

Health Impact Assessment Report
“Assessment of Open Burning Enforcement in La Crosse County”

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Abstract

A rapid Health Impact Assessment (HIA) was conducted to determine 1) the potential health impacts of creating a uniform open air burning policy within La Crosse County and 2) what inputs could be developed/offered to assist communities in expanding adherence to Wisconsin Department of Natural Resources and state statute codes regarding the restriction of materials to be burned in outdoor burn barrels, fire pits/rings and wood boilers.

Many vehicles for solid waste disposal are available in La Crosse County and are summarized in the 2010 “Final Report La Crosse County Solid Waste And Recycling Collection”, completed for the La Crosse County Solid Waste Department with recommendations for future efforts to improve garbage and recycling collection, as well as reduce the costs of these services through progressive planning and collaboration between the county and its municipalities.

Municipalities are responsible to secure their own solid waste removal. In La Crosse County the continuum spans from all waste collection provided in the City of La Crosse to the purchase of special bags to pick up limited household waste, with the remainder (recyclables, white goods, e-waste) to be disposed of at the expense/effort of the household. Many communities bear no direct expense for waste collection; the amount is assessed per household and collected with taxes or a user fee is assessed for services rendered. Most residents in La Crosse County do not distinguish the cost of solid waste collection as it is added to their property taxes.

The Towns of Holland and Onalaska implemented a local ordinance in 2008 which clearly defines burning practices. Many of the local ordinances are a one page reference to the state statute or a burn permit application. It was decided that within La Crosse County, the Town of Holland/Onalaska ordinance was a good benchmark to base optimal practice and education on. The health impacts selected for comparison were 1) current solid waste disposal expense (to the community and the resident), 2) the number of fire calls due to open burning (including unauthorized burning), 3) the number of (and implied time commitment to) annoyance calls, and 4) the estimated prevalence of respiratory illness in La Crosse County.

An assessment tool was developed and fire chiefs and town clerks were interviewed to collect the information. As this was a rapid assessment and not a detailed assessment, it was difficult at times to stick to the foundational information. The topics of fire service and solid waste collection are both complex subjects. There was an additional challenge in the limited amount of time to collect the data and the fact that the time of year coincided with local municipal elections resulting in a number of clerk and/or chairman changes. About a third of the communities were not contacted – these were the most rural communities physically at the “edges” of La Crosse County. These folks did not respond to phone messages, and many did not have email addresses. In one case I was able to talk with both the clerk and the chairman, whose board had made the decision not to complete the survey – they assumed the assessment was another attempt by the county (per the outdoor wood boiler ordinance in 2006) to make changes for them. Once the purpose of the HIA was explained, the chairman was willing to complete the assessment. Another challenge in reaching rural elected officials was that many of them have farms, some with additional outside employment, so they were very rarely in. A summary of this report will go out to all municipal clerks/chairpersons and those who did not complete the assessment will

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be sent the tool with a cover letter and return addressed and stamped envelope requesting completion. A benefit of participation in this process is that the La Crosse County Solid Waste Department has made funds available for a health educator to provide educational resources to communities, as time and interest permits in 2011

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Introduction

Open air burning of trash, including the use of burn barrels, is a known health hazard. The outside burning of anything except clean (untreated) wood is often perceived as a convenient and cost-feasible way to remove refuse of any kind from an individual's property. However, even limited usage of open air burning can cause leakage of mercury, dioxins, and arsenic into the ground, air, and local water. On average, twenty-one households that burn trash daily release the same amount of pollutants as an average (200 ton/day) municipal waste combustor.¹ Open air burning is the largest contributor of dioxin exposure in food in the United States.² Many of the compounds released during open air burning are causal agents of bladder, lung, liver, and skin cancers.³ In children, the pollutants found in “burn barrels” are causally linked with neurological disorders, immune system effects, and endocrine disruption.⁴ Open air burning also increases the number of particulates in the air, which can cause immediate reactions such as an asthma attack and/or long term damage to the lungs.⁵

There are eighteen separate municipalities in La Crosse County. Regulations and enforcement of open air burning differ in each municipality, causing significant confusion on both the effects of open air burning and alternatives for waste removal and recycling. There is a significant interest among elected officials to create a uniform regulation for open air burning and enforcement for the entire county. Reduction of open air burning in La Crosse County will lower the number of contaminants released into the environment, improving the short- and long-term health of La Crosse County residents. Although there is no defined number of open air burning users in La Crosse County, based on the heavy use of open air burning areas (and burn barrels) in Wisconsin (approximately 500,000)⁶ and previous community involvement, this affects a significant number of La Crosse County residents, as well as the Coulee Region system of seven rivers.

The rapid Health Impact Assessment (HIA) offered a framework for gathering information relative to the use of burn barrels in the county and projecting the potential health implications of adopting a uniform regulation for open air burning. The La Crosse County Health and Human Services Board supported the idea, as did the La Crosse County Solid Waste Department. A steering committee comprised of three representatives of the La Crosse County Health Department, one from the Solid Waste Department, and a member of UW-Extension committed to review the process and agree on a strategy for implementation. Two members of the

¹ Lemieux PM, Lutes CC, Abbott JA, Aldous KM. *Emissions of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans from the open burning of household waste in barrels*. Environmental Science & Technology, web release date January 4, 2000.

² Committee on the implications of dioxin in the food supply, natural resource council. *Dioxins and dioxin-like compounds in the food supply: strategies to decrease exposure*. National Academies Press (2003).

³ Siemiatycki J et al. *Listing occupational carcinogens*. Environmental Health Perspectives. 112: 1447-1459 (2004).

⁴ Chance GW. *Environmental contaminants and children's health: cause for concern, time for action*. Paediatrics Child Health 6(10): 731-743 (2001).

⁵ Penn A, Murphy G, Barker S, Henk W, Penn L. *Combustion-derived ultrafine particles transport organic toxicants to target respiratory cells*. Environmental Health Perspectives. 113:956-963 (2005).

⁶ Wisconsin Department of Natural Resources. *Give burn barrels the boot*. PUB-CE-7001-02.

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community were recruited for their expertise; a fire chief and a physician who serves on the local asthma coalition.

Several initial calls were held with two state staff from the Wisconsin Bureau of Environmental and Occupational Health and status update calls were held twice a month to provide technical assistance on the implementation of the HIA framework.

Health Impact Assessment (HIA) Process

Background

Since the La Crosse County Solid Waste Department had just completed a study regarding current waste disposal systems in La Crosse County with recommendations for possible improvements; and the La Crosse County Health Department had already begun an investigation into burn policies in municipalities, it was decided that this topic would be a good vehicle to test the HIA process.

La Crosse County's population in July 2009 was 113,679 (83% urban, 17% rural).⁷ The county is comprised of two cities, four villages and twelve townships. With the exception of grills and backyard fire pits, there is no burning allowed in either city, and similar restrictions are in effect for the villages.

In 2006, La Crosse County passed an ordinance with regard to outdoor wood boilers.⁸ The effort was highly emotional and resulted in two public hearings, and lots of media attention. The issue of the negative health effects of burning household trash was visited with this effort.

In 2010 a phone survey of the eighteen municipalities was conducted by the Health Education Division of the La Crosse County Health Department to determine if each community had a written burn policy in place, regarding the burning of household trash. Of eighteen communities, twelve provided evidence of a policy regarding open burning in their community, but indicated they have limited resources to conduct an educational campaign or provide enforcement if called upon. All confirmed policies are accessible electronically from a municipal website or upon request from the town clerk. The compliance of those residents in each municipality is self regulatory and could be further enhanced with a structured educational campaign.

In September of 2010, the La Crosse County Solid Waste Department published a report evaluating solid waste and recycling collection in an effort to examine current practices and identify opportunities for improving customer service, saving money and building a more sustainable practice for solid waste handling.⁹ The evaluation focused on the cities of La Crosse and Onalaska, but is applicable to other municipalities in the county.

These events, and the growing number of states in the United States that have banned (e.g. Michigan), or are in the process of banning (e.g. New York) the use of burn barrels out of a

⁷ http://www.city-data.com/county/La_Crosse_County-WI.html#ixzz1PSHhI0X3

⁸ www.co.la-crosse.wi.us/.../Chapter%2011%20Public%20Health%20and%20Welfare.pdf

⁹ <http://www.co.la-crosse.wi.us/SolidWaste/docs/FINALEvaluation.pdf>

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concern for hazardous human exposure to the harmful chemicals produced by low combustion burning, as well as risk of fire hazards supported the use of the HIA to better understand the potential health implications of banning burn barrel usage.

Step 1. Screening

The goal of this rapid health impact assessment is to determine the impact of creating a uniform open air burning regulation throughout La Crosse County and the most effective methods for engaging key stakeholders and educating community members on alternatives to open air burning.

Stakeholder involvement

La Crosse County Health and Human Services board members have expressed an interest in an open air burning HIA. The La Crosse County Solid Waste program has offered funds to equip a health educator with the resources to provide community-based education with regard to concerns revealed by the HIA.

The project timeline covered December 2010 through May 2011 as follows:

- By December 31, 2010, the health educator will define and contact the relevant stakeholders to set up a workgroup to look at feasible ways to reduce open air burning in La Crosse County.
- By February 28, 2011, this committee of stakeholders will have met at least once, creating a mission statement as well as a feasible work plan and timeline to meet the goal of decreased open air burning.
- By April 30, 2011, the health educator will give at least five presentations (including the La Crosse County Board of Health and Human Services) on the importance of reducing open air burning in La Crosse County and seek input from participants at each of the presentations.
- By May 15, 2011, the health educator will produce a written final report approved by the stakeholder committee that has identified the most effective way to reduce open air burning, including the possibility of a countywide uniform ordinance and enforcement.
- By December 31, 2011, the health educator will present the findings of the HIA to a regional or national group, including best practices and lessons learned.

The assessment was developed and approved by the steering committee. The health educator addressed members of the La Crosse County Fire Officers Association on April 11, 2010 to explain the intent of the assessment and solicit their assistance in collecting data for the municipalities they cover. Seven of the nine fire districts were consulted in person and the remaining two chiefs provided the information in writing and over the phone and email. Contacts were attempted with the clerk in each of the towns, and an administrator in each of the villages and cities for completion of the solid waste information. Two-thirds of the municipalities provided data for the assessment. The remaining one-third was either not reached or would not respond to attempts to contact.

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Step 2. Scoping: Determine which health impacts to evaluate and the methods for analysis

A committee comprised of three staff in the health education division of the La Crosse County Health Department, a member of the La Crosse Solid Waste Department, and a member of the La Crosse County UW-Extension Department gathered for ideas and comments. Additionally, a local fire chief was recruited as a resource for information and guidance relative to fire service operations, and distribution of services and governance in La Crosse County. This individual also authored the “burn” ordinance the committee determined was a best practice in La Crosse County. A physician, and member of the local asthma coalition, was recruited for the purpose of advisement and a resource for future educational opportunities. (See Appendix A)

As we started the scoping process, it was noted that while most people may share concerns about direct negative health impacts, they are more likely to act on those concerns (that impact their available funds). The Scoping Pathway diagrams (see appendices B and C) identified four health issues potentially impacted by the proposed adoption of a uniform ban on burn barrel usage, assuming either compliance or non-compliance with the policy.

- Cost of disposal/fire penalties
- Cost of fire damage/fines
- Annoyance calls
- Respiratory health

Step 3. Assessing Risks and Benefits

An assessment tool was developed to collect information on three of the four health focus areas from each of the eighteen municipalities. The respiratory information was calculated for the county as a whole, based on data available from the 2010 US Census and the Burden of Asthma in Wisconsin (see below). The other three areas identified in the scoping process included information germane to fire policies and enforcement/education, as well as the availability and cost of solid waste disposal services. The assessment tool follows as Appendix D. All data was maintained in a database capturing contacts, responses to the assessment, as well as demographic data for each municipality.

Solid Waste Expense

The state mandates that each municipality is responsible for arranging solid waste disposal for its residents. A table identifying what each municipality offers for solid waste disposal and recycling (pages 9 & 11 respectively) is included in the September 2010 “La Crosse County Solid Waste and Recycling Collection Evaluation” report. The majority of municipalities in La Crosse County fund their solid waste and recycling programs through their general fund (passed onto residents through tax assessment), rather than through user fees. Based on the proximity of the services to the municipality, as well as the population base, services may be contracted with haulers; residents may have to buy bags and deliver to a municipal collection center; recycling and pick up of large items may be assessed individually (user fee) or the resident may be expected to pay for county services as needed. One community does their own

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collection for residents; two contiguous communities have entered into a cooperative agreement to make recycling more cost-effective; and most communities on the “fringes” of La Crosse County provide the minimum services needed for waste disposal and the residents do the rest on their own. One thing that should be noted is that La Crosse County does have a refuse-derived fuel facility (Xcel Energy) and a highly organized county landfill complex.

When the expense of solid waste disposal is applied to the resident, it is not just what is assessed to their tax bill, or the out-of-pocket expenses they may incur to haul their own items, but the time they must invest in getting to the drop locations at the hours provided. Residents may find it very tempting to toss household garbage into their wood boiler, burn barrel, or fire ring in order to avoid additional bag charges or hauling it to a drop site. Consideration of collaborative contracts for hauling and recycling between municipalities with haulers, expanded hours with the county solid waste facilities (large items, hazardous waste, et al) and off-site collection points, and education about composting should be emphasized to assist residents in reducing the amount of household waste they are left to dispose of.

Fire Calls

Open burning is a significant source of wild fires and property damage. Resources sent to respond to these calls deplete local fire resources; including the potential and actual injury to responders en route or on scene. With the exception of La Crosse, Onalaska, and Holmen, the fire departments serving the municipalities of La Crosse County do not have full time employees. They have volunteer fire departments, and some may provide a reimbursement or stipend for the acting chiefs. Fire service is divided into nine districts in La Crosse County; services are provided by nine fire departments; one of which is actually in Vernon County. All fire departments have “boards” comprised of a representative from each of the municipalities they serve. Some have a good relationship and communication; others do not. Decisions about burning policies, permits, and citations are fragmented in many of the smaller communities due to the physical location of the fire department in another municipality, law enforcement provided by the sheriff’s department, rather than locally, and burn policies, including issuance of permits provided by local town administration, independent of the fire officers. Fire calls may be tracked by the providing fire department or by the local clerk/treasurer/chairman. Calls are also categorized differently within each fire district – some use a two category designation (e.g. structure or non-structure), while others may use a more sophisticated system in keeping with national fire guidance and software. The La Crosse County Communication Center publishes the total number of calls per fire department each year in its annual report, but those calls are not differentiated in any way. Calls which may be a result of open burning or unauthorized burning are not distinguished within the tracking system, but only by the memory of the fire department or town administration.

The Town of Holland/Town of Onalaska policies do include a provision for a citation for unauthorized burning. The City of Onalaska, the Towns of Campbell, Farmington, and Shelby assess citations. The City of Onalaska and the Coon Valley Fire Department assess a charge for the activation of their equipment. Most fire departments indicated they did not cite for unauthorized burning calls. The Coon Valley Fire Department is at a distinct disadvantage since they serve parts of two rural communities in La Crosse County. The town administration issue

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burn permits independent of the fire department; so when someone sees smoke and the department gets dispatched, they are not aware the call may be a controlled burn at the address. The La Crosse County Communications Center has encouraged burn permit information to be shared with them to reduce the number of calls emergency services are dispatched to, which later may be documented as false alarms.

Annoyance Calls

Very few of the municipalities actually track annoyance calls (complaints about the smells from burning). The Village of Holmen (which serves the Town of Holland – one of the fastest growing townships in the county) fire chief crafted the Town of Holland and Town of Onalaska ordinance in response to the amount of time he was spending on the phone and making field visits to investigate complaints about burning. He did not actually track the number of calls, but noted they ate up a lot of his time. Since the two Town Boards have adopted the enhanced ordinance in 2008, his time on the phone is more about education, answering questions, than about having to make physical investigations or resolving conflicts between neighbors.

A number of the other fire departments indicated they received very few calls; and most of those they chose to educate, rather than issue citations. And in the smaller municipalities where the fire department is not directly located, these calls may go to a town clerk or chairman, local or county law enforcement, or even a county board supervisor.

In the City of La Crosse, although no open burning is allowed with the exception of grills and fire pits, the fire department documented 150 nuisance calls midway through 2010, as reported in their bi-monthly newsletter for the purpose of educating residents about the local burning policy.

Respiratory Health Concerns

An estimate of the prevalence of respiratory disease in La Crosse County was drawn from the reported number of persons with:

- asthma in La Crosse County, per the 2010 Census data and the “Burden of Asthma in Wisconsin” (11,783)
- the number of persons with chronic bronchitis, per the 2010 Census and the Environmental Protection Agency’s (EPA) Report for Region V 2008 estimate(4,713)
- and the number of persons with emphysema, per the 2010 Census data and the EPA Report for Region V estimate (1,821)
- These numbers total 18,317 (La Crosse County numbers are not age or gender adjusted/EPA numbers are age-adjusted for Region V – WI, MN, MI, IL, IN, OH)

The 2010 Census population for La Crosse County is 114,638; 18,317 people estimated to have respiratory concerns; and 16% of the population estimated to have, or to experience a respiratory health concern.

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Step 4. Reporting: Synthesis of results

The information collected through the completion of the assessment by the fire and administration personnel responsible for each municipality will be summarized in a brief written summation and disseminated to HIA committee members, and fire and administration personnel for each municipality. Each municipality will receive an invitation to invite the La Crosse County health educator and sustainability coordinator to discuss education resources/activities and policy changes to positively impact costs, numbers of fires/fire calls, complaints/annoyance calls and respiratory health in the county. Municipalities which did not complete an assessment will be given another opportunity to complete the written form and return by mail or fax.

The HIA helped to confirm/update information that was compiled by the Solid Waste Department in 2010. It also began a relationship directly between Health Department and the fire district staff and municipal administration for the purpose of cooperative consideration of quality of life improvements for residents.

A second health educator will work with the Solid Waste Department's Sustainability Coordinator and municipalities to implement activities to assist with increased awareness of the negative effects of open burning, the opportunities for alternatives to current education and waste disposal strategies. The data collected through the HIA will help direct education efforts toward the municipalities. Targets may include:

- Township Boards for the purpose of explaining strategies to increase/improve solid waste disposal services for their residents with cost saving features.
- Township Boards for the purpose of discussing the problem of open burning & education strategies to increase compliance.
- Residents of targeted municipalities to receive education relative to solid waste disposal services, schedules, fees and alternatives.
- Realtors/Town clerks relative to providing solid waste and recycling information to new home owners for properties with new construction and title transfers.
- Displays/literature/professional staff available at municipal and community events.
- Solid waste and recycling information on municipal web pages, community hall displays/literature racks, municipal mailings or newsletter, etc.
- “Out of the box” activities with local employers, e.g. a complete the sentence education article in the local paper submitted and drawn to win sponsored (free) recycle bins, wheeled garbage cans, local gift certificates, etc.

In 2005 the Minnesota Office of Environmental Assistance released a report which summarized interviews with 834 residents about the health, environmental, legal and safety concerns of open burning of garbage or household waste in the more rural parts of the state.¹⁰ Minnesota and western Wisconsin are similar enough to draw on the Minnesota study's data to generalize burning demographics and behaviors to western Wisconsin residents, which may be useful in designing educational resources/strategies for western Wisconsin.

¹⁰ http://www.pca.state.mn.us/index.php/component/option,com_docman/task,doc_view/gid,11226

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Step 5. Monitoring: Implications for decision-making processes and health policy outcomes

For the most part, according to state law and DNR regulations and guidance, all county residents do live under a similar burn policy.¹¹ The only material that is to be openly burned in the state of Wisconsin is clean, untreated wood. All other materials are to be disposed of in another manner. For municipalities with limited resources for education and enforcement, a detailed burn policy, like the one the Towns of Holland and Onalaska have, is an opportunity to provide education and guidance for people as they move into communities where they are not familiar with the solid waste disposal services and the policies surrounding what can be burned, whether in a fire ring, outdoor boiler, or barrel. It was noted by a few fire chiefs in the mostly agricultural municipalities that about half of all residents have burn barrels. Another concern for these communities is finding a convenient and efficient way to dispose of plastic silage wrap. The rural communities are at the greatest disadvantage for disposing of some of their waste; however, in terms of “green” and sustainability, their need is among the greatest for access.

The information gathered through the HIA (and generalizations drawn from Minnesota’s 2005 report) can be used to identify municipalities which may have an interest and/or need to provide ongoing education about open burning to its residents. Working with Nick Nichols, some strategies for increased access for those municipalities with the least services or the greater individual costs could be drafted (e.g. hazardous household waste, silage bags, disposal of large items, etc.). Additionally, discussions with haulers could yield some collaborative services between the municipal lines for increased access and cost-saving measures.

Working with the health educator, resources developed to target residents through a variety of venues could be made available, including web resources, social networking resources and physical resources for local distribution or access at community venues (community halls, churches, etc.).

¹¹ <http://dnr.wi.gov/environmentprotect/ob/regulations.htm#dnr>

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Conclusion

The HIA is a very effective tool for reaching across all professions and community interests/concerns. The process itself is not new, but the way the HIA is structured and presented builds in the diversity of stakeholder interests/resources to address a concern, program, policy for the discussion of all. This process provided a cooperative and non-threatening way to gather information for the benefit of the local community, and its neighboring communities, as well as the residents each serves.

Challenges

Challenges to this process included the continuity of agency administration from the grant application to the grant implementation for the Health Impact Assessment. At the completion of the HIA report, two people worked this project, and a third will take what has been gathered and presented and try to develop education strategies/resources to assist interested municipalities in increasing their local education regarding open burning. In writing the final report, it was noted that what was proposed in application for the HIA grant is not exactly what was gathered. The transition between grant writer and implementer required a tighter structure in terms of communicating the inception of the topic for assessment. Documentation with a goal of completing the report should have been in place at the beginning with an orientation to the expected outcome. In transferring from the completion of the assessment and the report to the next steps of communicating the report's findings and monitoring the response and activity which may result from the information provided out to the municipalities.

A second challenge was the complexity of the topics involved. The topics of fire regulations and surveillance and solid waste management are each a broad and layered system of services, resources, and policies based on state statute and other federal regulations. In the short time from mid- December to mid-May, not only was the survey to be completed with fire and administrative personnel for eighteen municipalities, but I needed to familiarize myself with HIA framework, including terminology and steps, as well as gain insight into the cultures of fire regulations and administration and solid waste services and management. It was very helpful to have a professional from each field to answer questions and provide feedback/guidance as needed.

A third challenge presented itself in the task of gathering data. Reaching elected municipal contacts, i.e. town clerks or chairmen came at a very challenging time in the year. April 2011 saw a turnover in some of the individuals filling these positions, delaying the time to contact them or the time they could respond (as a person new to the job) with the information needed. In the rural townships some of these folks have limited “official” contact hours. Some contacts did not have email.

Some of the more rural townships did not return calls, or where I had contacted a clerk and sent the survey, in follow up she indicated their board decided not to complete the assessment; upon further inquiry with the town chairman, they had a perception of the county gathering the information to make changes across the board, as they have experienced with past (passed) ordinances. A future effort would be more successful with support from the fire chief in each

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district with the provision of co-signed letter of introduction encouraging their municipalities to complete the written survey or to schedule a face to face meeting to gather the information.

Lessons Learned

The goal of implementing this HIA was to determine the impact of creating a uniform open air burning regulation throughout La Crosse County and the most effective methods for engaging key stakeholders and educating community members on alternatives to open air burning.

Even though the data is incomplete (missing one third of the municipalities at this time), there is enough information to form the opinion that information sharing, communication and community networking could be improved at some level. While each municipality is concerned about directing their own business within said demographics, times are changing and resources are becoming scarcer. Conversations to compare ways for increased access to external resources and ways to conserve or stretch internal resources will best serve communities, and those that comprise the community. Communities do want what's best for themselves and their members; we just need to determine how to reach those goals.

With the time limitations for implementation of the HIA, it was helpful to address all the fire chiefs at their monthly La Crosse County Fire Officers Association meeting. A similar meeting of municipal contacts would have been an asset in reaching out to the many municipal clerks or chairmen. There is a Towns Association which provides a venue for local discussion, this may be explored as a venue to discuss education and share the Town of Holland/Onalaska burn policy. It may also be a good forum to discuss solid waste collection/drop services, fees and suggestions for improvement of access to all the services which would help residents dispose of their household generated waste in a more environmentally sustainable fashion.

With regard to gathering the information on the assessment, the face-to-face meetings were more effective than email correspondence; questions could be clarified to elicit the desired answers. Phone interviews were fairly effective in obtaining basic data, with clarification. Ideally, meetings would have included the town chairmen and the fire chief, such as at a district' meeting of their local “fire board”. This would have been helpful in building understanding and support of this effort, with cooperation in providing information and a desire for accessing resources for improvements in residential compliance for solid waste disposal, as well as burn policy compliance. There are so many differences in the ways communities allow burning, although, as stated earlier, the basic open burning requirements apply statewide.

This process should be used again for other topics which cross multiple disciplines, jurisdictions and have considerations for improvements, whether, policy, program or plan for our communities.

Recommendations

1. Address follow up with municipalities within the respective “fire district”. Each has a “fire board” at which time strengths, solicitation for feedback, and suggestions for enhancements (inputs) could be discussed with the municipal stakeholders and respective

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fire chief in one sitting and group correspondence. These groups will be further referenced as stakeholder groups. A good starting point may be a meeting with the fire chiefs for the “districts” thirty minutes prior to their monthly La Crosse County Fire Officers Association meeting. Encourage these representatives (or invite educator) to address Township Boards for the purpose of explaining strategies to increase/improve solid waste disposal services for their residents with cost saving features.

2. Utilize collected data, with information provided in the “La Crosse County Solid Waste and Recycling Collection Evaluation”, to inquire with municipal stakeholders about how solid waste service decisions are made and what barriers exist for cost containment and increased access for all household waste. Include Nick Nichols, Sustainability Coordinator in this step. Note: while the initial step is to address collaboration cost save and increase access to services within “fire district”; encourage inter-“district” examination of same with stakeholder groups as well.
3. Solicit input from respective stakeholder groups with regard to the resources and community venues available in each municipality to reach residents with education about solid waste disposal services and burning “rules”. Develop tools and vehicles for community education for municipalities by “fire district”
4. Use existing education materials (e.g. DNR materials) and develop some out of the box uses for application, e.g. grocery bag distribution in communities during fire month or ordinances/permits on websites, etc. (see page 11 for more suggestions).
5. Make the Town of Holland/Town of Onalaska “burn ordinance” available to all township administrators. Invite them to review it & ask questions about its user-friendliness for residents. Involve Doug Schober (Village of Holmen Fire Department) and their own fire district “chief” to converse about the policy and how it differs from what is currently in place for the respective community(s).
6. Invite all municipalities to place their solid waste services and schedule and their burn policy on their websites. Work with the five communities without a website to place a page on the La Crosse County website – free of charge.
7. Work with the fire chiefs respective to the municipalities that did not respond to the initial survey to collect their survey information and include them in county-wide efforts to educate and build sustainability for a healthier La Crosse County.
8. Recognize efforts through community venues and local media.

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Appendix A

Stakeholders List

Committee:

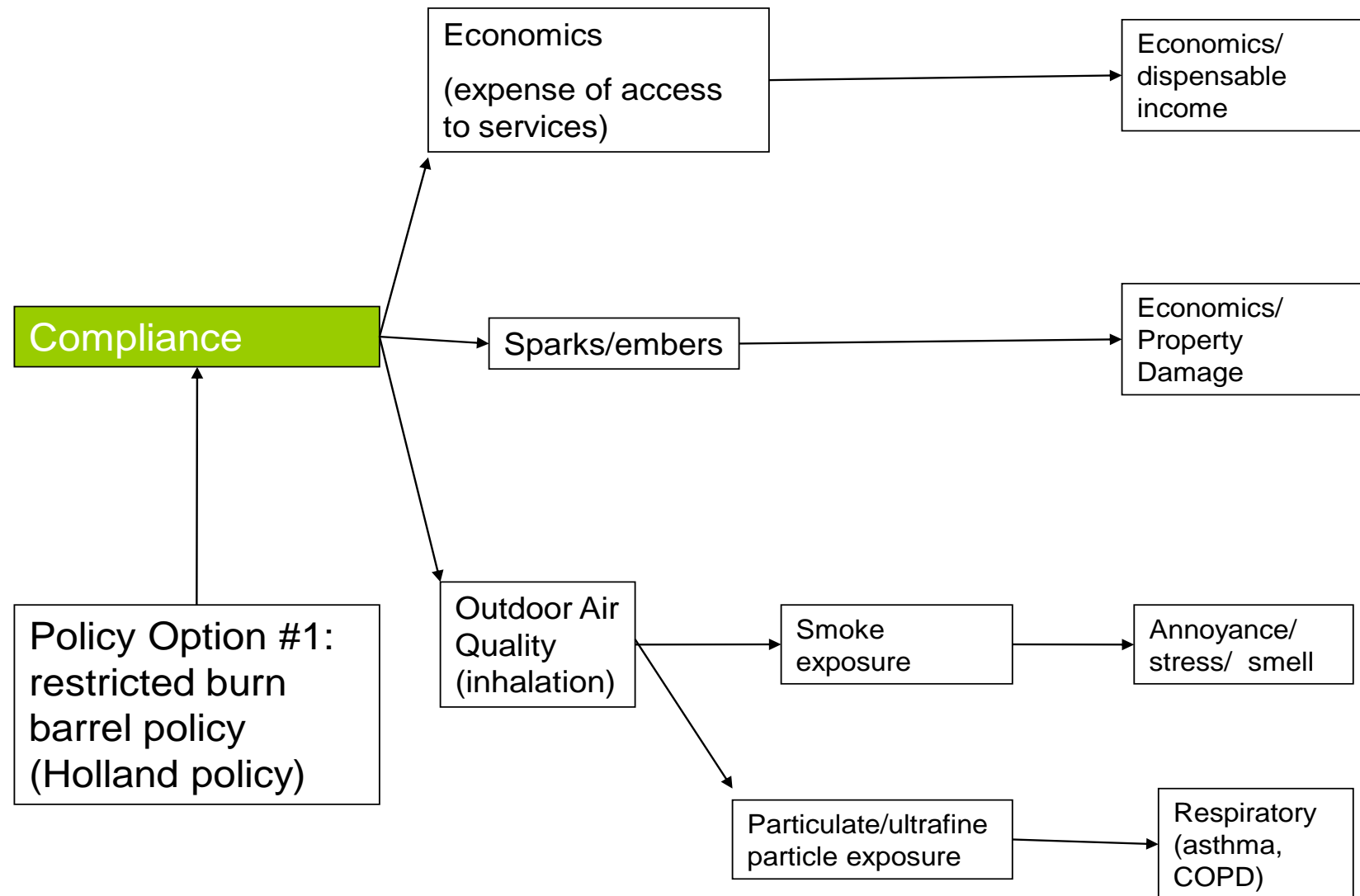
Al Graewin, La Crosse County Health Department, Education Division Manager
Karl Green, UW Extension- La Crosse County, Community Resource Development Educator
Brenda Hanson La Crosse County Health Department, Education Division, Health Educator
Derek Moore, La Crosse County Health Department, Education Division, Epidemiologist
Nick Nichols, La Crosse County Solid Waste Department, Sustainability Coordinator
Doug Schober, Holmen Fire Department, Fire Chief

Fire District Contacts:

Russ Cornforth, Chief	Coon Valley
Don Dominick, Chief	Onalaska
Mike Kemp, Chief	Shelby
Nate Melby, Chief	Campbell
Dave Munson, Chief	West Salem
Rick Paisley, Chief	Farmington
Bob Rueckheim, Chief	Bangor
Doug Schober, Chief	Holmen
Warren Thomas, Division Chief	La Crosse

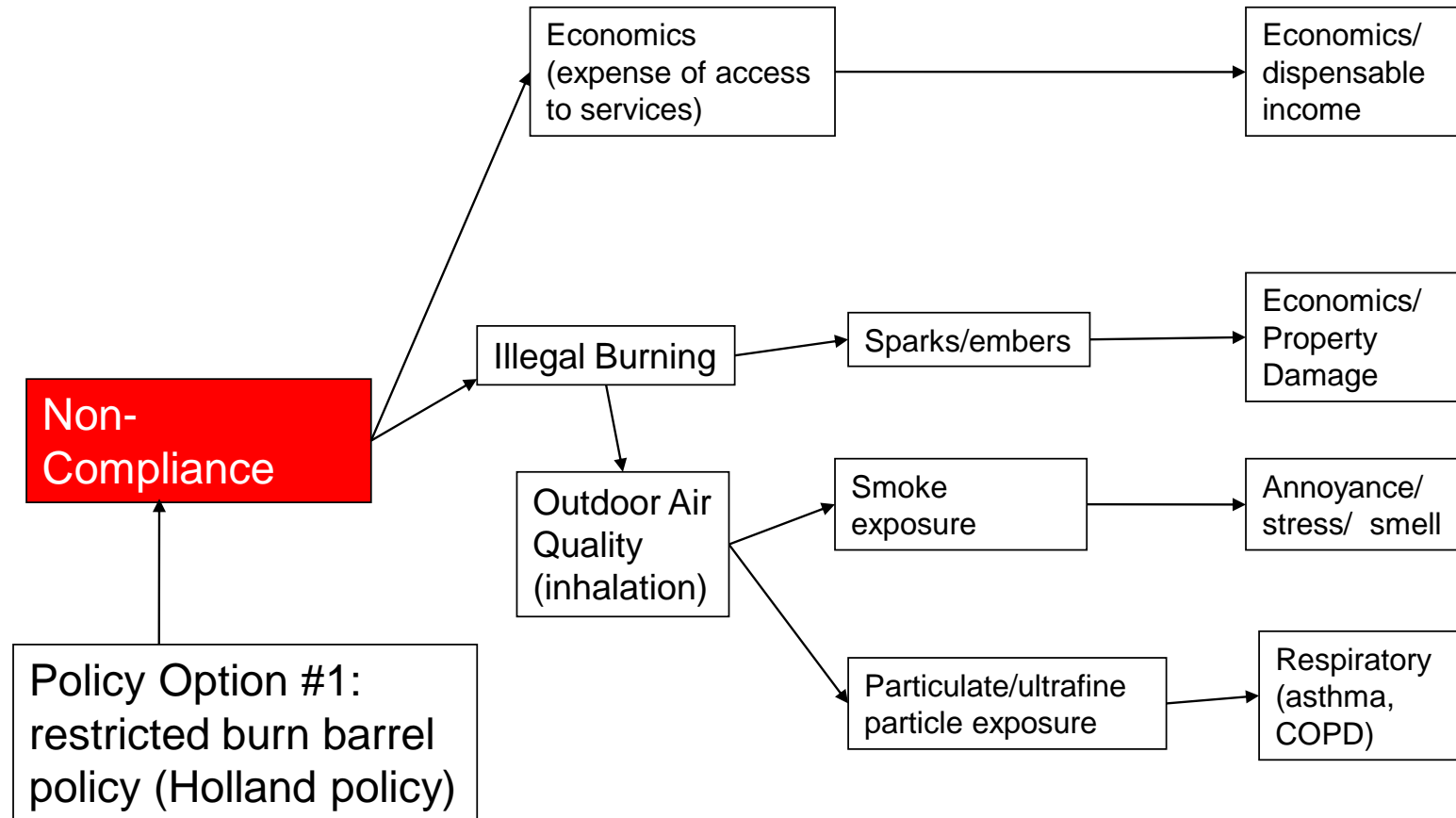
Municipal Clerk and Chairman Contacts:

<http://www.co.la-crosse.wi.us/CoDirctry/8Municipalities.pdf>



La Crosse County HIA Scoping Diagram 2011

Appendix C



The status of household trash burning in La Crosse County

The La Crosse County Health Department is conducting a Health Impact Assessment on the practices, policies and health outcomes of open air burning of trash within our individual municipalities.

A Health Impact Assessment (HIA) is a means of collecting information surrounding the practice of trash burning and sharing that information back with community members to gather feedback on possible improvements, as they relate to community values and priorities. This method ensures that democracy, equity, sustainable development and ethical use of evidence are inclusive in its application.

Why is open air burning of residential trash a health concern?

(i.e. Health impacts: **Expense** of solid waste disposal, **Fire**, **Annoyance**, **Respiratory** distress/asthma /COPD /Emphysema)

What are alternatives to open air burning?

Education on the harmful effects of low combustion burning of trash, improved access to solid waste disposal venues, and community collaboration on cost sharing and recycling/reuse of discarded materials.

ASSESSMENT QUESTIONS

Municipality

Fire/Administration/Other:

EXPENSE

How is solid waste handled by your municipality?

What is the direct expense to the municipality?

What waste disposal is included in your contract & at what cost to the municipality?

What is the resident's cost? (homeowner vs. renter?)

How could your “garbage” disposal be made better? (cost, access, etc.)

FIRE

How are fire calls tracked/categorized in your municipality?

How many fire calls in municipality in 2009? 2010? 2011?

How many calls attributed to open burning? (% ?)

How are your residents educated about open burning procedures? Trash disposal? How often?

What is the cost to residents if billed for response to a fire in violation of the local policy?

ANNOYANCE

How many complaints (related to open burning) are received RE: odor, smoke? (by municipality, fire, police)

Is time allotted to receiving/investigating/resolving these complaints? (If yes, estimate # hours)

RESPIRATORY ILLNESS

What is the problem of RESPIRATORY ILLNESS (asthma, emphysema, COPD, allergies, etc.) as a result of open air burning?

(What is respiratory distress? How many people suffer from it?)

By restricting open air burning to natural wood only, how would that impact the problems of respiratory illnesses?

“Assessment of Open Burning Enforcement in La Crosse County”

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