

Survey of Industrial Timberland Owners Regarding the Washington State Logger Safety Initiative, Spring 2015

Technical Report Number 11-1-2015
September 2015

David K. Bonauto, MD, MPH

Safety and Health Assessment and Research for Prevention (SHARP) Program
Washington State Department of Labor & Industries
PO Box 44330
Olympia, WA 98504-4330

www.Lni.wa.gov/Safety/Research/

List of Abbreviations:

DOSH – Division of Occupational Safety and Health

L&I – Washington Department of Labor and Industries

LSI - Logger Safety Initiative

WCLA – Washington Contract Logger Association

Acknowledgements:

This research was supported by the Washington State Department of Labor and Industries. Its contents are solely the responsibility of the author and do not necessarily represent the official views of the Department. David Bonauto, MD, MPH conducted the interviews, summarized the data and wrote the report; Sara Wuellner, PhD, Judy Schurke and Christina Rappin reviewed and provided edits to the report.

Executive Summary:

The Washington State Logger Safety Initiative (LSI) is designed to improve safety and enhance a positive safety culture in logging. We surveyed industrial timberland owners to capture landowner involvement in contract logger safety. Nine responses were obtained. Survey responses were obtained during April and May 2015 and evaluated for themes by the primary author. The survey was not intended to evaluate compliance with the LSI landowner program requirements.

Key observations:

- LSI played a role in changing perceptions of landowner involvement in contract logger safety.
 - Three respondents prior to LSI were ‘hands-off’ regarding contract logger safety. Each became more engaged in contract logger safety following LSI.
 - Every landowner evaluated their role in contract logger safety against the LSI program requirements.
 - Most respondents have trained their harvest managers/contract administrators on logging safety and expect harvest managers to observe and promote safe logging operations in the field.
 - Landowners collectively and individually have become more involved in training their contract loggers on creating a positive safety culture and safe logging operations.
 - Landowners are using components of the LSI program to monitor safety of their contract loggers, specifically results of the third party audit and the L&I DOSH Consultation.
 - Landowners individually committed to hiring only LSI certified contract loggers.
- Landowners noted several positive aspects of LSI, including:
 - The collaborative nature of government, landowners and contract loggers on the LSI technical and policy committees.
 - An improved presence and engagement of L&I on logging sites – ‘not just when there is an accident.’
 - A positive experience with the 3rd party auditor evaluations of safety.
 - Success at bringing a large portion of contract loggers into the program via landowners individually deciding to direct work to only LSI certified contract loggers.
 - Observations that some contract loggers have changed their approach to safety - there is some ‘true buy-in to the LSI program.’
- Landowners noted several areas where LSI might improve, including:
 - Broadening representation of contract loggers on the LSI committees.
 - Increasing the capacity of L&I for LSI – ‘too much reliance on one individual.’
 - Providing training based on ‘real-life [work] scenarios.’
 - Basing the future financial incentives of the LSI program on an individual contract logger’s safety performance.
 - Modifying the on-site assessment by the 3rd party auditor and DOSH consultant to identify those contract loggers who are ‘staging’ their worksites.
 - Encouraging the Washington State Department of Natural Resources to become an LSI participating landowner.
 - Evaluating technological advancements in logging that may improve safety.
 - Pursuing those businesses that purchase timber sales to become LSI members.

Introduction:

The Washington State Logger Safety Initiative (LSI) intends to reduce work injuries to loggers engaged in manual logging¹ through improvements in safety and a change in the industry's safety culture. The primary participant in LSI is the contract logger, the business contracted to harvest timber by an industrial or private timberland owner or a timber purchaser. The LSI program planning began in 2013 with enrollment of contract loggers starting in January 2014. LSI is a voluntary program for contract loggers. Contract loggers are eligible for financial incentives in the form of reduced workers compensation premiums if they satisfactorily meet enhanced sector-wide standards for worker training, performance, and supervision through mandatory performance-based third party safety audits and consultation services from L&I's Division of Occupational Safety and Health (DOSH).

Unlike other known logging safety initiatives,² the Washington State LSI program desired landowner³ participation in improving contract logger safety. LSI stakeholders⁴ believed that landowners frequently observe and interact with their contract loggers and could therefore monitor and improve safety performance. Also, by leveraging the business relationship between the landowner and contract logger, the landowner's prioritization on safety could influence the safety performance of the contract logger.

The LSI stakeholders developed 'Landowner Requirements'⁵ for voluntary LSI certification. The safety aspects of these requirements center around the landowner engaging with the contract logger's safety activities (e.g. supporting the contract logger's accident investigations, and review of contract logger's accident prevention program), and through landowner employees being trained in safety and modeling safe behavior in the field. While not a requirement, landowners could individually decide to require their contract loggers to participate in LSI as a condition of work.

To capture activities in response to LSI, we conducted a survey of the 9 participating LSI landowners. Landowners were solicited by e-mail and provided 'prompts' for a discussion about their activities in response to LSI (Appendix A). Participation in the survey was voluntary. Eight of the nine LSI landowner participants provided responses, with one landowner participant providing two responses – one each for two harvest units which function under separate management; therefore a total of 9 responses were collected.¹ Data were collected either by telephone using the prompts in the form of a semi-structured interview or via e-mail responses. Six responses were obtained via telephone interview and three were via e-mail. All responses were reviewed for common activities or themes. Survey responses were obtained during April and May 2015. The survey was not conducted to verify compliance with LSI landowner requirement and responses were not verified by field observations or additional interviews.

¹ There are nine landowner participants in the Washington State Logger Safety Initiative. Two LSI landowner participants are part of the same corporation, therefore eight corporations are represented in LSI. Seven of the eight corporations have a response in the survey. One landowner participant representing one corporation has multiple harvest units logging in Washington and provided two responses.

Results:

A. Changing perceptions and expectations of a landowner role in contract logger safety:

1. Landowners were engaged in safety prior to starting LSI. Six landowner respondents affirmed a positive, active role in contract logger safety prior to LSI. These roles varied significantly across landowners.

- One landowner conducts cutting, logging side, and vehicle/truck driver safety inspections or audits for their contract loggers on a routine bases. The landowner reviewed with the contractor all accident investigations and was an active participant in root cause analysis for all serious injuries occurring on their land– even necessitating cessation of work for the period of time necessary to conduct a thorough investigation. The landowner had periodic reviews of logger’s accident prevention programs and reported that logging contractors were evaluated in part on their safety performance and attitudes. The landowner will hire third party safety investigators for accident investigations of serious injuries.
- Another landowner actively encouraged their contract loggers to engage with the L&I DOSH consultation program to evaluate adherence to Washington safety standards for logging. The same landowner reviewed contract logger’s safety programs, required accident reporting and participated in accident and near-miss investigations. The respondent reported his foresters had been trained in safety and were expected to model safety in their interactions with contract loggers.
- Other respondents provided their expectations of safety for contract loggers prior to LSI, including expecting contract loggers to:
 - Have safety training programs.
 - Have work practices that included ‘stop work authority’ to all loggers on the crew.
 - Adhere to measures of safety performance in contracts.
 - Review contract logger safety plans (or requiring the contract logger to create a safety plan).
 - Report near-misses and injuries to the landowner.

2. Some landowners were initially ‘hands-off’: Three respondents described a ‘hands-off’ approach or ‘little to no’ landowner involvement in contract logger safety prior to the initiation of LSI. Two reasons were provided for this approach, including:

- Concerns about establishing an employer-employee relationship with the contract logger, and
- An expectation that contract logger safety performance should be independent of landowner involvement.

Over the course of the implementation of LSI, each of these three landowners challenged their previous perceptions of their role in contract logger safety programs and involved themselves in contract logger safety activities.

B. Landowner response to the LSI program:

1. LSI landowner requirements established a set of safety expectations:

- The LSI landowner requirements were established by the LSI taskforce (see Appendix B).
 - The taskforce was composed of contract loggers, landowners, and government agencies.
 - In establishing these ‘requirements,’ the LSI taskforce set fundamental expectations for landowners regarding safety of their employees and their interactions with their contracted logging companies to improve safety.

- All landowners individually evaluated their safety actions in relation to the LSI landowner requirements, in essence determining if they met or exceeded those requirements.
- Establishing a benchmark set of expectations provided motivations for improvement for those below the LSI landowner requirements; for the landowners that exceeded the LSI landowner requirements, none reported doing less safety activities as a result of LSI.

2. Landowners responded to LSI by increasing expectations among their field staff to identify safety hazards and engage contract loggers on safety.

- Landowners often designated specific individuals (or specific job positions e.g. harvest managers) within their companies to implement LSI safety programs. For example, one smaller landowner created a new position designated as 'Contractor Safety Manager.' Landowner representatives also mentioned inclusion of safety leadership expectations into their own or their employees' performance evaluations.
- They supported these increased safety expectations with training specific to logging hazards and the control of those hazards. Generally those trained were the harvest managers/contract administrators for the landowner.
- Training harvest managers about safety took many forms – often in conjunction with training of contract loggers. One company hired a logging consultant to train landowner personnel on hazard identification and then conducted field-based trainings on the same topic.
 - Most LSI participating landowners attended a first of its kind workshop on safety conducted by the Washington Forest Protection Association.
 - Harvest managers were familiar with or had participated in trainings conducted by the Washington Contract Loggers Association.
 - Specific workshops were hosted by landowners regarding cable logging safety (e.g. 'How to engineer a cable job') and training on understanding and improving safety culture.
 - Some landowners sought assistance from L&I's DOSH Safety Consultant for recommendations regarding personal protection equipment and other safety recommendations.
 - One landowner trained their harvest managers/contract administrators on how to initiate conversations about identified safety hazards with their contract loggers.

3. Hiring LSI contractors:

- Each landowner individually decided to use LSI participation as a factor in hiring contract loggers; in essence mandating participation in LSI for continued employment by the landowner.
 - Larger landowners phased in this requirement over the first year of LSI.
 - Two mentioned requiring LSI participation of sub-contractors while conducting logging activities on their land.

4. Engaging in the safety of contract loggers: Landowners demonstrated an increased commitment to engage with their contract loggers on matters of safety.

- Landowners used LSI provided content for landowners to evaluate contract logger safety –
 - Several landowners remarked that they reviewed contract loggers 3rd party audit findings, and L&I safety consultation findings.
 - Contractors with 'violations' on L&I consultations or 3rd party audits get increased attention from landowner.

- Reviewed contractor Accident Prevention Program to verify that all hazards were addressed.
- Two landowners mentioned seeking out and reviewing possible technologies to improve safety (e.g. tethered cutting, ACDACT)
- One landowner now requires a landowner representative to attend contract logger safety meetings.
- One landowner hired a very experienced contract logger to assist in contract logger safety programs.
- Several landowners mentioned developing safety recognition programs for their contract loggers.
- Three landowners sought knowledge from their international operations; evaluating safety perspectives and activities in New Zealand and British Columbia, Canada. These included looking at logger and cutter certification programs, technological advancements in safety, and safety recognition programs.

5. Changing safety culture:

- Two landowner representatives provided notable responses indicating how individuals can change safety culture:
 - One executive noted that while his company likely exceeded the LSI landowner expectations, LSI involvement triggered a recognition that he (and his company) could have a greater role in contract logger safety. Following interviews with the contract loggers, he determined that there was meaningful ‘crew to crew’ variation in ‘how to get safety leadership’ into operations. This led to an iterative analysis of safety program performance and the development of a multi-step strategic plan by the landowner to improve safety in his operation and those of his contract loggers.
 - Another respondent, in a new management role, was confronted with operations in which safety was not previously valued; in the setting of difficulties changing the safety perspectives of his employees, he ‘brought in’ replacements who had previously demonstrated a commitment to safety and structured his contractor selection based on safety performance – ‘I wasn’t going to argue about working safely.’ By demonstrating the importance of safety in his hiring practices and contracting practices, the safety culture of the operations were likely to change.

C: Landowners observations of what is working well about LSI:

- LSI leadership and membership:
 - Everyone [landowners] is playing so there is little room to be an ‘out’ logger and still find work.
 - Collaborative group of government, landowners, and contract loggers – encouraged to look across the table and develop trust.
- L&I:
 - L&I has an increased presence in logging – performing on site assessments and improving safety when there is not an accident,
 - L&I bringing the discount [to incentivize safety]; ‘contractors now have a direct financial incentive to improve their safety record. Safety now matters every day.’
- LSI program effectiveness:
 - Landowners are increasing contract logger accountability for safety.
 - Increased accountability for safety, since as a member of the LSI taskforce, he is looking across the table at other landowners engaged in safety.
 - Program appears sustainable over the long run – as contract loggers are ‘settling down’ about additional reporting requirements.
 - 3rd party audit system with auditors who seem to have a good grasp of safety issues.

- There is some true buy-in [from the contract logger]; increasing emphasis on safety.
- A belief that the underground economy is decreasing in logging as evidenced by more workers compensation premium hours being reported.

D. Landowners observations on how to improve LSI:

- LSI leadership and membership:
 - Continue to build trust among the group [landowners, loggers, and government].
 - Maintain transparency in communications.
 - Encourage DNR to become an LSI landowner.
 - Engage more contract loggers to be on the LSI technical advisory committee.
 - Broaden representation of the contract logger community on LSI committees.
 - Pursue those businesses that purchase stumpage sales to be members of LSI.
- LSI financial incentives:
 - Reward system needs additional levels ‘so the contractor’s that truly embrace safety and work safely receive an incentive above their mediocre peers.’
 - Provide financial incentives for technological improvements in logging safety.
 - Start discussion of the requirements to extend the financial incentive.
- Training:
 - Need more training content.
 - Focus training on ‘real-life examples’ and specific topics e.g. technical logging issues.
 - Use 3rd party auditors for training.
 - Find examples of safety improving productivity.
 - Develop certification or proof of training card for the worker to carry through career.
 - Address labor shortage by providing technical training through community colleges.
- L&I:
 - Too much reliance by L&I on one individual with credibility within the logging community.
 - L&I sounds too much like LSI.
 - Better assessments by L&I and 3rd party auditor of those contact loggers who are ‘staging’ during assessments (suggesting reporting of near misses and accident investigations).
 - L&I needs to improve its reputation.
 - Elevated insurance premium represents a system in need of change.
- Independent contractors:
 - Restrict independent cutters – suggesting that there are still problems from an underground economy as it relates to cutting.
 - ‘Many loggers feel burned by the independent contractor problem’ – implying that unrecognized employer and employee relationship exist.

Conclusion:

Landowners responding to this survey were involved in their contract loggers' safety programs. As a result of the LSI program, some landowners started engaging in contract logger safety. Most landowners with existing programs evaluated their own programs relative to the LSI program requirements and used LSI program evaluation tools (e.g. 3rd Party Audit findings and L&I Consultation reports) to learn more about their contract logger safety performance.

Almost all landowners now train their harvest managers on logging safety and have an expectation their harvest managers will both model safety and evaluate contract logger safety performance when in the field.

While we did not pursue external validation of landowner actions, the survey results are encouraging – suggesting that landowners are building safety into their relationships with contract loggers.

Appendix A: Landowner Discussion Guide

To stimulate discussion here are several questions to consider –

For reference please consider the LSI program to have started in January 2014.

1. Describe your company's activities related to logger safety prior to the start of the LSI program in 2014?
2. As a result of LSI, does your organization have a **greater awareness of safety issues** in Washington State logging? (Any examples to share)
3. Regarding loggers you employ or contract with, did your company:
 - Adopt or consider any new policies or procedures regarding safety?
 - Create any new recognition processes for safety in the organization or for contractors?
 - Increase communication about safety with your employees or contractors?
 - Have any visible demonstrations by leadership, or the management of your company regarding safety?
4. As a result of LSI, did your company increase the **monitoring of the safety** of your logging workforce or loggers you contract with? Possibly:
 - Increased presence on logging sites?
 - Adoption or modification of safety audits or safety performance criteria?
 - Increase safety discussions with your logging contractors?
 - Determine logging contractor employment or non-employment based on LSI participation?
 - Review contract logger APPs, review or participate in injury or near miss investigations?
 - Review any of your or your contractor's safety policies?
5. As a result of LSI, did your company increase **training opportunities** about logging safety for:
 - Your own employees?
 - Your senior management?
 - Your contract loggers?
 - The logging community overall?
6. From your perspective, **what is working well** about the LSI program?
 - Regarding landowners?
 - Regarding contract loggers?
 - Regarding workers?
 - Regarding L&I or other government agencies?
7. From your perspective, **how can the LSI program be improved?**
 - Regarding landowners?
 - Regarding contract loggers?
 - Regarding workers?
 - Regarding L&I or other government agencies?

Appendix B: LSI Landowner Requirements

Compliance with current standards alone cannot completely accomplish the goals of the Washington State Logger Safety Initiative (LSI). LSI is intended as a means of encouraging voluntary improvements to contractor protection and safety. Landowners have a role in fostering a culture of safety in the industry. In order to participate in LSI, landowners must implement the following requirements:

1. **Commitment:** Sign the LSI Logger Safety commitment letter.
2. **Training:** Landowners and/or their contract supervisors shall attend workshops or review materials developed to help them support the culture of safety.
3. **Compliance:** Be in compliance with applicable Department of Safety & Health (DOSH) standards.
4. **Funding:** Contribute funding towards LSI third-party training and audits.
5. **Reporting:** As of a set day each month, provide to the Department of Labor & Industries (L&I) landowner contact information along with a list of loggers working on the landowner's land who are:
 - a. Not participating in LSI; and
 - b. Performing non-mechanical logging or cutting (Class 5001); and
 - c. Not exempt from industrial insurance premiums nor self-insured for workers compensation; and
 - d. Primary contractors for the work performed, not sub-contractors
6. **Support culture of safety:** Be mindful and supportive of logging contractors LSI Safety Plans (Accident Prevention Plans or APPs):
 - a. As part of normal operations, annually review with each logging contractor their logging and/or cutting APP's and LSI expectations on site
 - b. Wear proper Personal Protection Equipment (PPE) when on-site
 - c. Participate in the investigation of root causes for all serious accidents or review root causes with contractor as determined by a contractor or third-party investigation report
 - d. Periodically review each logger's status on L&I website
7. **Inclusive:** Encourage non-LSI loggers to participate in LSI and inform them that their names will be reported to L&I while they are working on the ownership.
8. **Validation:** Landowners will be subject to a review on the above landowner expectations.

Endnotes:

¹ Manual logging are operations such as chainsaw felling of trees, and cable logging operations. The more formal definition used the Washington State workers compensation risk class – 5001-03 Logging N.O.C. -

Applies to establishments engaged in various logging operations not covered by another classification (N.O.C.). Typical work contemplated by this classification includes, but is not limited to, high lead or tower logging, ground logging, and team logging with horses. For purposes of this rule, logging is the complete operation of felling, skidding, yarding, delimiting, and bucking of trees into logs or block wood and loading them onto trucks or rail cars.

This classification excludes flight crews of helicopters used in helicopter logging which are to be reported separately in classification 6803; log hauling which is to be reported separately in classification 5003; logging road construction which is to be reported separately in classification 6902; logging machine operators which are to be reported separately in classification 5005-01; and mechanical or mechanized logging operations which are to be reported separately in classification 5005-00 provided the classification has been approved by the classification services section.

² Bell JL, Grushecky ST. Evaluating the effectiveness of a logger safety training program. *Journal of Safety Research* 37 (2006) 53-61.

³ Landowner refers to an industrial timberland owner either private or public.

⁴ LSI stakeholders included the Washington Contract Logger Association, individual contract loggers, private industrial timberland companies, the Washington Forest Protection Association, the Washington State Department of Natural Resources, and the Washington State Department of Labor and Industries. The Washington State Department of Labor and Industries' has representatives from the Division of Industrial Insurance, the Division of Occupational Safety and Health, and the Safety and Health Assessment and Research for Prevention program.

⁵ For a full set of landowner requirements see 'Application Packet for Landowners' at <http://www.lni.wa.gov/main/loggersafety/Join.asp>. Also attached as Appendix B.