3
1	2:35	38.7
1	2:40	40.6
1	2:45	41.5
1	2:50	42.4
1	2:55	42.9
1	3:00	43
1	3:05	43.9
1	3:10	42
1	3:15	42.8
1	3:20	43.4
1	3:25	43
1	3:30	42
1	3:35	41
1	3:40	39.6
1	3:45	39.7
1	3:50	39.5
1	3:55	39.3
1	4:00	39.9

3 Teal Circle		
9-Nov-12		
Time: 12:55 am		
Run #	mm:ss	dB(A)
2	5	42.5
2	10	40.9
2	15	39.3
2	20	38.5
2	25	37.9
2	30	37.7
2	35	37.4
2	40	37.8
2	45	38.4
2	50	40.1
2	55	40.7
2	60	39.4
2	1:05	38.7
2	1:10	42.1
2	1:15	39.3
2	1:20	38.9
2	1:25	38.6
2	1:30	39.2
2	1:35	38.9
2	1:40	38.7
2	1:45	38.9
2	1:50	38
2	1:55	38.8
2	2:00	38.3
2	2:05	38.7
2	2:10	40.2
2	2:15	38.1
2	2:20	37.7
2	2:25	38
2	2:30	37.8
2	2:35	37.4
2	2:40	37.6
2	2:45	37.4
2	2:50	38
2	2:55	37.8
2	3:00	38
2	3:05	38.6
2	3:10	41.6
2	3:15	43.7
2	3:20	43.6
2	3:25	42.3
2	3:30	42.5
2	3:35	43.4
2	3:40	44.5
2	3:45	44.1
2	3:50	42.8
2	3:55	41.4
2	4:00	40.1

3 Teal Circle		
9-Nov-12		
Time: 1:04 AM		
Run #	mm:ss	dB(A)
3	5	42.1
3	10	40.7
3	15	39.9
3	20	40
3	25	40
3	30	39.8
3	35	41.5
3	40	43.3
3	45	42.1
3	50	40.8
3	55	42.2
3	60	44.4
3	1:05	42.9
3	1:10	42.2
3	1:15	42
3	1:20	42.8
3	1:25	41.6
3	1:30	42.9
3	1:35	43.1
3	1:40	42.4
3	1:45	42.2
3	1:50	41.5
3	1:55	41.7
3	2:00	41.7
3	2:05	42
3	2:10	42.1
3	2:15	41.6
3	2:20	41.7
3	2:25	41.4
3	2:30	41.1
3	2:35	41.8
3	2:40	42.1
3	2:45	43.3
3	2:50	43.9
3	2:55	43.1
3	3:00	42.9
3	3:05	42.3
3	3:10	41.2
3	3:15	41.4
3	3:20	41.5
3	3:25	40.9
3	3:30	40.3
3	3:35	39.6
3	3:40	40.6
3	3:45	40.5
3	3:50	41.1
3	3:55	41.1
3	4:00	41.8

Wind Turbine Sound Sampling: Fairhaven 9 November 2012

AMBIENT SOUND - PRELIMINARY DATA

3 Teal Circle		
9-Nov-12		
Time: 12:49 am		
Run #	mm:ss	dB(A)
1	4:05	39.3
1	4:10	38.5
1	4:15	37.6
1	4:20	38.8
1	4:25	39.5
1	4:30	37.6
1	4:35	40.4
1	4:40	39.9
1	4:45	37.3
1	4:50	41.6
1	4:55	40
1	5:00	39.6

3 Teal Circle		
9-Nov-12		
Time: 12:55 am		
Run #	mm:ss	dB(A)
2	4:05	40.7
2	4:10	41.4
2	4:15	42.9
2	4:20	42.8
2	4:25	41.5
2	4:30	40.9
2	4:35	39.8
2	4:40	40.2
2	4:45	40.6
2	4:50	40.6
2	4:55	40
2	5:00	40.9

3 Teal Circle		
9-Nov-12		
Time: 1:04 AM		
Run #	mm:ss	dB(A)
3	4:05	41.2
3	4:10	40.5
3	4:15	40.9
3	4:20	40.9
3	4:25	41.5
3	4:30	41.7
3	4:35	41.6
3	4:40	42.6
3	4:45	42.2
3	4:50	41.6
3	4:55	43.2
3	5:00	41.4

L90	38.1	dBA
Range	37.3	to
	44.5	

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	40.7	dBA	Leq	40.5	dBA	Leq	41.8	dBA
L90	38.1	dBA	L90	37.6	dBA	L90	40.2	dBA

Met Data

WS at Hub	7.75	m/s
WS at West Is.	3.5	m/s
WD at Hub	338	degrees
WD at West Is.	NW	
BP	29.75	in
Humidity	62	%
Temp	40.6	degr F

Wind Turbine Sound Sampling: Fairhaven 9 NOvember 2013
IMPACT SOUND - PRELIMINARY DATA

7 Peirce's Pt Rd		
9-Nov-12		
Time: 232 am		
Run #	mm:ss	dB(A)
1	5	48.5
1	10	48.2
1	15	47.8
1	20	47.9
1	25	47
1	30	46.5
1	35	47.6
1	40	47.9
1	45	48.5
1	50	48.2
1	55	49.9
1	60	49.7
1	1:05	48.5
1	1:10	47.9
1	1:15	47
1	1:20	47.4
1	1:25	48.7
1	1:30	55.8
1	1:35	51.8
1	1:40	50.7
1	1:45	49.2
1	1:50	47
1	1:55	47.2
1	2:00	46.7
1	2:05	46.3
1	2:10	46.3
1	2:15	47
1	2:20	48.8
1	2:25	48.8
1	2:30	50.3
1	2:35	50..8
1	2:40	51.1
1	2:45	52
1	2:50	52.4
1	2:55	54.5
1	3:00	52.9
1	3:05	49.6
1	3:10	47.8
1	3:15	47.1
1	3:20	47.6
1	3:25	48.7
1	3:30	49.4
1	3:35	48.5
1	3:40	49.7
1	3:45	50
1	3:50	51.5
1	3:55	52.8
1	4:00	52.5
1	4:05	51.2
1	4:10	50
1	4:15	50.2
1	4:20	49.4
1	4:25	48.8
1	4:30	48.1

7 Peirce's Pt Rd		
9-Nov-12		
Time: 2:40 am		
Run #	mm:ss	dB(A)
2	5	44.8
2	10	45.2
2	15	45.7
2	20	47.2
2	25	47.2
2	30	46.6
2	35	44.5
2	40	46.2
2	45	47.2
2	50	47.1
2	55	48.6
2	60	49.5
2	1:05	49.3
2	1:10	47.9
2	1:15	47.6
2	1:20	48
2	1:25	47.6
2	1:30	46.5
2	1:35	50.6
2	1:40	50.2
2	1:45	49.7
2	1:50	49.9
2	1:55	49.1
2	2:00	50.3
2	2:05	50.7
2	2:10	48.6
2	2:15	48.9
2	2:20	48.2
2	2:25	49.2
2	2:30	49.5
2	2:35	51.5
2	2:40	48.9
2	2:45	48.6
2	2:50	49.9
2	2:55	48.3
2	3:00	47.7
2	3:05	48.8
2	3:10	49.5
2	3:15	48.7
2	3:20	49.2
2	3:25	50.7
2	3:30	50.8
2	3:35	50.6
2	3:40	49.3
2	3:45	49.6
2	3:50	48.3
2	3:55	49.4
2	4:00	47
2	4:05	46.8
2	4:10	50.6
2	4:15	52.6
2	4:20	50.7
2	4:25	49.2
2	4:30	51.4

7 Peirce's Pt Rd		
9-Nov-12		
Time: 2:46 am		
Run #	mm:ss	dB(A)
3	5	47.2
3	10	48.1
3	15	47.9
3	20	48.5
3	25	50.9
3	30	50.9
3	35	47.6
3	40	46
3	45	44.3
3	50	44.6
3	55	44.7
3	60	44.9
3	1:05	46.2
3	1:10	45.8
3	1:15	44.4
3	1:20	44.7
3	1:25	44.5
3	1:30	44.7
3	1:35	44.5
3	1:40	44.4
3	1:45	45.6
3	1:50	47
3	1:55	46.5
3	2:00	47.2
3	2:05	48.7
3	2:10	47.6
3	2:15	49.9
3	2:20	46.1
3	2:25	47.3
3	2:30	x
3	2:35	47.5
3	2:40	46.1
3	2:45	45.6
3	2:50	47.8
3	2:55	46.7
3	3:00	44.8
3	3:05	46.3
3	3:10	47.2
3	3:15	46.7
3	3:20	46.5
3	3:25	45.7
3	3:30	47.7
3	3:35	46.9
3	3:40	45.8
3	3:45	45.2
3	3:50	44.9
3	3:55	45.4
3	4:00	45.5
3	4:05	45.2
3	4:10	46.4
3	4:15	48.4
3	4:20	46.1
3	4:25	45.9
3	4:30	47.5

Wind Turbine Sound Sampling: Fairhaven 9 NOvember 2013
IMPACT SOUND - PRELIMINARY DATA

7 Peirce's Pt Rd		
9-Nov-12		
Time: 232 am		
Run #	mm:ss	dB(A)
1	4:35	46.4
1	4:40	47.3
1	4:45	47.4
1	4:50	47.7
1	4:55	47.8
1	5:00	48.7

7 Peirce's Pt Rd		
9-Nov-12		
Time: 2:40 am		
Run #	mm:ss	dB(A)
2	4:35	52
2	4:40	52
2	4:45	51.6
2	4:50	49.3
2	4:55	48.2
2	5:00	47.7

7 Peirce's Pt Rd		
9-Nov-12		
Time: 2:46 am		
Run #	mm:ss	dB(A)
3	4:35	46
3	4:40	47.3
3	4:45	48.5
3	4:50	47.1
3	4:55	48.6
3	5:00	47.9

Lmax	49.9	dBA	
Leq	47.1	dBA	
Range	44.3	to	49.9 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	49.7	dBA
L10	51.7	dBA
L50	48.6	dBA

Leq	49.1	dBA
L10	50.9	dBA
L50	48.8	dBA

Leq	47	dBA
L10	48.4	dBA
L50	46.5	dBA

Met Data		
WS at Hub	7.8	m/s
WS at West Is.	3.5	m/s
WD at Hub	338	degrees
WD at West Is.	NW	
BP	29.75	in
Humidity	62	%
Temp	40.6	degr F

*West Island weather data unavailable for time period
 Used last reading (1:14 am) as an approximate because
 when station data resumed (4:15 am) there were no significant
 changes from 1:14 am reading*

Wind Turbine Sound Sampling Summary: Fairhaven 9 November 2012
PRELIMINARY DATA

LOCATION					
	Parameter	12 Little Bay	3 Teal Circle	7 Peirces Pt Rd	7 Peirces Pt Rd
Hand Log data (dBA)	Lmax	51	45.8	49.9	49.9
	L90	40.3	38.1	<i>no data- lost contact with turbine</i>	40.3
	Diff	10.7	7.7		9.6
	Range Turbine on	46.6 - 51.5	40.4 - 46.8	44.3 -49.9	44.3 -49.9
	Range Turbine Off	39 - 45.7	37.3 - 45	nd	39 - 45.7
MET	Wind Direction	NNW	NW	NW	NW
	Sampling Location Relationship to WT	Downwind and Right	Perpendicular to the right	Downwind	Downwind
	Wind Speed Hub	7.8-8.9 m/s	7.7 - 7.8 m/s	7.8 M/s	7.8 m/s
					Using Little Bay Ambient Data as a surrogate

Wind Turbine Sound Sampling: Fairhaven 20 Mar 2013

3 Shawmut St		
19-Mar-13		
Time 11:55 pm		
Run #	mm:ss	dB(A)
1	5	46.9
1	10	46.4
1	15	44.7
1	20	44.1
1	25	44
1	30	41.9
1	35	43.4
1	40	41.7
1	45	42.3
1	50	41.4
1	55	42.1
1	60	42.8
1	1:05	42.9
1	1:10	40.9
1	1:15	41.3
1	1:20	41.7
1	1:25	41.9
1	1:30	41.4
1	1:35	41.4
1	1:40	39.9
1	1:45	41.3
1	1:50	41.6
1	1:55	41.2
1	2:00	42.9
1	2:05	44.1
1	2:10	43.7
1	2:15	41.7
1	2:20	41
1	2:25	42
1	2:30	42.7
1	2:35	40.9
1	2:40	41.5
1	2:45	42.7
1	2:50	41
1	2:55	42.5
1	3:00	41.8
1	3:05	41.2
1	3:10	42.2
1	3:15	40.9
1	3:20	41.9
1	3:25	41.7
1	3:30	43
1	3:35	41.2

3 Shawmut St		
20-Mar-13		
Time: 12:04 am		
Run #	mm:ss	dB(A)
2	5	44.2
2	10	43.8
2	15	41.6
2	20	43
2	25	43.2
2	30	44.1
2	35	43.3
2	40	44.8
2	45	43.9
2	50	45.4
2	55	44.4
2	60	45.2
2	1:05	45.8
2	1:10	45.8
2	1:15	45.7
2	1:20	44.3
2	1:25	44.5
2	1:30	44
2	1:35	44.1
2	1:40	43.8
2	1:45	44.1
2	1:50	44
2	1:55	44.1
2	2:00	44.2
2	2:05	45.3
2	2:10	44.4
2	2:15	44.5
2	2:20	45.8
2	2:25	48.9
2	2:30	47.1
2	2:35	50.2
2	2:40	46
2	2:45	46.3
2	2:50	43.2
2	2:55	43.1
2	3:00	42.4
2	3:05	42.9
2	3:10	46.8
2	3:15	43.5
2	3:20	45
2	3:25	44.1
2	3:30	43.1
2	3:35	43

3 Shawmut St		
20-Mar-13		
Time: 12:11 am		
Run #	mm:ss	dB(A)
3	5	46.8
3	10	55.7
3	15	47.8
3	20	45.8
3	25	46
3	30	43.8
3	35	44.2
3	40	48
3	45	44.4
3	50	44.5
3	55	44
3	60	42.8
3	1:05	42.4
3	1:10	43
3	1:15	42.2
3	1:20	43.3
3	1:25	45.8
3	1:30	45.6
3	1:35	48.3
3	1:40	49.4
3	1:45	48
3	1:50	46.2
3	1:55	45.9
3	2:00	48.9
3	2:05	49.8
3	2:10	48.7
3	2:15	47.2
3	2:20	46.3
3	2:25	45.8
3	2:30	47.5
3	2:35	46.7
3	2:40	46
3	2:45	45.2
3	2:50	46.8
3	2:55	48.9
3	3:00	53.3
3	3:05	48.5
3	3:10	47.5
3	3:15	48.2
3	3:20	49.4
3	3:25	48.5
3	3:30	49.3
3	3:35	46.8

3 Shawmut St		
20-Mar-31		
1217 am		
Run #	mm:ss	dB(A)
4	5	43.1
4	10	43.3
4	15	41.2
4	20	41.6
4	25	39.9
4	30	40.8
4	35	40.9
4	40	42.7
4	45	42
4	50	42.4
4	55	47
4	60	50.5
4	1:05	44.4
4	1:10	46
4	1:15	47.2
4	1:20	46.6
4	1:25	47.6
4	1:30	46
4	1:35	46.5
4	1:40	46.2
4	1:45	47.7
4	1:50	47.2
4	1:55	45.7
4	2:00	46.6
4	2:05	45.4
4	2:10	47.1
4	2:15	47.6
4	2:20	47.3
4	2:25	46.9
4	2:30	51
4	2:35	50.5
4	2:40	47.1
4	2:45	50.9
4	2:50	44.2
4	2:55	43.1
4	3:00	43.8
4	3:05	44.7
4	3:10	46.2
4	3:15	46.4
4	3:20	46.9
4	3:25	49.8
4	3:30	47.5
4	3:35	48.4

Wind Turbine Sound Sampling: Fairhaven 20 Mar 2013

3 Shawmut St		
19-Mar-13		
Time 11:55 pm		
Run #	mm:ss	dB(A)
1	3:40	42.1
1	3:45	42.2
1	3:50	43.1
1	3:55	43.1
1	4:00	40.1
1	4:05	40.8
1	4:10	42.6
1	4:15	42.8
1	4:20	42.9
1	4:25	40.3
1	4:30	41.2
1	4:35	40.9
1	4:40	42.3
1	4:45	41.8
1	4:50	43.2
1	4:55	41.8
1	5:00	44.9

Lmax

Lmax	45.7	dBA
<i>Leq</i>	42.9	dBA
Range	39.9	to 46.8 dBA

3 Shawmut St		
20-Mar-13		
Time: 12:04 am		
Run #	mm:ss	dB(A)
2	3:40	42.3
2	3:45	43.2
2	3:50	42.6
2	3:55	42.3
2	4:00	43.7
2	4:05	44
2	4:10	43.8
2	4:15	43.5
2	4:20	46.7
2	4:25	45.8
2	4:30	42.9
2	4:35	43.7
2	4:40	47.9
2	4:45	45.3
2	4:50	44.8
2	4:55	45.4
2	5:00	47

x

3 Shawmut St		
20-Mar-13		
Time: 12:11 am		
Run #	mm:ss	dB(A)
3	3:40	47.5
3	3:45	46
3	3:50	46.8
3	3:55	45.5
3	4:00	44.7
3	4:05	44.7
3	4:10	44.2
3	4:15	44.1
3	4:20	44
3	4:25	44.1
3	4:30	44.4
3	4:35	45.6
3	4:40	42.6
3	4:45	40.9
3	4:50	40.9
3	4:55	42.1
3	5:00	41.9

x

3 Shawmut St		
20-Mar-31		
1217 am		
Run #	mm:ss	dB(A)
4	3:40	49.2
4	3:45	48.5
4	3:50	46.2
4	3:55	45.3
4	4:00	47.4
4	4:05	47.4
4	4:10	48.1
4	4:15	48.1
4	4:20	48.6
4	4:25	45.5
4	4:30	46.4
4	4:35	45.7
4	4:40	45
4	4:45	43.9
4	4:50	45
4	4:55	50.6
4	5:00	46.7

Lmax 4

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	42.4	dBA
L01	46.5	dBA
L10	43.8	dBA
L50	41.8	dBA
L90	40.6	dBA
LC-A	17	dBA

S142

Leq	44.9	dBA
L01	48.7	dBA
L10	46.6	dBA
L50	44.3	dBA
L90	42.7	dBA
LC-A	22.2	dBA

S143

Leq	47.5	dBA
L01	56	dBA
L10	49.3	dBA
L50	46	dBA
L90	42.7	dBA
LC-A	23.4	dBA

S144

Leq	47	dBA
L01	51.7	dBA
L10	49	dBA
L50	46.5	dBA
L90	42	dBA
LC-A	23.2	dBA

S145

Met Data		
WS at Hub	8.65	m/s
WS at West Is.	3.6	m/s
WD at Hub	307	degrees
WD at West Is.	WNW	
BP	29.71	in
Humidity	91	%
Temp	32.6	degr F

Wind Turbine Sound Sampling: Fairhaven 20 March 2013

3 Shawmut St		
20-Mar-13		
Time: 12:30 am		
Run #	mm:ss	dB(A)
1	5	37.6
1	10	37.8
1	15	37.5
1	20	36.1
1	25	36.3
1	30	35.9
1	35	35.3
1	40	35.3
1	45	35.8
1	50	35.2
1	55	38.2
1	60	35.5
1	1:05	35.1
1	1:10	35.4
1	1:15	35.2
1	1:20	35.5
1	1:25	35.7
1	1:30	37.7
1	1:35	36.2
1	1:40	38.4
1	1:45	38.1
1	1:50	38.3
1	1:55	37.4
1	2:00	35.6
1	2:05	35.8
1	2:10	35.9
1	2:15	36.2
1	2:20	36.4
1	2:25	36.4
1	2:30	37.8
1	2:35	39.4
1	2:40	38.1
1	2:45	37.8
1	2:50	38.3
1	2:55	38.7
1	3:00	41.6
1	3:05	42.4
1	3:10	44.4
1	3:15	41.7
1	3:20	40.1
1	3:25	40.8

3 Shawmut St		
20-Mar-13		
Time: 12: 36 am		
Run #	mm:ss	dB(A)
2	5	37.1
2	10	36.4
2	15	40
2	20	36.6
2	25	37.3
2	30	34.4
2	35	44.4
2	40	35.8
2	45	36.1
2	50	37.1
2	55	35.7
2	60	36.8
2	1:05	36.7
2	1:10	38.7
2	1:15	37.6
2	1:20	38.9
2	1:25	x
2	1:30	45
2	1:35	x
2	1:40	57.3
2	1:45	x
2	1:50	43.7
2	1:55	43.1
2	2:00	x
2	2:05	x
2	2:10	x
2	2:15	x
2	2:20	x
2	2:25	x
2	2:30	x
2	2:35	x
2	2:40	x
2	2:45	x
2	2:50	x
2	2:55	x
2	3:00	x
2	3:05	x
2	3:10	x
2	3:15	x
2	3:20	x
2	3:25	x

3 Shawmut St		
20-Mar-13		
Time : 12:39 AM		
Run #	mm:ss	dB(A)
3	5	40.3
3	10	36.4
3	15	37.6
3	20	37.3
3	25	37.1
3	30	38
3	35	37.5
3	40	40.3
3	45	39.8
3	50	39.9
3	55	38.5
3	60	36.3
3	1:05	36.8
3	1:10	36.4
3	1:15	36.4
3	1:20	36
3	1:25	36
3	1:30	36.2
3	1:35	38.7
3	1:40	39.1
3	1:45	41.7
3	1:50	44.6
3	1:55	44.4
3	2:00	40.6
3	2:05	39.4
3	2:10	41.6
3	2:15	39.1
3	2:20	37.8
3	2:25	38.4
3	2:30	37.5
3	2:35	41.1
3	2:40	39.4
3	2:45	36.9
3	2:50	38.5
3	2:55	38.1
3	3:00	38.4
3	3:05	36.9
3	3:10	37.6
3	3:15	36.7
3	3:20	36.6
3	3:25	36.4

3 Shawmut St		
20-Mar-13		
Time: 12: 45 am		
Run #	mm:ss	dB(A)
4	5	39.9
4	10	39
4	15	41.9
4	20	38.8
4	25	38.1
4	30	36.8
4	35	35.8
4	40	35.8
4	45	35.5
4	50	36.2
4	55	35.8
4	60	35.8
4	1:05	37.6
4	1:10	37.1
4	1:15	36.4
4	1:20	35.2
4	1:25	35.9
4	1:30	36.7
4	1:35	36
4	1:40	35.9
4	1:45	37.5
4	1:50	36.9
4	1:55	37
4	2:00	36.6
4	2:05	37.4
4	2:10	35.8
4	2:15	35.7
4	2:20	37.4
4	2:25	38.5
4	2:30	39.6
4	2:35	37.3
4	2:40	41
4	2:45	48.7
4	2:50	37.3
4	2:55	39.4
4	3:00	39.5
4	3:05	37.9
4	3:10	38.4
4	3:15	40.2
4	3:20	41.7
4	3:25	41.1

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3 Shawmut St		
20-Mar-13		
Time: 12:30 am		
Run #	mm:ss	dB(A)
1	3:30	38.7
1	3:35	41.2
1	3:40	39.7
1	3:45	40.1
1	3:50	40.9
1	3:55	41.6
1	4:00	40.8
1	4:05	40.6
1	4:10	41.1
1	4:15	38.7
1	4:20	37.3
1	4:25	36.8
1	4:30	37
1	4:35	36.2
1	4:40	35.8
1	4:45	35.7
1	4:50	36.4
1	4:55	38.4
1	5:00	36.3

L90

L90	35.7
Range	34.4 to 48.7

3 Shawmut St		
20-Mar-13		
Time: 12: 36 am		
Run #	mm:ss	dB(A)
2	3:30	x
2	3:35	x
2	3:40	x
2	3:45	x
2	3:50	x
2	3:55	x
2	4:00	x
2	4:05	x
2	4:10	x
2	4:15	x
2	4:20	x
2	4:25	x
2	4:30	x
2	4:35	x
2	4:40	x
2	4:45	x
2	4:50	x
2	4:55	x
2	5:00	x

3 Shawmut St		
20-Mar-13		
Time : 12:39 AM		
Run #	mm:ss	dB(A)
3	3:30	37.4
3	3:35	36.6
3	3:40	36.9
3	3:45	37.7
3	3:50	36.2
3	3:55	35.1
3	4:00	35.4
3	4:05	36.2
3	4:10	35.5
3	4:15	36.4
3	4:20	36.4
3	4:25	36.3
3	4:30	38
3	4:35	37.2
3	4:40	37.1
3	4:45	37.4
3	4:50	35.7
3	4:55	35.9
3	5:00	36.1

3 Shawmut St		
20-Mar-13		
Time: 12: 45 am		
Run #	mm:ss	dB(A)
4	3:30	37.4
4	3:35	36.9
4	3:40	38.7
4	3:45	37.7
4	3:50	38.5
4	3:55	38
4	4:00	38.8
4	4:05	38.7
4	4:10	37.5
4	4:15	37.1
4	4:20	35.6
4	4:25	35.9
4	4:30	37.3
4	4:35	37.4
4	4:40	40.5
4	4:45	40
4	4:50	39.2
4	4:55	42.8
4	5:00	41.7

x

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	38.8	dBA
L90	35.4	dBA
LC-A	23.7	dBA

S146

S147

S148

S149

Met Data

WS at Hub	6.71	m/s
WS at West Is.	1.9	m/s
WD at Hub	310	degrees
WD at West Is.	WNW	degrees
BP	29.7	in
Humidity	90	%
Temp	32	degr F

Wind Turbine Sound Sampling : Fairhaven 20 March 2013

AMBIENT SAMPLING- PRELIMINARY DATA

7 Peirce's Pt Rd		
20-Mar-13		
Time: 1:02 am		
Run #	mm:ss	dB(A)
1	5	41
1	10	39.4
1	15	35
1	20	35.2
1	25	35.7
1	30	36
1	35	36.9
1	40	36.1
1	45	35.4
1	50	37.8
1	55	36.9
1	60	36
1	1:05	35.8
1	1:10	35.8
1	1:15	35.9
1	1:20	36
1	1:25	36.3
1	1:30	37
1	1:35	35.9
1	1:40	36.3
1	1:45	36
1	1:50	37.2
1	1:55	35.5
1	2:00	34.1
1	2:05	34
1	2:10	34.1
1	2:15	34.2
1	2:20	34
1	2:25	35.1
1	2:30	35.8
1	2:35	36.3
1	2:40	35.6
1	2:45	35.8
1	2:50	36.9
1	2:55	37.8
1	3:00	37.1
1	3:05	36.8
1	3:10	35.7
1	3:15	34.5
1	3:20	34.2
1	3:25	34.9
1	3:30	34.8
1	3:35	35
1	3:40	35.5
1	3:45	35.2
1	3:50	35.2
1	3:55	36

7 Peirce's Pt Rd		
20-Mar-13		
Time: 1:08 am		
Run #	mm:ss	dB(A)
2	5	36.9
2	10	35.1
2	15	33.7
2	20	33.4
2	25	34.4
2	30	34.8
2	35	35.2
2	40	35.6
2	45	36.3
2	50	35.7
2	55	34.4
2	60	34.3
2	1:05	34.4
2	1:10	35.8
2	1:15	33.7
2	1:20	34.3
2	1:25	33.5
2	1:30	34.5
2	1:35	35.7
2	1:40	35.2
2	1:45	35.5
2	1:50	34.8
2	1:55	36.6
2	2:00	36
2	2:05	36.4
2	2:10	37.2
2	2:15	36.2
2	2:20	35.9
2	2:25	36.8
2	2:30	36
2	2:35	37.3
2	2:40	37.8
2	2:45	39.7
2	2:50	37.5
2	2:55	36.9
2	3:00	36.2
2	3:05	36.3
2	3:10	36.2
2	3:15	36.8
2	3:20	37.4
2	3:25	38.7
2	3:30	37.3
2	3:35	36.3
2	3:40	36.3
2	3:45	36.8
2	3:50	36
2	3:55	36

7 Peirce's Pt Rd		
20-Mar-13		
Time : 1:14 am		
Run #	mm:ss	dB(A)
3	5	36.9
3	10	37.8
3	15	35.3
3	20	35.1
3	25	35.2
3	30	34.3
3	35	35.6
3	40	35.4
3	45	35.3
3	50	34.1
3	55	35.6
3	60	34.7
3	1:05	35.2
3	1:10	36.9
3	1:15	39.9
3	1:20	39.8
3	1:25	37.6
3	1:30	37.6
3	1:35	37.3
3	1:40	36.1
3	1:45	37.6
3	1:50	37.3
3	1:55	37.9
3	2:00	38.3
3	2:05	38.1
3	2:10	37
3	2:15	37.2
3	2:20	37.3
3	2:25	37.1
3	2:30	35.9
3	2:35	36.2
3	2:40	36.1
3	2:45	35.6
3	2:50	36.2
3	2:55	35.7
3	3:00	36
3	3:05	36.1
3	3:10	36.7
3	3:15	36.3
3	3:20	36
3	3:25	x
3	3:30	35.9
3	3:35	36.1
3	3:40	35.8
3	3:45	36.4
3	3:50	39.4
3	3:55	40.5

Wind Turbine Sound Sampling : Fairhaven 20 March 2013

AMBIENT SAMPLING- PRELIMINARY DATA

7 Peirce's Pt Rd		
20-Mar-13		
Time: 1:02 am		
Run #	mm:ss	dB(A)
1	4:00	35.6
1	4:05	36.1
1	4:10	36
1	4:15	36.9
1	4:20	35.8
1	4:25	36.6
1	4:30	38.2
1	4:35	40.6
1	4:40	40.3
1	4:45	38.6
1	4:50	36.8
1	4:55	37.3
1	5:00	35.8

7 Peirce's Pt Rd		
20-Mar-13		
Time: 1:08 am		
Run #	mm:ss	dB(A)
2	4:00	35.1
2	4:05	35.2
2	4:10	35
2	4:15	35.3
2	4:20	35.8
2	4:25	37.5
2	4:30	36.8
2	4:35	37.2
2	4:40	36.2
2	4:45	38.7
2	4:50	39.2
2	4:55	38
2	5:00	36.7

7 Peirce's Pt Rd		
20-Mar-13		
Time : 1:14 am		
Run #	mm:ss	dB(A)
3	4:00	42.8
3	4:05	38.8
3	4:10	36
3	4:15	36.3
3	4:20	36.1
3	4:25	35.3
3	4:30	36.4
3	4:35	35.4
3	4:40	34.9
3	4:45	34.7
3	4:50	34.8
3	4:55	34.8
3	5:00	34.4

L90	34.4	dBA
Range	33.4	to
		39.9

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	36.7	dBA	Leq	36.4	dBA	Leq	37.7	dBA
L90	34.4	dBA	L90	34.3	dBA	L90	34.7	dBA

Met Data

WS at Hub	4.72	m/s
WS at West Is.	2.08	m/s
WD at Hub	278	degrees
WD at West Is.	WNW	
BP	29.72	in
Humidity	90	%
Temp	31.4	degr F

Wind Turbine Sound Sampling: Fairhaven 20 Mar 2013

IMPACT SOUND - PRELIMINARY DATA

7 Peirce's Pt Rd		
20-Mar-13		
Time: 1:28 am		
Run #	mm:ss	dB(A)
1	5	43.8
1	10	43.4
1	15	44.6
1	20	42.8
1	25	43.1
1	30	42.8
1	35	42.2
1	40	44.9
1	45	44.4
1	50	44.7
1	55	42.9
1	60	45.7
1	1:05	44.3
1	1:10	44.1
1	1:15	43.8
1	1:20	45.2
1	1:25	43.8
1	1:30	x
1	1:35	46.2
1	1:40	43.6
1	1:45	44.6
1	1:50	44.2
1	1:55	43.8
1	2:00	42.1
1	2:05	45
1	2:10	43.3
1	2:15	44.1
1	2:20	42.5
1	2:25	42.5
1	2:30	43.7
1	2:35	43.1
1	2:40	41.6
1	2:45	43.5
1	2:50	41.7
1	2:55	40.1
1	3:00	41.3
1	3:05	41.7
1	3:10	44.7
1	3:15	43.3
1	3:20	41.3
1	3:25	41.9
1	3:30	43.2
1	3:35	42.7
1	3:40	42.8
1	3:45	43.4
1	3:50	42.7
1	3:55	42.4
1	4:00	43.4
1	4:05	42.9
1	4:10	41.2
1	4:15	40.6
1	4:20	41.9
1	4:25	45.3
1	4:30	43.8
1	4:35	44.8

7 Peirce's Pt Rd		
20-Mar-13		
Time: 1:35 am		
Run #	mm:ss	dB(A)
2	5	43.1
2	10	42.4
2	15	41.4
2	20	43.2
2	25	44.3
2	30	45.4
2	35	44
2	40	43.6
2	45	42.6
2	50	42.8
2	55	43.4
2	60	43.9
2	1:05	43
2	1:10	43.7
2	1:15	42.5
2	1:20	43
2	1:25	44.8
2	1:30	43.1
2	1:35	45.5
2	1:40	42.6
2	1:45	43.9
2	1:50	42.5
2	1:55	43
2	2:00	44.1
2	2:05	43.8
2	2:10	42.7
2	2:15	44.8
2	2:20	44.3
2	2:25	43.4
2	2:30	44.8
2	2:35	46.2
2	2:40	42.3
2	2:45	46.5
2	2:50	42.8
2	2:55	42.9
2	3:00	43.6
2	3:05	43.3
2	3:10	43.1
2	3:15	42.4
2	3:20	41.1
2	3:25	42.6
2	3:30	42.8
2	3:35	44
2	3:40	43.5
2	3:45	43.8
2	3:50	45.5
2	3:55	43.7
2	4:00	42.6
2	4:05	46
2	4:10	42.3
2	4:15	42.6
2	4:20	43.1
2	4:25	42.1
2	4:30	44.3
2	4:35	45.6

7 Peirce's Pt Rd		
20-Mar-13		
Time: 1:40 am		
Run #	mm:ss	dB(A)
3	5	44.7
3	10	44.2
3	15	43.3
3	20	43.2
3	25	42.1
3	30	44.3
3	35	43.9
3	40	46.9
3	45	46.6
3	50	45.1
3	55	46.3
3	60	46.5
3	1:05	45.4
3	1:10	45.8
3	1:15	45.8
3	1:20	45.9
3	1:25	46.7
3	1:30	46.7
3	1:35	46.3
3	1:40	46.9
3	1:45	44.8
3	1:50	44.9
3	1:55	45.4
3	2:00	45.2
3	2:05	46
3	2:10	45.2
3	2:15	45.1
3	2:20	45.1
3	2:25	46.3
3	2:30	45.8
3	2:35	46.2
3	2:40	44.1
3	2:45	44
3	2:50	44.8
3	2:55	44.1
3	3:00	42.9
3	3:05	41.5
3	3:10	43
3	3:15	41.6
3	3:20	43
3	3:25	43.4
3	3:30	47.6
3	3:35	42.7
3	3:40	44.6
3	3:45	44.9
3	3:50	42.7
3	3:55	43.6
3	4:00	45
3	4:05	45.2
3	4:10	44.2
3	4:15	46.2
3	4:20	46.9
3	4:25	43.8
3	4:30	45
3	4:35	48.1

Lmax 1

Lmax 2

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 20 Mar 2013
IMPACT SOUND - PRELIMINARY DATA

7 Peirce's Pt Rd		
20-Mar-13		
Time: 1:28 am		
Run #	mm:ss	dB(A)
1	4:40	45.3
1	4:45	43.6
1	4:50	41.8
1	4:55	44
1	5:00	46.2

7 Peirce's Pt Rd		
20-Mar-13		
Time: 1:35 am		
Run #	mm:ss	dB(A)
2	4:40	43.5
2	4:45	42.3
2	4:50	43.3
2	4:55	45.5
2	5:00	45

7 Peirce's Pt Rd		
20-Mar-13		
Time: 1:40 am		
Run #	mm:ss	dB(A)
3	4:40	46.5
3	4:45	46.2
3	4:50	47.3
3	4:55	47.7
3	5:00	46.7

Lmax	45.8	dBA
Leq	43.5	dBA
Range	40.1	to 46.2 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	44.1	dBA	Leq	43.7	dBA	Leq	45.3	dBA
L10	45.1	dBA	L10	44.9	dBA	L10	46.8	dBA
L50	43.2	dBA	L50	43.3	dBA	L50	45.2	dBA

Met Data

WS at Hub	4.68	m/s
WS at West Is.	1.78	m/s
WD at Hub	289	degrees
WD at West Is.	WNW	
BP	29.7	in
Humidity	90	%
Temp	31.3	degr F

Wind Turbine Sound Sampling Summary: Fairhaven 20 March 2013

PRELIMINARY DATA

LOCATION			
	Parameter	3 Shawmut St	7 Peirce's Pt Rd
Hand Log data (dBA)	Lmax	<i>result not valid Non-comparable wind speeds during sampling</i>	45.8
	L90		34.4
	Diff		11.4
	Range Turbine on		40.1 - 46.2
	Range Turbine Off		33.4 - 39.9
MET	Wind Direction	WNW	WNW
	Sampling location relationship to WT	Downwind and Right	Downwind and Right
	Wind Speed Hub	6.7-8.6 m/s	4.7 m/s

Wind Turbine Sound Sampling : Fairhaven 2 April 2013
IMPACT SOUND - PRELIMINARY DATA

7 Peirce's Pt Rd		
2-Apr-13		
Time: 1:20 AM		
Run #	mm:ss	dB(A)
1	1:05	46.5
1	1:10	45.4
1	1:15	47.3
1	1:20	45.9
1	1:25	46.6
1	1:30	46.3
1	1:35	46.8
1	1:40	46.6
1	1:45	45.7
1	1:50	46
1	1:55	45.4
1	2:00	44.4
1	2:05	44.7
1	2:10	44.8
1	2:15	44.7
1	2:20	45.5
1	2:25	47.1
1	2:30	46.9
1	2:35	46.2
1	2:40	46.2
1	2:45	46.1
1	2:50	48.3
1	2:55	45.9
1	3:00	47.3
1	3:05	46.3
1	3:10	49.3
1	3:15	48.8
1	3:20	47.4
1	3:25	46.8
1	3:30	44.1
1	3:35	44.8
1	3:40	46.7
1	3:45	47.1
1	3:50	45.6
1	3:55	45.5
1	4:00	47
1	4:05	45.8
1	4:10	45.2
1	4:15	45.6
1	4:20	45.6
1	4:25	45.3
1	4:30	45.7
1	4:35	43.9
1	4:40	43.3
1	4:45	44.9
1	4:50	46.6
1	4:55	45.2
1	5:00	45.4
1	5	45.3
1	10	44.2
1	15	44.4
1	20	43.5
1	25	44.4
1	30	45.6
1	35	44.3

Lmax 1

7 Peirce's Pt Rd		
2-Apr-13		
Time: 1:26 AM		
Run #	mm:ss	dB(A)
2	1:05	46.7
2	1:10	46.3
2	1:15	46
2	1:20	46.3
2	1:25	46.1
2	1:30	47.1
2	1:35	46.4
2	1:40	45.5
2	1:45	44.8
2	1:50	45.6
2	1:55	45.7
2	2:00	45.1
2	2:05	46.9
2	2:10	46.8
2	2:15	46.3
2	2:20	45.8
2	2:25	47.2
2	2:30	47.3
2	2:35	46.6
2	2:40	46.1
2	2:45	46.8
2	2:50	46.2
2	2:55	46.9
2	3:00	46.8
2	3:05	47.7
2	3:10	47
2	3:15	46.8
2	3:20	47.3
2	3:25	48.1
2	3:30	47.4
2	3:35	47
2	3:40	48.9
2	3:45	47.4
2	3:50	45.5
2	3:55	46.2
2	4:00	46.9
2	4:05	47.3
2	4:10	46.9
2	4:15	46.2
2	4:20	49.1
2	4:25	48.5
2	4:30	47.6
2	4:35	47.3
2	4:40	48.6
2	4:45	46.7
2	4:50	44.6
2	4:55	46
2	5:00	45
2	5	45.8
2	10	47.5
2	15	47.5
2	20	47
2	25	45.9
2	30	46.1
2	35	47.2

x

7 Peirce's Pt Rd		
2-Apr-13		
Time: 1:33 am		
Run #	mm:ss	dB(A)
3	1:05	x
3	1:10	48.3
3	1:15	46.7
3	1:20	47.9
3	1:25	47.8
3	1:30	47.7
3	1:35	46.3
3	1:40	46.2
3	1:45	46.3
3	1:50	47.5
3	1:55	46.1
3	2:00	46.1
3	2:05	46.2
3	2:10	47.2
3	2:15	45.3
3	2:20	45.5
3	2:25	45.4
3	2:30	44.9
3	2:35	45.2
3	2:40	44.9
3	2:45	46.8
3	2:50	45.5
3	2:55	45.1
3	3:00	44.9
3	3:05	44.3
3	3:10	45
3	3:15	44.9
3	3:20	45.5
3	3:25	45.5
3	3:30	44.7
3	3:35	45.1
3	3:40	43.8
3	3:45	45.1
3	3:50	43.7
3	3:55	44.9
3	4:00	45.5
3	4:05	46.2
3	4:10	45.3
3	4:15	45.5
3	4:20	46.1
3	4:25	45.3
3	4:30	45.7
3	4:35	47.9
3	4:40	48.8
3	4:45	47.3
3	4:50	47.8
3	4:55	48.2
3	5:00	48.7
3	5	48.9
3	10	47.4
3	15	47.2
3	20	47.8
3	25	47
3	30	47.8
3	35	47.7

Wind Turbine Sound Sampling : Fairhaven 2 April 2013
IMPACT SOUND - PRELIMINARY DATA

7 Peirce's Pt Rd		
2-Apr-13		
Time: 1:20 AM		
Run #	mm:ss	dB(A)
1	40	43.2
1	45	42.5
1	50	43.2
1	55	44.2
1	60	44.7

7 Peirce's Pt Rd		
2-Apr-13		
Time: 1:26 AM		
Run #	mm:ss	dB(A)
2	40	46.1
2	45	45.5
2	50	46.9
2	55	46.4
2	60	47.7

7 Peirce's Pt Rd		
2-Apr-13		
Time:1:33 am		
Run #	mm:ss	dB(A)
3	40	48.9
3	45	46.7
3	50	47.4
3	55	48.4
3	60	48

Lmax	48.1	dBA
Leq	45.9	dBA
Range	42.5	to 48.4 dBA

too significant a change in wind speed between impact sampling and ambient sampling to consider L90 to be comparable to Lmax.

x

Lmax 3

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	45.9	dBA
L10	47.2	dBA
L50	45.5	dBA

Leq	46.9	dBA
L10	47.9	dBA
L50	46.7	dBA

Leq	46.8	dBA
L10	48.2	dBA
L50	46.2	dBA

Met Data		
WS at Hub	8.0	m/s
WS at West Is.	4.35	m/s
WD at Hub	273	degrees
WD at West Is.	WNW	
BP	29.87	in
Humidity	47	%
Temp	35.3	degr F

Wind Turbine Sound Sampling: Fairhaven 2 April 2013

AMBIENT SOUND - PRELIMINARY DATA

7 Peirce's Pt Rd		
2-Apr-13		
Time: 12:58 AM		
Run #	mm:ss	dB(A)
1	1:05	34
1	1:10	33.2
1	1:15	33
1	1:20	32.9
1	1:25	33.3
1	1:30	33
1	1:35	33.8
1	1:40	33.7
1	1:45	34.9
1	1:50	32.4
1	1:55	32
1	2:00	33.9
1	2:05	33.1
1	2:10	32.2
1	2:15	32.3
1	2:20	32.5
1	2:25	33.4
1	2:30	35.6
1	2:35	33.1
1	2:40	32.6
1	2:45	33
1	2:50	33.6
1	2:55	33.4
1	3:00	33.4
1	3:05	32.2
1	3:10	32
1	3:15	31.9
1	3:20	31.7
1	3:25	32.1
1	3:30	32.9
1	3:35	31.4
1	3:40	32.6
1	3:45	31.6
1	3:50	33
1	3:55	30.6
1	4:00	31.5
1	4:05	32
1	4:10	32.3
1	4:15	31.8
1	4:20	32.2
1	4:25	32.6
1	4:30	33.8
1	4:35	33.3
1	4:40	32.6
1	4:45	33.3
1	4:50	32.6
1	4:55	32
1	5:00	33.3

7 Peirce's Pt Rd		
2-Apr-13		
Time: 1:04 AM		
Run #	mm:ss	dB(A)
2	1:05	33.2
2	1:10	34
2	1:15	32
2	1:20	31.7
2	1:25	32.7
2	1:30	36.9
2	1:35	32.9
2	1:40	32.7
2	1:45	33.7
2	1:50	32.9
2	1:55	35.1
2	2:00	35.2
2	2:05	34.1
2	2:10	32.4
2	2:15	32.5
2	2:20	33.4
2	2:25	33.3
2	2:30	33.2
2	2:35	32.7
2	2:40	32.7
2	2:45	35.5
2	2:50	33.3
2	2:55	33
2	3:00	33.5
2	3:05	34
2	3:10	33.9
2	3:15	31.9
2	3:20	31.8
2	3:25	32.7
2	3:30	33.7
2	3:35	36.9
2	3:40	36.1
2	3:45	35
2	3:50	33.6
2	3:55	33.9
2	4:00	33.7
2	4:05	34.9
2	4:10	35.1
2	4:15	33.7
2	4:20	34.7
2	4:25	33.2
2	4:30	32.6
2	4:35	33.5
2	4:40	33.6
2	4:45	34.2
2	4:50	34.6
2	4:55	33.4
2	5:00	32.5

7 Peirce's Pt Rd		
2-Apr-13		
Time: 1:09 AM		
Run #	mm:ss	dB(A)
3	1:05	36.8
3	1:10	39.1
3	1:15	37.8
3	1:20	36.2
3	1:25	37.1
3	1:30	36.6
3	1:35	34.4
3	1:40	34.5
3	1:45	36
3	1:50	35.8
3	1:55	34.6
3	2:00	32
3	2:05	33
3	2:10	32.1
3	2:15	32.9
3	2:20	33.4
3	2:25	33.6
3	2:30	33
3	2:35	33.1
3	2:40	33.9
3	2:45	33.9
3	2:50	33.3
3	2:55	34.3
3	3:00	34.4
3	3:05	32.3
3	3:10	33.3
3	3:15	34
3	3:20	33.8
3	3:25	34.2
3	3:30	32.2
3	3:35	32.6
3	3:40	33.3
3	3:45	35.7
3	3:50	34.3
3	3:55	35.1
3	4:00	33.7
3	4:05	34.8
3	4:10	33.9
3	4:15	34.3
3	4:20	33.5
3	4:25	34
3	4:30	35.7
3	4:35	33.8
3	4:40	34.1
3	4:45	34.4
3	4:50	33.5
3	4:55	33.3
3	5:00	33.9

Wind Turbine Sound Sampling: Fairhaven 2 April 2013

AMBIENT SOUND - PRELIMINARY DATA

7 Peirce's Pt Rd		
2-Apr-13		
Time: 12:58 AM		
Run #	mm:ss	dB(A)
1	5	36.3
1	10	32.7
1	15	32.3
1	20	33.3
1	25	37.9
1	30	35.5
1	35	35.1
1	40	35.4
1	45	34.7
1	50	33.7
1	55	34.2
1	60	34.1

7 Peirce's Pt Rd		
2-Apr-13		
Time: 1:04 AM		
Run #	mm:ss	dB(A)
2	5	33.9
2	10	31.6
2	15	31.8
2	20	31.9
2	25	31.5
2	30	32.4
2	35	33.7
2	40	32.3
2	45	32.7
2	50	34.6
2	55	31.7
2	60	32.2

7 Peirce's Pt Rd		
2-Apr-13		
Time: 1:09 AM		
Run #	mm:ss	dB(A)
3	5	32.9
3	10	33.2
3	15	34.2
3	20	33.5
3	25	32.5
3	30	32.4
3	35	32.9
3	40	32.5
3	45	33.1
3	50	34.2
3	55	33.8
3	60	34.7

L90	32	dBA
Range	30.6	to

39.1

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	33.4	dBA	Leq	33.9	dBA	Leq	34.5	dBA
L90	31.7	dBA	L90	31.9	dBA	L90	32.5	dBA

Met Data

WS at Hub	5.2	m/s
WS at West Is.	1.5	m/s
WD at Hub	273	degrees
WD at West Is.	NW	
BP	29.86	in
Humidity	46	%
Temp	35.5	degr F

too significant a change in wind speed between impact sampling and ambient sampling to consider L90 to be comparable to Lmax.

Wind Turbine Sound Sampling: Fairhaven 2 April 2013

IMPACT SOUND - PRELIMINARY DATA

3 Teal Cir		
2-Apr-13		
Time: 2:04 AM		
Run #	mm:ss	dB(A)
1	5	40.7
1	10	39.3
1	15	38.5
1	20	38.7
1	25	38.4
1	30	38.1
1	35	38
1	40	37.7
1	45	37.5
1	50	36.8
1	55	37.1
1	60	37.7
1	1:05	38.4
1	1:10	37
1	1:15	37.9
1	1:20	37.5
1	1:25	36.8
1	1:30	36.4
1	1:35	37.1
1	1:40	36.8
1	1:45	38.8
1	1:50	38.3
1	1:55	37.1
1	2:00	37.9
1	2:05	40.5
1	2:10	42
1	2:15	39.6
1	2:20	38.8
1	2:25	38.1
1	2:30	38
1	2:35	40
1	2:40	41.5
1	2:45	41.5
1	2:50	41.1
1	2:55	43.3
1	3:00	46.7
1	3:05	41.9
1	3:10	41.5
1	3:15	42.6
1	3:20	42.9
1	3:25	41.1
1	3:30	42
1	3:35	40.4
1	3:40	39
1	3:45	39.8
1	3:50	39.8
1	3:55	38.2
1	4:00	38.9
1	4:05	40.1
1	4:10	38.4
1	4:15	38.5
1	4:20	41.1

3 Teal Cir		
2-Apr-13		
Time: 2:10 AM		
Run #	mm:ss	dB(A)
2	5	40
2	10	38.5
2	15	39.4
2	20	37.7
2	25	36.8
2	30	39
2	35	38.3
2	40	38.8
2	45	39.3
2	50	44
2	55	40.4
2	60	39.6
2	1:05	39.6
2	1:10	39.8
2	1:15	40.2
2	1:20	40.9
2	1:25	39.7
2	1:30	40.2
2	1:35	39.2
2	1:40	40
2	1:45	41.3
2	1:50	41.1
2	1:55	41.8
2	2:00	42.9
2	2:05	43.9
2	2:10	41.5
2	2:15	44.1
2	2:20	44.2
2	2:25	42.4
2	2:30	41.8
2	2:35	40.9
2	2:40	42.9
2	2:45	41
2	2:50	42.6
2	2:55	44
2	3:00	42.5
2	3:05	41.5
2	3:10	41
2	3:15	41.9
2	3:20	41.4
2	3:25	47.3
2	3:30	44.2
2	3:35	43.4
2	3:40	42.1
2	3:45	42.5
2	3:50	43.2
2	3:55	44.7
2	4:00	44.4
2	4:05	45.7
2	4:10	43.7
2	4:15	45.2
2	4:20	46.7

3 Teal Cir		
2-Apr-13		
Time: 2:17 AM		
Run #	mm:ss	dB(A)
3	5	45.9
3	10	46
3	15	45
3	20	44.6
3	25	44.9
3	30	45
3	35	43.7
3	40	43.8
3	45	43.8
3	50	46.3
3	55	42.9
3	60	45.3
3	1:05	44.1
3	1:10	45.1
3	1:15	43.8
3	1:20	45.7
3	1:25	43.5
3	1:30	44.1
3	1:35	43
3	1:40	42.2
3	1:45	43.7
3	1:50	41.8
3	1:55	42.1
3	2:00	43.4
3	2:05	43.1
3	2:10	42.5
3	2:15	41.7
3	2:20	42.8
3	2:25	42.4
3	2:30	40.8
3	2:35	42.9
3	2:40	41.8
3	2:45	42.7
3	2:50	43.5
3	2:55	44.3
3	3:00	43
3	3:05	43.4
3	3:10	43.1
3	3:15	45.4
3	3:20	44.3
3	3:25	45
3	3:30	44.8
3	3:35	43.6
3	3:40	42.6
3	3:45	43.1
3	3:50	44.4
3	3:55	45.8
3	4:00	44.9
3	4:05	42.8
3	4:10	43.1
3	4:15	45.4
3	4:20	44

Wind Turbine Sound Sampling: Fairhaven 2 April 2013

IMPACT SOUND - PRELIMINARY DATA

3 Teal Cir		
2-Apr-13		
Time: 2:04 AM		
Run #	mm:ss	dB(A)
1	4:25	39.6
1	4:30	38.8
1	4:35	39
1	4:40	40.6
1	4:45	38.8
1	4:50	38.5
1	4:55	39.8
1	5:00	38.7

3 Teal Cir		
2-Apr-13		
Time: 2:10 AM		
Run #	mm:ss	dB(A)
2	4:25	44.6
2	4:30	46.3
2	4:35	47.6
2	4:40	44.6
2	4:45	45
2	4:50	46
2	4:55	44.8
2	5:00	44.7

3 Teal Cir		
2-Apr-13		
Time: 2:17 AM		
Run #	mm:ss	dB(A)
3	4:25	41.5
3	4:30	42
3	4:35	42
3	4:40	41.6
3	4:45	45.5
3	4:50	43.2
3	4:55	42.8
3	5:00	47.3

Lmax	44.7	dBA
Leq	41.3	dBA
Range	36.4	to
	45.7	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)		
Leq	40.3	dBA
L10	42.2	dBA
L50	38.7	dBA
Leq	43	dBA
L10	45.5	dBA
L50	41.9	dBA
Leq	44	dBA
L10	45.5	dBA
L50	43.5	dBA

Met Data		
WS at Hub	6.66	m/s
WS at West Is.	2.68	m/s
WD at Hub	295	degrees
WD at West Is.	NW	
BP	29.87	in
Humidity	50	%
Temp	34.7	degr F

Wind Turbine Sound Sampling: Fairhaven 2 April 2013

AMBIENT SOUND - PRELIMINARY DATA

3 Teal Circle		
2-Apr-13		
Time: 2:27 am		
Run #	mm:ss	dB(A)
1	5	35.7
1	10	35.5
1	15	35.5
1	20	35
1	25	37.2
1	30	38.3
1	35	38.4
1	40	37.2
1	45	36.1
1	50	37.4
1	55	40.9
1	60	38.8
1	1:05	39
1	1:10	37.9
1	1:15	37.8
1	1:20	36.2
1	1:25	37.1
1	1:30	40
1	1:35	39.9
1	1:40	43.8
1	1:45	39.7
1	1:50	40.2
1	1:55	39.2
1	2:00	38.6
1	2:05	38.3
1	2:10	37.7
1	2:15	38.8
1	2:20	39.5
1	2:25	38.9
1	2:30	39.7
1	2:35	37.9
1	2:40	37.6
1	2:45	40.3
1	2:50	37.7
1	2:55	36.8
1	3:00	35.6
1	3:05	36
1	3:10	35.7
1	3:15	34.9
1	3:20	36.2
1	3:25	39.8
1	3:30	39.1
1	3:35	39
1	3:40	37.7
1	3:45	39.6
1	3:50	37.4
1	3:55	36
1	4:00	35.2

3 Teal Circle		
2-Apr-13		
Time: 2:32 AM		
Run #	mm:ss	dB(A)
2	5	39.2
2	10	39.8
2	15	39.8
2	20	41.3
2	25	45.6
2	30	44.4
2	35	45.3
2	40	44.7
2	45	43
2	50	42
2	55	41.1
2	60	41.6
2	1:05	42.9
2	1:10	43.8
2	1:15	43.2
2	1:20	50.7
2	1:25	x
2	1:30	47.9
2	1:35	49.5
2	1:40	41.5
2	1:45	40.1
2	1:50	38.9
2	1:55	40.8
2	2:00	40.1
2	2:05	39.5
2	2:10	40
2	2:15	39.4
2	2:20	38.1
2	2:25	37.9
2	2:30	37.8
2	2:35	38.3
2	2:40	40
2	2:45	37.5
2	2:50	36.9
2	2:55	38.4
2	3:00	39.1
2	3:05	38.3
2	3:10	39.5
2	3:15	38.7
2	3:20	37.4
2	3:25	37.8
2	3:30	37.1
2	3:35	37.2
2	3:40	37.2
2	3:45	37.2
2	3:50	37.4
2	3:55	37.5
2	4:00	37.9

3 Teal Circle		
2-Apr-13		
Time: 2:38 am		
Run #	mm:ss	dB(A)
3	5	35.8
3	10	35.1
3	15	34
3	20	33.5
3	25	34.9
3	30	35.5
3	35	35
3	40	35.7
3	45	36
3	50	38.3
3	55	37
3	60	36.4
3	1:05	37.6
3	1:10	34.7
3	1:15	34.6
3	1:20	35.3
3	1:25	34.7
3	1:30	36
3	1:35	35.1
3	1:40	34
3	1:45	35.2
3	1:50	34.6
3	1:55	37
3	2:00	39.3
3	2:05	35.3
3	2:10	36.7
3	2:15	36
3	2:20	34.8
3	2:25	34.2
3	2:30	33.8
3	2:35	34.5
3	2:40	35.4
3	2:45	34
3	2:50	34.2
3	2:55	37
3	3:00	36.8
3	3:05	39.7
3	3:10	44.4
3	3:15	41.2
3	3:20	36.8
3	3:25	37.4
3	3:30	37.1
3	3:35	35.2
3	3:40	34.6
3	3:45	34.8
3	3:50	36.2
3	3:55	35.9
3	4:00	36.6

Wind Turbine Sound Sampling: Fairhaven 2 April 2013

AMBIENT SOUND - PRELIMINARY DATA

3 Teal Circle		
2-Apr-13		
Time: 2:27 am		
Run #	mm:ss	dB(A)
1	4:05	36.7
1	4:10	35.7
1	4:15	34.4
1	4:20	36.4
1	4:25	35.3
1	4:30	35.6
1	4:35	35.5
1	4:40	37.2
1	4:45	36.7
1	4:50	35.8
1	4:55	35.4
1	5:00	38.2

3 Teal Circle		
2-Apr-13		
Time: 2:32 AM		
Run #	mm:ss	dB(A)
2	4:05	37.6
2	4:10	38.8
2	4:15	38.2
2	4:20	39
2	4:25	39.6
2	4:30	39
2	4:35	38.8
2	4:40	39.5
2	4:45	39.6
2	4:50	38.1
2	4:55	37.6
2	5:00	37.5

3 Teal Circle		
2-Apr-13		
Time: 2:38 am		
Run #	mm:ss	dB(A)
3	4:05	37.6
3	4:10	39.3
3	4:15	37.3
3	4:20	40
3	4:25	39.2
3	4:30	38.3
3	4:35	36.3
3	4:40	36.2
3	4:45	35.7
3	4:50	35.8
3	4:55	36.7
3	5:00	35.5

L90	34.9	dBA
Range	33.5	to
		43.8

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	38.3	dBA	Leq	42.7	dBA	Leq	36.9	dBA
L90	35.2	dBA	L90	37.3	dBA	L90	34.1	dBA

Met Data

WS at Hub	5.57	m/s
WS at West Is.	3.87	m/s
WD at Hub	293	degrees
WD at West Is.	NW	
BP	29.87	in
Humidity	47	%
Temp	34.3	degr F

Wind Turbine Sound Sampling: Fairhaven 2 April 2013

IMPACT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
2-Apr-13		
Time: 12:03 AM		
Run #	mm:ss	dB(A)
1	5	43.7
1	10	43.7
1	15	44.1
1	20	44
1	25	43.6
1	30	43.1
1	35	44
1	40	44.3
1	45	43.9
1	50	45
1	55	42.7
1	60	42.3
1	1:05	43
1	1:10	42.7
1	1:15	43.3
1	1:20	43.1
1	1:25	42.5
1	1:30	44.1
1	1:35	45.9
1	1:40	45.9
1	1:45	45.3
1	1:50	45.1
1	1:55	44.2
1	2:00	44.2
1	2:05	43.2
1	2:10	44.4
1	2:15	45.9
1	2:20	45
1	2:25	45
1	2:30	48
1	2:35	48.4
1	2:40	46.6
1	2:45	48.6
1	2:50	47.3
1	2:55	47.9
1	3:00	49.1
1	3:05	47.9
1	3:10	48.8
1	3:15	48.3
1	3:20	48.6
1	3:25	46.1
1	3:30	45.9
1	3:35	46
1	3:40	44.7
1	3:45	43.7
1	3:50	43.2
1	3:55	43.2
1	4:00	43.9
1	4:05	42.8
1	4:10	42.7
1	4:15	45
1	4:20	44.8
1	4:25	45.6
1	4:30	44.2

12 Little Bay Rd		
2-Apr-13		
Time: 12:10 AM		
Run #	mm:ss	dB(A)
2	5	43.4
2	10	43.9
2	15	44.4
2	20	45
2	25	44.2
2	30	45.1
2	35	45.8
2	40	46.1
2	45	45.5
2	50	44.1
2	55	44.7
2	60	44.3
2	1:05	44.3
2	1:10	42.7
2	1:15	43.2
2	1:20	42.9
2	1:25	43.8
2	1:30	44.2
2	1:35	43.8
2	1:40	44
2	1:45	43.9
2	1:50	43.8
2	1:55	43.1
2	2:00	43.1
2	2:05	43.9
2	2:10	43.6
2	2:15	43.8
2	2:20	43.5
2	2:25	42.9
2	2:30	42.1
2	2:35	42.1
2	2:40	41.6
2	2:45	41.6
2	2:50	41.9
2	2:55	41.4
2	3:00	43.1
2	3:05	42.1
2	3:10	42.2
2	3:15	42.5
2	3:20	44
2	3:25	44.8
2	3:30	45.1
2	3:35	44.9
2	3:40	45.9
2	3:45	45.9
2	3:50	46
2	3:55	45.1
2	4:00	45.7
2	4:05	45.9
2	4:10	44.9
2	4:15	44.8
2	4:20	43.9
2	4:25	43.6
2	4:30	43.1

12 Little Bay Rd		
2-Apr-13		
Time: 12:16 AM		
Run #	mm:ss	dB(A)
3	5	43.2
3	10	42.5
3	15	43.2
3	20	44.7
3	25	43.9
3	30	44.5
3	35	44
3	40	43.4
3	45	44.5
3	50	45.4
3	55	44.8
3	60	44.1
3	1:05	44.2
3	1:10	44.5
3	1:15	44.7
3	1:20	44
3	1:25	43.5
3	1:30	43.1
3	1:35	43.1
3	1:40	43.5
3	1:45	44.9
3	1:50	44.9
3	1:55	44.4
3	2:00	44.5
3	2:05	43.9
3	2:10	42.9
3	2:15	42.7
3	2:20	43.8
3	2:25	43.2
3	2:30	42.9
3	2:35	43.2
3	2:40	43.6
3	2:45	43.7
3	2:50	42.6
3	2:55	44.1
3	3:00	44.1
3	3:05	44.9
3	3:10	44.8
3	3:15	44
3	3:20	44.4
3	3:25	44.6
3	3:30	44.5
3	3:35	45.4
3	3:40	45.7
3	3:45	45.9
3	3:50	47.5
3	3:55	47.4
3	4:00	46.2
3	4:05	45.7
3	4:10	46.1
3	4:15	44.3
3	4:20	44
3	4:25	43.6
3	4:30	43.2

Wind Turbine Sound Sampling: Fairhaven 2 April 2013
IMPACT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
2-Apr-13		
Time: 12:03 AM		
Run #	mm:ss	dB(A)
1	4:35	43.7
1	4:40	44.3
1	4:45	43.9
1	4:50	43
1	4:55	43.2
1	5:00	44.6

12 Little Bay Rd		
2-Apr-13		
Time: 12:10 AM		
Run #	mm:ss	dB(A)
2	4:35	44.1
2	4:40	44
2	4:45	43.9
2	4:50	44.4
2	4:55	44.6
2	5:00	43.7

12 Little Bay Rd		
2-Apr-13		
Time: 12:16 AM		
Run #	mm:ss	dB(A)
3	4:35	44.4
3	4:40	43.5
3	4:45	44.1
3	4:50	44.8
3	4:55	44
3	5:00	43

Lmax	45.8	dBA	
Leq	43.9	dBA	
Range	41.4	to	45.9 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)					
Leq	45.2	dBA	Leq	44.1	dBA
L10	47.6	dBA	L10	45.5	dBA
L50	44.3	dBA	L50	43.9	dBA

Met Data		
WS at Hub	6.15	m/s
WS at West Is.	3.57	m/s
WD at Hub	324	degrees
WD at West Is.	WNW	
BP	29.84	in
Humidity	44	%
Temp	37.1	degr F

Wind Turbine Sound Sampling: Fairhaven 2 April 2013

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
2-Apr-13		
Time: 12:24 AM		
Run #	mm:ss	dB(A)
1	5	36.7
1	10	33.4
1	15	32.6
1	20	34
1	25	33.1
1	30	32.9
1	35	33.4
1	40	32.7
1	45	32.9
1	50	34.1
1	55	34.3
1	60	33.4
1	1:05	33.8
1	1:10	34.1
1	1:15	34.1
1	1:20	32.6
1	1:25	33.8
1	1:30	33.5
1	1:35	33.6
1	1:40	33.9
1	1:45	34.7
1	1:50	35.1
1	1:55	35.3
1	2:00	36.9
1	2:05	36
1	2:10	37.5
1	2:15	35.7
1	2:20	34.8
1	2:25	34.6
1	2:30	36.2
1	2:35	35.4
1	2:40	38.9
1	2:45	34.2
1	2:50	32.9
1	2:55	33
1	3:00	34.8
1	3:05	33.2
1	3:10	34.2
1	3:15	34.1
1	3:20	34.3
1	3:25	34.4
1	3:30	34.8
1	3:35	35.7
1	3:40	34.5
1	3:45	35.5
1	3:50	36.3
1	3:55	35.1
1	4:00	35.3
1	4:05	35.8
1	4:10	35.8
1	4:15	37.1
1	4:20	36.4

12 Little Bay Rd		
2-Apr-13		
Time: 12:31 AM		
Run #	mm:ss	dB(A)
2	5	35.5
2	10	34.8
2	15	34.1
2	20	33.9
2	25	34.3
2	30	33.6
2	35	33
2	40	32.5
2	45	33.4
2	50	32.9
2	55	32.2
2	60	33.9
2	1:05	36.2
2	1:10	36.6
2	1:15	36.9
2	1:20	33.5
2	1:25	34.6
2	1:30	35.9
2	1:35	34.5
2	1:40	33.8
2	1:45	34.2
2	1:50	33.2
2	1:55	32.4
2	2:00	33.4
2	2:05	32.2
2	2:10	33.5
2	2:15	33
2	2:20	33.3
2	2:25	34.5
2	2:30	35.2
2	2:35	34.8
2	2:40	33.8
2	2:45	35.9
2	2:50	34.4
2	2:55	33.8
2	3:00	33.3
2	3:05	33.4
2	3:10	34.9
2	3:15	35.7
2	3:20	36.9
2	3:25	37
2	3:30	35.2
2	3:35	33.1
2	3:40	32.6
2	3:45	34.2
2	3:50	34.7
2	3:55	34.8
2	4:00	34.4
2	4:05	35.7
2	4:10	34.9
2	4:15	35
2	4:20	36.6

12 Little Bay Rd		
2-Apr-13		
Time: 12:37 AM		
Run #	mm:ss	dB(A)
3	5	34
3	10	33.5
3	15	35.3
3	20	35.4
3	25	33.5
3	30	33.1
3	35	34.8
3	40	34.1
3	45	32.4
3	50	32.9
3	55	33.9
3	60	33.1
3	1:05	33.1
3	1:10	33
3	1:15	32.4
3	1:20	32.1
3	1:25	33.4
3	1:30	34.5
3	1:35	33.6
3	1:40	33.9
3	1:45	34.5
3	1:50	33.2
3	1:55	33.5
3	2:00	32.4
3	2:05	31.7
3	2:10	31.2
3	2:15	31.6
3	2:20	33.6
3	2:25	32.4
3	2:30	32.6
3	2:35	33.5
3	2:40	33.2
3	2:45	32.4
3	2:50	32.6
3	2:55	33.4
3	3:00	32.5
3	3:05	33
3	3:10	33.1
3	3:15	32.6
3	3:20	31.9
3	3:25	33.9
3	3:30	32.5
3	3:35	33.4
3	3:40	33.2
3	3:45	32.7
3	3:50	33.1
3	3:55	32.6
3	4:00	32.7
3	4:05	32.2
3	4:10	31.7
3	4:15	32.5
3	4:20	34.4

Wind Turbine Sound Sampling: Fairhaven 2 April 2013

AMBIENT SOUND - PRELIMINARY DATA

12 Little Bay Rd		
2-Apr-13		
Time: 12:24 AM		
Run #	mm:ss	dB(A)
1	4:25	36.7
1	4:30	34.6
1	4:35	34.3
1	4:40	33.9
1	4:45	34.4
1	4:50	34.9
1	4:55	34.6
1	5:00	34.2

L90	32.9	dBA	
Range	31.2	to	38.9

12 Little Bay Rd		
2-Apr-13		
Time: 12:31 AM		
Run #	mm:ss	dB(A)
2	4:25	37.8
2	4:30	37.2
2	4:35	35.3
2	4:40	35
2	4:45	35.1
2	4:50	35
2	4:55	35.7
2	5:00	34.9

12 Little Bay Rd		
2-Apr-13		
Time: 12:37 AM		
Run #	mm:ss	dB(A)
3	4:25	34.8
3	4:30	34.1
3	4:35	34.9
3	4:40	35
3	4:45	35
3	4:50	34.6
3	4:55	33.9
3	5:00	33.1

NOTE: During third run, WS dropped below 5m/s avg so results from 3rd run were NOT counted when determining the L90

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	35.1	dBA	Leq	34.8	dBA	Leq	33.6	dBA
L90	33.1	dBA	L90	32.8	dBA	L90	32.1	dBA

Met Data

WS at Hub	5.57	m/s
WS at West Is.	3.9	m/s
WD at Hub	316	degrees
WD at West Is.	WNW	
BP	29.85	in
Humidity	44	%
Temp	36.7	degr F

based on avg of 1st two runs

Wind Turbine Sound Sampling Summary: Fairhaven 2 April 2013
PRELIMINARY DATA

LOCATION					
	Parameter	7 Pierces Pt Road	12 Little Bay Rd	3 Teal Cir	
Hand Log data (dBA)	Lmax	<i>Result not Valid</i> <i>Noncomparable wind speeds between ambient and impact sampling periods</i>	45.8	44.7	
	L90		32.9	34.9	
	Diff		12.9	9.8	
	Range Turbine on		41.4 - 45.9	36.4 - 45.7	
	Range Turbine Off		31.2 - 38.9	33.5 - 43.8	
MET	Wind Direction	WNW	NW	WNW	
	Sampling location relationship to WT	Downwind	Perpendicular Right	Upwind & right	
	Wind Speed Hub	5.2 - 8.0 m/s	5.6 - 6.2 m/s	5.6 - 6.7 m/s	

Only 2 runs used to determine ambient Wind speed dropped below spec in 3rd run

Wind Turbine Sound Sampling: Fairhaven 12 April 2013

IMPACT SOUND- PRELIMINARY DATA

12 Little Bay Rd		
11-Apr-13		
Time: 11:52 pm		
Run #	mm:ss	dB(A)
1	5	39.8
1	10	40.3
1	15	39.6
1	20	39.3
1	25	40.7
1	30	40
1	35	40.2
1	40	40.8
1	45	42.8
1	50	44.9
1	55	45.3
1	60	44.6
1	1:05	43.6
1	1:10	43.5
1	1:15	44.5
1	1:20	46.3
1	1:25	42.8
1	1:30	42.1
1	1:35	42
1	1:40	40.9
1	1:45	41.7
1	1:50	39.7
1	1:55	40.7
1	2:00	40.4
1	2:05	40
1	2:10	39.8
1	2:15	39.7
1	2:20	38.9
1	2:25	39.1
1	2:30	38.4
1	2:35	39
1	2:40	39
1	2:45	38.8
1	2:50	39.5
1	2:55	38.5
1	3:00	39.6
1	3:05	38.9
1	3:10	39
1	3:15	38.9
1	3:20	39.7
1	3:25	39.4
1	3:30	39.5
1	3:35	39.5
1	3:40	38.6
1	3:45	38.7
1	3:50	38.7
1	3:55	38.3
1	4:00	38.7
1	4:05	39.4
1	4:10	38.9
1	4:15	38.3
1	4:20	40
1	4:25	39.7
1	4:30	39.8

12 Little Bay Rd		
11-Apr-13		
Time: 11:59 pm		
Run #	mm:ss	dB(A)
2	5	38.9
2	10	39.3
2	15	40.3
2	20	39.4
2	25	40.8
2	30	40.5
2	35	39.7
2	40	39
2	45	39.1
2	50	39.4
2	55	41.3
2	60	40
2	1:05	39.2
2	1:10	39.2
2	1:15	40
2	1:20	39.3
2	1:25	40.9
2	1:30	39.9
2	1:35	39.9
2	1:40	39.3
2	1:45	39
2	1:50	38.9
2	1:55	39.7
2	2:00	38.5
2	2:05	38.3
2	2:10	39
2	2:15	39.2
2	2:20	38.7
2	2:25	39.5
2	2:30	37.8
2	2:35	39.1
2	2:40	39.2
2	2:45	38.2
2	2:50	39.1
2	2:55	37.7
2	3:00	38.1
2	3:05	38.4
2	3:10	38
2	3:15	38.9
2	3:20	38.7
2	3:25	40.5
2	3:30	40.2
2	3:35	40.1
2	3:40	37.7
2	3:45	39.2
2	3:50	40
2	3:55	38.8
2	4:00	39.1
2	4:05	38.5
2	4:10	39.4
2	4:15	38.5
2	4:20	39.1
2	4:25	40.3
2	4:30	40.4

12 Little Bay Rd		
12-Apr-13		
Time: 12:06 am		
Run #	mm:ss	dB(A)
3	5	39.7
3	10	39.4
3	15	38.8
3	20	40.4
3	25	39.6
3	30	39.1
3	35	40.1
3	40	40.2
3	45	39.2
3	50	40.1
3	55	40.4
3	60	39.9
3	1:05	40.1
3	1:10	39.2
3	1:15	40.2
3	1:20	39.8
3	1:25	39.7
3	1:30	39
3	1:35	39.8
3	1:40	39.7
3	1:45	39.7
3	1:50	39.4
3	1:55	40.7
3	2:00	40.2
3	2:05	41.2
3	2:10	39.7
3	2:15	40.7
3	2:20	40
3	2:25	39.7
3	2:30	38.8
3	2:35	40.5
3	2:40	40
3	2:45	39.4
3	2:50	39.4
3	2:55	38.7
3	3:00	39.1
3	3:05	39.9
3	3:10	39.4
3	3:15	39.1
3	3:20	40.6
3	3:25	40
3	3:30	40.8
3	3:35	40.4
3	3:40	39.4
3	3:45	40
3	3:50	40.8
3	3:55	40.4
3	4:00	40.7
3	4:05	41
3	4:10	40.3
3	4:15	39.9
3	4:20	39.1
3	4:25	38.8
3	4:30	39.6

Wind Turbine Sound Sampling: Fairhaven 12 April 2013

IMPACT SOUND- PRELIMINARY DATA

12 Little Bay Rd		
11-Apr-13		
Time: 11:52 pm		
Run #	mm:ss	dB(A)
1	4:35	39
1	4:40	38.8
1	4:45	38
1	4:50	38.2
1	4:55	39.7
1	5:00	38.4

12 Little Bay Rd		
11-Apr-13		
Time: 11:59 pm		
Run #	mm:ss	dB(A)
2	4:35	39.8
2	4:40	40.2
2	4:45	39.5
2	4:50	38.9
2	4:55	40
2	5:00	40.5

12 Little Bay Rd		
12-Apr-13		
Time: 12:06 am		
Run #	mm:ss	dB(A)
3	4:35	40.3
3	4:40	38.8
3	4:45	39.3
3	4:50	41.7
3	4:55	41.1
3	5:00	40.8

Lmax	40.9	dBA	
Leq	39.5	dBA	
Range	37.7	to	41.2 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	40.9	dBA	Leq	39.5	dBA	Leq	40	dBA
L10	43.8	dBA	L10	40.4	dBA	L10	40.8	dBA
L50	39.4	dBA	L50	39.2	dBA	L50	39.8	dBA

Met Data

WS at Hub	3.4	m/s
WS at West Is.	1.6	m/s
WD at Hub	84	degrees
WD at West Is.	East	
BP	35.8	in
Humidity	72	%
Temp	44.2	degr F

Wind Turbine Sound Sampling: Fairhaven 12 April 2013

AMBIENT SOUND- PRELIMINARY DATA

12 Little Bay Rd		
12-Apr-13		
Time: 12:14 am		
Run #	mm:ss	dB(A)
1	5	31.8
1	10	31.9
1	15	32.1
1	20	32.3
1	25	31.1
1	30	32.6
1	35	31.8
1	40	31.7
1	45	31.4
1	50	32
1	55	32.3
1	60	32
1	1:05	31.7
1	1:10	32.5
1	1:15	32.9
1	1:20	32.1
1	1:25	32.4
1	1:30	32.4
1	1:35	32.9
1	1:40	34.2
1	1:45	35
1	1:50	35.2
1	1:55	35.2
1	2:00	34.5
1	2:05	x
1	2:10	33.2
1	2:15	32.1
1	2:20	31.4
1	2:25	32.1
1	2:30	32.3
1	2:35	31.4
1	2:40	31.1
1	2:45	31.2
1	2:50	30.4
1	2:55	31.4
1	3:00	30.5
1	3:05	29.9
1	3:10	30
1	3:15	30.9
1	3:20	31.7
1	3:25	32.2
1	3:30	32
1	3:35	30.9
1	3:40	30.3
1	3:45	30.1
1	3:50	31.1
1	3:55	31.2
1	4:00	31.2
1	4:05	30.4

12 Little Bay Rd		
12-Apr-13		
Time: 12:20 am		
Run #	mm:ss	dB(A)
2	5	34.8
2	10	32.1
2	15	33
2	20	32.6
2	25	33.7
2	30	34
2	35	33
2	40	33
2	45	32.9
2	50	32.2
2	55	32.7
2	60	32.1
2	1:05	33.1
2	1:10	33
2	1:15	32.9
2	1:20	33.2
2	1:25	32.9
2	1:30	32.5
2	1:35	32.1
2	1:40	32.9
2	1:45	32.6
2	1:50	31
2	1:55	31.5
2	2:00	31
2	2:05	31.5
2	2:10	31.2
2	2:15	29.9
2	2:20	29.6
2	2:25	29.9
2	2:30	29.9
2	2:35	31.5
2	2:40	30.9
2	2:45	31.1
2	2:50	32
2	2:55	33
2	3:00	34.8
2	3:05	33.6
2	3:10	33.5
2	3:15	34
2	3:20	34.2
2	3:25	34
2	3:30	33.1
2	3:35	32.9
2	3:40	32.6
2	3:45	32.1
2	3:50	31.6
2	3:55	32.3
2	4:00	32.5
2	4:05	33

12 Little Bay Rd		
12-Apr-13		
Time: 12:27 am		
Run #	mm:ss	dB(A)
3	5	30.4
3	10	30.5
3	15	29
3	20	29.1
3	25	29.8
3	30	29.5
3	35	29.7
3	40	29.9
3	45	29.9
3	50	30
3	55	29.3
3	60	29.8
3	1:05	30.5
3	1:10	30.4
3	1:15	29.9
3	1:20	29.6
3	1:25	29.7
3	1:30	30.7
3	1:35	30.5
3	1:40	31.6
3	1:45	32.3
3	1:50	32
3	1:55	30.5
3	2:00	30.9
3	2:05	31.4
3	2:10	30.1
3	2:15	29.9
3	2:20	30.1
3	2:25	30.7
3	2:30	31
3	2:35	31.8
3	2:40	32.5
3	2:45	31.8
3	2:50	32
3	2:55	32.9
3	3:00	33.6
3	3:05	31.1
3	3:10	31.2
3	3:15	31.7
3	3:20	32.2
3	3:25	32.9
3	3:30	33.1
3	3:35	32.7
3	3:40	32.4
3	3:45	32.9
3	3:50	33.2
3	3:55	33.2
3	4:00	33.3
3	4:05	33.1

Wind Turbine Sound Sampling: Fairhaven 12 April 2013

AMBIENT SOUND- PRELIMINARY DATA

12 Little Bay Rd		
12-Apr-13		
Time: 12:14 am		
Run #	mm:ss	dB(A)
1	4:10	30.7
1	4:15	30.8
1	4:20	29.7
1	4:25	30.6
1	4:30	30.4
1	4:35	30.4
1	4:40	30.4
1	4:45	30.1
1	4:50	30.9
1	4:55	30.5
1	5:00	30.7

12 Little Bay Rd		
12-Apr-13		
Time: 12:20 am		
Run #	mm:ss	dB(A)
2	4:10	32.5
2	4:15	31.9
2	4:20	33.1
2	4:25	33.4
2	4:30	33.4
2	4:35	31.4
2	4:40	31.8
2	4:45	32.6
2	4:50	32.2
2	4:55	31.8
2	5:00	32.7

12 Little Bay Rd		
12-Apr-13		
Time: 12:27 am		
Run #	mm:ss	dB(A)
3	4:10	33.4
3	4:15	34.3
3	4:20	33.1
3	4:25	32.9
3	4:30	32.5
3	4:35	33.6
3	4:40	33.4
3	4:45	36
3	4:50	38.7
3	4:55	35.6
3	5:00	36.8

L90	29.9	dBA
Range	29	to
	35.2	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	32.1	dBA	Leq	32.7	dBA	Leq	32.5	dBA
L90	30.3	dBA	L90	30.9	dBA	L90	29.8	dBA

Met Data

WS at Hub	3.4	m/s
WS at West Is.	1.6	m/s
WD at Hub	75	degrees
WD at West Is.	East	
BP	30.15	in
Humidity	69	%
Temp	44.2	degr F

Wind Turbine Sound Sampling: Fairhaven 12 April 2013
IMPACT SOUND- PRELIMINARY DATA

Teal Circle		
12-Apr-13		
Time: 1:23 am		
Run #	mm:ss	dB(A)
1	5	39.2
1	10	38.7
1	15	37.9
1	20	39.1
1	25	39.3
1	30	39.9
1	35	38.7
1	40	38.9
1	45	38.5
1	50	38.5
1	55	38.1
1	60	39.1
1	1:05	38.5
1	1:10	39.5
1	1:15	41.7
1	1:20	40.2
1	1:25	39.1
1	1:30	38.5
1	1:35	38.8
1	1:40	38.6
1	1:45	38
1	1:50	39.6
1	1:55	38.1
1	2:00	38.8
1	2:05	38.5
1	2:10	37.4
1	2:15	38.9
1	2:20	37.6
1	2:25	38.2
1	2:30	38.9
1	2:35	38.3
1	2:40	37.1
1	2:45	37.4
1	2:50	37.2
1	2:55	37.6
1	3:00	38.2
1	3:05	38.3
1	3:10	38.5
1	3:15	37.7
1	3:20	38.4
1	3:25	38.4
1	3:30	37.1
1	3:35	37.9
1	3:40	38.7
1	3:45	39.4
1	3:50	39.1
1	3:55	39
1	4:00	38.2
1	4:05	38
1	4:10	38.4
1	4:15	39
1	4:20	40.8
1	4:25	38.2
1	4:30	38.2

Lmax 01

Teal Circle		
12-Apr-13		
Time: 1:29 am		
Run #	mm:ss	dB(A)
2	5	37.3
2	10	37.6
2	15	38.8
2	20	36.7
2	25	36.8
2	30	38
2	35	38.1
2	40	39
2	45	40.7
2	50	39.1
2	55	38.4
2	60	39.3
2	1:05	38.6
2	1:10	38.6
2	1:15	37.9
2	1:20	38.3
2	1:25	37.8
2	1:30	38.4
2	1:35	37.7
2	1:40	38.5
2	1:45	37.5
2	1:50	37.1
2	1:55	37.9
2	2:00	37.7
2	2:05	37.6
2	2:10	36
2	2:15	37.4
2	2:20	37.5
2	2:25	38.8
2	2:30	38.6
2	2:35	38.1
2	2:40	38.5
2	2:45	37.9
2	2:50	37.6
2	2:55	38.7
2	3:00	38.9
2	3:05	37.9
2	3:10	38.8
2	3:15	38.3
2	3:20	37.3
2	3:25	38.6
2	3:30	39.9
2	3:35	38.9
2	3:40	39
2	3:45	38.7
2	3:50	38.6
2	3:55	38.3
2	4:00	38.7
2	4:05	37.2
2	4:10	37.1
2	4:15	37.6
2	4:20	37.6
2	4:25	37.5
2	4:30	38.4

Lmax 2

Teal Circle		
12-Apr-13		
Time: 1:35 am		
Run #	mm:ss	dB(A)
3	5	38.9
3	10	38.5
3	15	38.2
3	20	38.7
3	25	37.4
3	30	36.9
3	35	37.3
3	40	37.7
3	45	39.4
3	50	38.7
3	55	38.2
3	60	38.5
3	1:05	38.8
3	1:10	39.7
3	1:15	39.8
3	1:20	39
3	1:25	39.7
3	1:30	40.1
3	1:35	38.5
3	1:40	36.7
3	1:45	37.8
3	1:50	37.7
3	1:55	38
3	2:00	39.1
3	2:05	38.4
3	2:10	39
3	2:15	40.5
3	2:20	39.5
3	2:25	39.1
3	2:30	38.6
3	2:35	39.8
3	2:40	38.6
3	2:45	37.7
3	2:50	38.6
3	2:55	38.7
3	3:00	39.1
3	3:05	39.4
3	3:10	39.7
3	3:15	39.1
3	3:20	38.6
3	3:25	40.3
3	3:30	38.7
3	3:35	37.6
3	3:40	37.4
3	3:45	39
3	3:50	37.9
3	3:55	38.8
3	4:00	41.3
3	4:05	40.4
3	4:10	39.6
3	4:15	39.4
3	4:20	38.6
3	4:25	38.1
3	4:30	37.6

Lmax 3

Wind Turbine Sound Sampling: Fairhaven 12 April 2013
IMPACT SOUND- PRELIMINARY DATA

Teal Circle		
12-Apr-13		
Time: 1:23 am		
Run #	mm:ss	dB(A)
1	4:35	38.3
1	4:40	37.9
1	4:45	38.5
1	4:50	38.4
1	4:55	37.7
1	5:00	38.2

Teal Circle		
12-Apr-13		
Time: 1:29 am		
Run #	mm:ss	dB(A)
2	4:35	38
2	4:40	37.9
2	4:45	36.3
2	4:50	36.2
2	4:55	37.1
2	5:00	37.6

Teal Circle		
12-Apr-13		
Time: 1:35 am		
Run #	mm:ss	dB(A)
3	4:35	37.9
3	4:40	37.9
3	4:45	37.5
3	4:50	39
3	4:55	37.6
3	5:00	37.8

Lmax	39.2	dBA	
Leq	38.0	dBA	
Range	36	to	39.4 dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)								
Leq	38.9	dBA	Leq	38.2	dBA	Leq	38.8	dBA
L10	39.6	dBA	L10	39	dBA	L10	39.6	dBA
L50	38.4	dBA	L50	38	dBA	L50	38.6	dBA

Met Data								
WS at Hub	3.4	m/s						
WS at West Is.	1.6	m/s						
WD at Hub	66	degrees						
WD at West Is.	East							
BP	30.16	in						
Humidity	69	%						
Temp	44.1	degr F						

Wind Turbine Sound Sampling: Fairhaven 12 April 2013

AMBIENT SOUND - PRELIMINARY DATA

Teal Circle		
12-Apr-13		
Time: 12:41 am		
Run #	mm:ss	dB(A)
1	5	31.2
1	10	30.4
1	15	29.3
1	20	29.1
1	25	28.9
1	30	29.1
1	35	29.3
1	40	29.6
1	45	29.7
1	50	29.8
1	55	30
1	60	30.4
1	1:05	29.6
1	1:10	30.4
1	1:15	30.3
1	1:20	31
1	1:25	30.6
1	1:30	29.8
1	1:35	29.3
1	1:40	30.5
1	1:45	30.9
1	1:50	27.7
1	1:55	27.3
1	2:00	27.6
1	2:05	29.9
1	2:10	28.5
1	2:15	26.3
1	2:20	26.5
1	2:25	26.9
1	2:30	28
1	2:35	26.2
1	2:40	27.4
1	2:45	26.7
1	2:50	27.8
1	2:55	28.6
1	3:00	30.3
1	3:05	30.4
1	3:10	29.9
1	3:15	31.9
1	3:20	32.1
1	3:25	31.1
1	3:30	29.7
1	3:35	29.8
1	3:40	30
1	3:45	30.8
1	3:50	32.2
1	3:55	31.1
1	4:00	30.7
1	4:05	32.2
1	4:10	31.7
1	4:15	31.8

Teal Circle		
12-Apr-13		
Time: 12:48 am		
Run #	mm:ss	dB(A)
2	5	30
2	10	31.7
2	15	30
2	20	29
2	25	28.9
2	30	27.9
2	35	27.2
2	40	27
2	45	28
2	50	27.3
2	55	28.8
2	60	28
2	1:05	28.2
2	1:10	28.7
2	1:15	29.5
2	1:20	29.7
2	1:25	30.7
2	1:30	30.9
2	1:35	30.3
2	1:40	30
2	1:45	31.9
2	1:50	30.4
2	1:55	30.1
2	2:00	32.1
2	2:05	34
2	2:10	32.5
2	2:15	30.9
2	2:20	30.4
2	2:25	30.9
2	2:30	32.5
2	2:35	32.1
2	2:40	31.8
2	2:45	30.5
2	2:50	30.5
2	2:55	30.3
2	3:00	29.8
2	3:05	30.3
2	3:10	30.5
2	3:15	30.5
2	3:20	30.4
2	3:25	31.2
2	3:30	30.9
2	3:35	29.9
2	3:40	29.7
2	3:45	30.3
2	3:50	30.6
2	3:55	30.8
2	4:00	30.4
2	4:05	30.4
2	4:10	29.6
2	4:15	28

Teal Circle		
12-Apr-13		
Time: 12:54 am		
Run #	mm:ss	dB(A)
3	5	31.4
3	10	29.5
3	15	30.3
3	20	29.9
3	25	30
3	30	30.4
3	35	30.1
3	40	31
3	45	31.2
3	50	30.9
3	55	30
3	60	29.7
3	1:05	29.3
3	1:10	29.6
3	1:15	32.1
3	1:20	32.4
3	1:25	33.4
3	1:30	32
3	1:35	31.2
3	1:40	31.2
3	1:45	32.2
3	1:50	32.7
3	1:55	31.5
3	2:00	30.3
3	2:05	30.5
3	2:10	31.8
3	2:15	30.1
3	2:20	29.8
3	2:25	29.3
3	2:30	29.7
3	2:35	29.8
3	2:40	29.7
3	2:45	29.8
3	2:50	29.7
3	2:55	30
3	3:00	29.5
3	3:05	30.1
3	3:10	29.6
3	3:15	30.3
3	3:20	30.8
3	3:25	31.8
3	3:30	30.1
3	3:35	29.9
3	3:40	29.9
3	3:45	29.6
3	3:50	29.7
3	3:55	29.7
3	4:00	28.8
3	4:05	28.2
3	4:10	29
3	4:15	29.2

Wind Turbine Sound Sampling: Fairhaven 12 April 2013

AMBIENT SOUND - PRELIMINARY DATA

Teal Circle		
12-Apr-13		
Time: 12:41 am		
Run #	mm:ss	dB(A)
1	4:20	30.7
1	4:25	29.9
1	4:30	29.6
1	4:35	30
1	4:40	30.8
1	4:45	31.6
1	4:50	30.7
1	4:55	30.3
1	5:00	30.4

Teal Circle		
12-Apr-13		
Time: 12:48 am		
Run #	mm:ss	dB(A)
2	4:20	27.7
2	4:25	28.1
2	4:30	28.5
2	4:35	28.1
2	4:40	27
2	4:45	28
2	4:50	26.9
2	4:55	26.9
2	5:00	26.7

Teal Circle		
12-Apr-13		
Time: 12:54 am		
Run #	mm:ss	dB(A)
3	4:20	28.9
3	4:25	27.7
3	4:30	27.3
3	4:35	27.2
3	4:40	31.2
3	4:45	28.8
3	4:50	29.3
3	4:55	28.6
3	5:00	27.6

L90	27.7	dBA		
Range	26.2	to	34	dBA

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	30.5	dBA	Leq	30.6	dBA	Leq	30.6	dBA
L90	27.3	dBA	L90	27.6	dBA	L90	28.7	dBA

Met Data

WS at Hub	3.2	m/s
WS at West Is.	2	m/s
WD at Hub	62	degrees
WD at West Is.	East	
BP	30.16	in
Humidity	68	%
Temp	44.2	degr F

Wind Turbine Sound Sampling: Fairhaven 12 April 2013

IMPACT SOUND - PRELIMINARY DATA

Mill Rd (See Note)		
12-Apr-13		
Time: 2:03 am		
Run #	mm:ss	dB(A)
1	5	36.6
1	10	36.2
1	15	36
1	20	36.3
1	25	36.1
1	30	36.1
1	35	36.6
1	40	37.4
1	45	38
1	50	39.4
1	55	39.1
1	60	40
1	1:05	37.7
1	1:10	37.2
1	1:15	37
1	1:20	37.3
1	1:25	36.3
1	1:30	36.2
1	1:35	36.4
1	1:40	36
1	1:45	37.5
1	1:50	35.8
1	1:55	35.4
1	2:00	36.8
1	2:05	36.7
1	2:10	35.7
1	2:15	35.7
1	2:20	35.7
1	2:25	36.3
1	2:30	35.6
1	2:35	35.5
1	2:40	35.9
1	2:45	36.3
1	2:50	37
1	2:55	35.8
1	3:00	35.7
1	3:05	35.4
1	3:10	36.4
1	3:15	35.7
1	3:20	36.2
1	3:25	37.1
1	3:30	35.4
1	3:35	35.8
1	3:40	35.5
1	3:45	35.2
1	3:50	35.7
1	3:55	35.6
1	4:00	35.9
1	4:05	38.3
1	4:10	36.8
1	4:15	35.7
1	4:20	35.8
1	4:25	36.4
1	4:30	35.8

Mill Rd		
12-Apr-13		
Time: 2:08 am		
Run #	mm:ss	dB(A)
2	5	37.1
2	10	36.7
2	15	35.6
2	20	35.5
2	25	35.3
2	30	35.3
2	35	36.3
2	40	35.1
2	45	35.1
2	50	35.3
2	55	35.2
2	60	35.9
2	1:05	35.6
2	1:10	35.9
2	1:15	37
2	1:20	35.6
2	1:25	36.1
2	1:30	35.6
2	1:35	35.3
2	1:40	36
2	1:45	36.7
2	1:50	35.5
2	1:55	35.5
2	2:00	35.8
2	2:05	35.6
2	2:10	35.5
2	2:15	35.3
2	2:20	35.5
2	2:25	35.7
2	2:30	35.2
2	2:35	35.7
2	2:40	35.8
2	2:45	37.5
2	2:50	37.3
2	2:55	36.7
2	3:00	37.6
2	3:05	36.8
2	3:10	37.1
2	3:15	36.9
2	3:20	36.9
2	3:25	38.2
2	3:30	38.3
2	3:35	38.3
2	3:40	37.6
2	3:45	37.1
2	3:50	37.6
2	3:55	36.6
2	4:00	36.1
2	4:05	36.6
2	4:10	36.4
2	4:15	37.7
2	4:20	36.8
2	4:25	37.6
2	4:30	36.4

Mill Rd		
12-Apr-13		
Time: 2:14 am		
Run #	mm:ss	dB(A)
3	5	35.5
3	10	35.5
3	15	35
3	20	35.5
3	25	36.6
3	30	37
3	35	37.7
3	40	40.6
3	45	41.1
3	50	44
3	55	41.2
3	60	38.8
3	1:05	37.4
3	1:10	37.1
3	1:15	37.3
3	1:20	36.6
3	1:25	36.3
3	1:30	37.3
3	1:35	39.3
3	1:40	38.9
3	1:45	41.8
3	1:50	37.7
3	1:55	36.9
3	2:00	35.6
3	2:05	35.3
3	2:10	35.7
3	2:15	35.7
3	2:20	36
3	2:25	35.4
3	2:30	35.5
3	2:35	35.9
3	2:40	36.7
3	2:45	35.3
3	2:50	35.5
3	2:55	37.3
3	3:00	35.5
3	3:05	35.5
3	3:10	35.4
3	3:15	35.6
3	3:20	35.7
3	3:25	35.7
3	3:30	35.7
3	3:35	35.4
3	3:40	35.5
3	3:45	35.5
3	3:50	35.7
3	3:55	35.3
3	4:00	34.8
3	4:05	37
3	4:10	36.6
3	4:15	35.8
3	4:20	35.4
3	4:25	36.8
3	4:30	38.4

Wind Turbine Sound Sampling: Fairhaven 12 April 2013
IMPACT SOUND - PRELIMINARY DATA

Mill Rd (See Note)		
12-Apr-13		
Time: 2:03 am		
Run #	mm:ss	dB(A)
1	4:35	35.3
1	4:40	36.1
1	4:45	35.5
1	4:50	36
1	4:55	35.4
1	5:00	35.7

Mill Rd		
12-Apr-13		
Time: 2:08 am		
Run #	mm:ss	dB(A)
2	4:35	37.1
2	4:40	36.7
2	4:45	37.4
2	4:50	35.9
2	4:55	36.7
2	5:00	36.3

Mill Rd		
12-Apr-13		
Time: 2:14 am		
Run #	mm:ss	dB(A)
3	4:35	36.9
3	4:40	36.3
3	4:45	37.6
3	4:50	35.2
3	4:55	36.6
3	5:00	36.1

Lmax	37.6	dBA	
Leq	36.0	dBA	
Range	34.8	to	37.6 dBA

Note: *Sampling conducted in the road 2 houses south of 16 Mill Rd because the sound of water from the mill race made it difficult to hear the turbine sound*

Lmax 3

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)								
Leq	36.7	dBA	Leq	36.5	dBA	Leq	37.5	dBA
L10	37.8	dBA	L10	37.5	dBA	L10	39.2	dBA
L50	35.9	dBA	L50	36.2	dBA	L50	36.1	dBA

Met Data

WS at Hub	4.4	m/s
WS at West Is.	2	m/s
WD at Hub	64	degrees
WD at West Is.	East	
BP	30.13	in
Humidity	70	%
Temp	44	degr F

Wind Turbine Sound Sampling: Fairhaven 12 April 2013

AMBIENT SOUND - PRELIMINARY DATA

Mill Rd		
12-Apr-13		
Time: 2:22 am		
Run #	mm:ss	dB(A)
1	5	34.9
1	10	34.3
1	15	34.5
1	20	34.4
1	25	36.1
1	30	34.5
1	35	35
1	40	38.1
1	45	37.9
1	50	40.4
1	55	39.9
1	60	38
1	1:05	35.8
1	1:10	36.8
1	1:15	35.4
1	1:20	36.5
1	1:25	34.6
1	1:30	34.7
1	1:35	34.7
1	1:40	34.4
1	1:45	34
1	1:50	34.3
1	1:55	34.1
1	2:00	38.6
1	2:05	34.5
1	2:10	34.3
1	2:15	36
1	2:20	34.5
1	2:25	34.1
1	2:30	33.7
1	2:35	34.1
1	2:40	34
1	2:45	34
1	2:50	34
1	2:55	35.1
1	3:00	34
1	3:05	34.9
1	3:10	34.2
1	3:15	41.1
1	3:20	42
1	3:25	34.7
1	3:30	33.8
1	3:35	33.7
1	3:40	34.1
1	3:45	34
1	3:50	33.9
1	3:55	33.9
1	4:00	33.9
1	4:05	33.7
1	4:10	33.5
1	4:15	33.7
1	4:20	33.8
1	4:25	33.8
1	4:30	34.2

Mill Rd		
12-Apr-13		
Time: see note below		
Run #	mm:ss	dB(A)
2	5	34.4
2	10	34.8
2	15	34.2
2	20	34
2	25	33.9
2	30	34.2
2	35	33.8
2	40	34.2
2	45	34.1
2	50	34.7
2	55	34.1
2	60	34.5
2	1:05	34.1
2	1:10	34.4
2	1:15	35.2
2	1:20	35.4
2	1:25	39.8
2	1:30	39
2	1:35	39.4
2	1:40	40.6
2	1:45	40.3
2	1:50	37.9
2	1:55	36
2	2:00	36
2	2:05	35.3
2	2:10	34.4
2	2:15	35
2	2:20	34.5
2	2:25	34.4
2	2:30	34.2
2	2:35	34.5
2	2:40	34.4
2	2:45	34.5
2	2:50	34.5
2	2:55	34.6
2	3:00	34.7
2	3:05	34.4
2	3:10	34.7
2	3:15	34.3
2	3:20	34.5
2	3:25	34.6
2	3:30	35.3
2	3:35	34.8
2	3:40	36.6
2	3:45	36.2
2	3:50	35.6
2	3:55	38.9
2	4:00	40.7
2	4:05	36.8
2	4:10	36.2
2	4:15	35.2
2	4:20	35
2	4:25	34.2
2	4:30	33.9

Mill Rd		
12-Apr-13		
Time: see note below		
Run #	mm:ss	dB(A)
3	5	33.9
3	10	34.1
3	15	33.6
3	20	33.7
3	25	33.7
3	30	33.7
3	35	34.1
3	40	33.8
3	45	33.9
3	50	34
3	55	33.8
3	60	34
3	1:05	34.1
3	1:10	34.2
3	1:15	33.9
3	1:20	33.8
3	1:25	34
3	1:30	34
3	1:35	34
3	1:40	34.3
3	1:45	34.3
3	1:50	34
3	1:55	33.8
3	2:00	33.9
3	2:05	33.7
3	2:10	33.6
3	2:15	34
3	2:20	34.1
3	2:25	33.9
3	2:30	33.9
3	2:35	34
3	2:40	33.8
3	2:45	33.8
3	2:50	33.7
3	2:55	34
3	3:00	34.1
3	3:05	34.6
3	3:10	34.4
3	3:15	34.2
3	3:20	33.9
3	3:25	33.6
3	3:30	33.9
3	3:35	34.2
3	3:40	34.3
3	3:45	33.9
3	3:50	33.9
3	3:55	34.1
3	4:00	34.2
3	4:05	34.5
3	4:10	34
3	4:15	33.9
3	4:20	34
3	4:25	33.9
3	4:30	34.1

Wind Turbine Sound Sampling: Fairhaven 12 April 2013

AMBIENT SOUND - PRELIMINARY DATA

Mill Rd		
12-Apr-13		
Time: 2:22 am		
Run #	mm:ss	dB(A)
1	4:35	34.1
1	4:40	34
1	4:45	34.1
1	4:50	35
1	4:55	35
1	5:00	34.5

Mill Rd		
12-Apr-13		
Time: see note below		
Run #	mm:ss	dB(A)
2	4:35	33.9
2	4:40	33.7
2	4:45	33.4
2	4:50	33.4
2	4:55	33.6
2	5:00	33.9

Mill Rd		
12-Apr-13		
Time: see note below		
Run #	mm:ss	dB(A)
3	4:35	34.2
3	4:40	34.1
3	4:45	34.1
3	4:50	34
3	4:55	33.9
3	5:00	34.1

NOTE : The Ambient data was collected in a single continuous 15 minute run that is shown here as three runs of five minutes each for convenience and continuity of presentation

L90	33.8	dB(A)	
Range	33.4	to	36.5 dB(A)

Sampler Summary Data (1 second averages-Does NOT Exclude interference sound)

Leq	35.2	dB(A)
L90	33.7	dB(A)

Background sound dominated by sound of rushing water from mill race

Met Data

WS at Hub	4.0	m/s
WS at West Is.	3.4	m/s
WD at Hub	58	degrees
WD at West Is.	East	
BP	30.14	in
Humidity	71	%
Temp	43.8	degr F

Wind Turbine Sound Sampling Summary : Fairhaven 12 April 2013
PRELIMINARY DATA

		LOCATION		
	Parameter	Teal Cir	12 Little Bay Rd	Mill Rd.
Hand Log data (dBA)	Lmax	39.2	40.9	37.6
	L90	27.7	29.9	33.8
	Diff	11.5	11.0	3.8
	Range Turbine on	36 - 39.4	37.7 - 41.2	34.8 - 37.6
	Range Turbine Off	26.2 - 34.0	29.0 - 35.2	33.4 - 36.5
MET	Wind Direction	NE	ENE	NE
	Relationship to WT	Downwind	downwind and left	upwind and right
	Wind Speed Hub	3.3 m/s	3.4 m/s	4.2 m/s