

# LARIMER COUNTY ENVIRONMENTAL AND SCIENCE ADVISORY BOARD

## 2016 Annual Report





ENVIRONMENTAL AND SCIENCE  
ADVISORY BOARD

Post Office Box 1190  
Fort Collins, Colorado 80522-1190

January 2017

Board of County Commissioners:

This annual report outlines the Environmental and Science Advisory Board's activities in 2016 and sets out our general goals and direction for 2017.

An important discussion topic for the year concerned solid waste planning and coordination. The County landfill is nearing its capacity, and a regional Wasteshed Coalition has been formed to consider the future of solid waste management in the region. The Advisory Board has followed the activities of the Coalition carefully and provided recommendations where appropriate.

Additional information about the Advisory Board, including minutes for the meetings, is available on the County's website at [www.larimer.org/boards/](http://www.larimer.org/boards/).

We would like to acknowledge County staff for their continued help and commitment to sound environmental management. In 2016, representatives from the Departments of Emergency Management, Natural Resources, Engineering, Solid Waste, and Health & Environment attended ESAB meetings to assist and inform members of the Advisory Board.

We hope that the feedback we provided was useful for the County. Please feel free to contact any of our members if you would like to discuss specific issues in greater detail.

A handwritten signature in black ink that reads 'Michael Jones'.

Michael Jones, Chair for 2016

A handwritten signature in black ink that reads 'Richard Alper'.

Richard Alper, Chair for 2017

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# **2016 ANNUAL REPORT OF THE LARIMER COUNTY ENVIRONMENTAL AND SCIENCE ADVISORY BOARD**

**January 2017**

## **I. INTRODUCTION**

The Larimer County Commissioners established the Environmental Advisory Board in 1993. The Board consists of up to 12 at-large members, appointed by the County Commissioners. The name of the board was changed to the Environmental and Science Advisory Board (ESAB) in 2013.

The role of the Advisory Board is to advise the Board of County Commissioners and appropriate departments on environmental and science-related issues that affect Larimer County. Items considered by the ESAB come from the Commissioners, staff, citizens and our own members.

The Advisory Board meets regularly on the second Tuesday of each month and on an as-needed basis for special work sessions. The first agenda item of each meeting is devoted to hearing citizen's comments about environmental issues. The list of speakers and guests that attended the ESAB meetings is presented in Section V of this report.

Important topics and actions considered by the Advisory Board are noted in Section II. Section III outlines the status of issues related to written correspondence. The actual recommendations are included in the Appendix.

The Advisory Board utilizes an issue index to keep track of the various issues that the board addresses. The index is updated on a monthly basis.

Lew Gaiter III was the County Commissioner liaison to the Environmental and Science Advisory Board in 2016. Doug Ryan, from the Department of Health and Environment, served as staff facilitator.

## II. DISCUSSION TOPICS IN 2016

<b>MONTH</b>	<b>TOPICS</b>
<b>February</b>	Member update on climate change issues
<b>April</b>	Solid waste planning & coordination Larimer County Environmental Responsibility Policy Ozone air quality attainment planning
<b>May</b>	Solid waste planning & coordination Review of 2013 flood recovery efforts & results Climate change regional planning efforts
<b>July</b>	Larimer County Comprehensive Plan update Solid waste planning & coordination
<b>August</b>	Fort Collins Recycling Center update Solid waste planning & coordination
<b>September</b>	Zoonosis update Ozone air quality update Solid waste planning & coordination
<b>November</b>	Solid waste planning & coordination Planning for 2017 workplan
<b>December</b>	Emerald Ash Borer mitigation ESAB issue index review Consideration of ESAB workplan elements for 2017 Election of officers for 2017 Solid waste planning & coordination

### III. STATUS OF ESAB RECOMMENDATIONS IN 2016

The table below outlines the formal recommendations made by the Advisory Board, and provides a brief statement about the status of those recommendations. As an advisory board, the ESAB's written recommendations are submitted to the Board of County Commissioners or a requesting County department. The actual correspondence is in the Appendix.

<b>Issue</b>	<b>Principal ESAB Actions and Recommendations</b>	<b>Status</b>
Environmental Responsibility Policy	The Advisory Board inquired about the status of this policy in order to clarify its potential role in implementation.	The policy has not been actively promoted in a number of years. At this point, the County Manager's office is working on alternative ways to address this issue principally through the County's strategic plan.
Solid waste planning & coordination	<p>The Advisory Board is following the activities of the regional Wasteshed Planning Coalition, which has been formed to address solid waste management in anticipation of closure of the County landfill.</p> <p>The ESAB works to advise the Commissioners and County staff on technical and policy issues related to that project. An important issue in 2016 concerns the availability of accurate data about solid waste generation and management in order to help inform future management options.</p>	The Coalition includes both technical and policy advisory committees. At the end of 2016, the Coalition was working on waste characterization, future management options and public involvement.

#### **IV. ENVIRONMENTAL STEWARDSHIP AWARDS**

Each fall, the Larimer County Environmental & Science Advisory Board and the Larimer County Commissioners recognize environmental efforts of county residents, businesses, organizations and/or agencies by awarding the Environmental Stewardship Awards. Environmental Stewardship Awards were first issued by Larimer County in 1995.

The awards program was not carried out in 2016. The ESAB asked staff to consider if potential changes to the way the nomination process is advertised and promoted might increase the pool of nominations. Changes to the program have been made. Those changes include a more streamlined website and nomination form. The nomination period has been moved from the busy summer season and will run January through mid-March.

## V. GUESTS AND INVITED SPEAKERS FOR MONTHLY MEETINGS

<b>MONTH</b>	<b>PERSON</b>	<b>SPEAKER'S TOPIC</b>
<b>February</b>	Lew Gaiter, County Commissioner	
<b>May</b>	Lori Hodges, County Emergency Manager  Lew Gaiter Steve Johnson, County Commissioners	2013 Flood recovery
<b>July</b>	Terry Gilbert, County Community Development  Honore Depew, City of Fort Collins  Stephen Gillette, County Solid Waste Department	Comprehensive Plan Update  Wasteshed planning  Wasteshed planning
<b>August</b>	Susie Gordon, City of Fort Collins	
<b>September</b>	Jessica Royer, County Health & Environment  Doug Ryan, County Health & Environment  Lea Schneider, County Health & Environment	Zoonosis  Ozone air quality
<b>November</b>	Shelley Bayard de Volo, County Engineering	
<b>December</b>	Casey Cisneros, County Natural Resources Department  Shelley Bayard de Volo, County Engineering	Emerald Ash Borer mitigation

## VI. ENVIRONMENTAL AND SCIENCE ADVISORY BOARD MEMBERS

Jane Abels	
Richard Alper	
Corey Broeckling	Appointed January 2016
Jeremy Deuto	
Jim Gerek	
Michael Lee Jones	
Kimberly Karish	
Evelyn King	
David Lehman	Appointed January 2016
Ryan McShane	Retired June 2016
Martin Nelson	Retired June 2016
Joseph Wilson	

*Note: This list includes all Advisory Board members who served during the year. At any given time, the Board consists of a maximum of twelve members.*

## **VII. YEAR 2017 WORKPLAN**

The workplan provides information about the general direction the Environmental and Science Advisory Board contemplates taking in 2017. Because conditions or priorities in the County can change, a considerable degree of flexibility needs to be maintained.

**Overall:** The ESAB strives to inform, and be informed, about county government-related policies, decisions, issues and actions that have environmental implications. To that end the ESAB will:

1. Serve as an informational resource that provides science-based recommendations to the County Commissioners and departments, points out areas of uncertainty and suggests appropriate ways to address them;
2. Identify environmental and science-based issues and opportunities for the consideration of the County Commissioners so that the BCC can be proactive in their responsibilities towards the environment. To that end, the ESAB will solicit from its membership ideas with respect to current environmental issues, and develop a consensus of the most relevant topics to be forwarded to the BCC;
3. Develop and maintain an attitude of trust and respect among the ESAB, the Commissioners, County departments and other boards and commissions.
4. Foster a cooperative working relationship with local & state organizations that are connected with topics on the ESAB issue index.
5. Provide updates on current environmental topics in order to enhance the common knowledge base among the members.

### **Response to Referrals or Requests:**

1. Respond in a timely manner to issues raised by the Board of County Commissioners, the County departments and ESAB members.
2. Facilitate the response to citizen comments received by the Advisory Board with the Board of County Commissioners and appropriate County departments.

### **Current Environmental Topics:**

1. Consider the regional implications of important environmental issues, and consider ways to address those issues across local jurisdictional boundaries. Examples of current issues include planning for ozone air quality compliance, and hydraulic fracturing.

2. Monitor important water issues including watershed planning and proposed water projects. The Halligan and Seaman reservoir expansion projects and the Northern Integrated Supply Project are examples of current water issues.
3. Monitor solid waste management issues such as landfill operations, recycling and hazardous waste disposal. As the County landfill approaches its capacity, a regional Wasteshed Coalition has been formed to consider the next steps in solid waste management together with regional partners. This is an important project due in part to the lead time necessary for implementing changes to the solid waste management system.
4. Monitor the status of both conventional and alternative energy development, and be available to consult with staff and the County Commissioners regarding potential environmental implications. Wind energy, solar energy, and oil and gas development are current topics of interest.
5. Consider important natural or ecological impacts associated with large-scale events such as wildfire, floods, droughts, and climate change.
6. Participate in the County's proposed Comprehensive Plan Update for 2017 and 2018.

#### **Stewardship Awards:**

1. Coordinate the annual Environmental Stewardship Awards in partnership with the County Commissioners.

#### **Communications and Process:**

1. Maintain open communications with the County Commissioner liaison assigned to the Environmental and Science Advisory Board in order to facilitate communication about environmental concerns or issues seen by either the Commissioners or the Advisory Board.
2. Utilize the Commissioners' Administrative Matters meetings as appropriate for communicating on important environmental issues as they arise.
3. Continue the practice of assigning interested ESAB members to monitor select environmental activities and provide updates to the full Advisory Board.

## **APPENDIX: WRITTEN CORRESPONDENCE**

These documents were prepared by the Environmental and Science Advisory Board as part of their activities in 2016.

- May 2, 2016 memo to the County Manager about the Larimer County Environmental Responsibility Policy.
- August 19, 2016 email to the Larimer County Wasteshed Coalition about planning for public forums to be conducted by the Coalition.
- December 4, 2016 email to the Larimer County Wasteshed Coalition about solid waste data and its importance in planning for the future solid waste system.



## ENVIRONMENTAL AND SCIENCE ADVISORY BOARD

Post Office Box 1190  
Fort Collins, Colorado 80522-1190

To: Linda Hoffmann, County Manager

From: Michael Lee Jones, Chair 

Date: May 3, 2016

Subject: Larimer County Environmental Responsibility Policy (BCC Policy #8B)

The Environmental and Science Advisory Board has long considered that the County's [Environmental Responsibility Policy](#) represents a significant commitment for incorporating consideration of the environment in the County's decision making process.

The ESAB (originally as the EAB) was involved in reviewing the initial policy, and routinely includes promoting implementation of the Environmental Responsibility Policy as part of our annual workplan. During discussions of the work plan, it occurred to the members that this policy may no longer be in the forefront of where the organization turns for guidance that was intended. For example, Doug Ryan did an informal check with select staff in the County and found a low level of knowledge about the policy. At this point the advisory board is unsure if promoting the stand-alone policy would be an effective way to work toward our common goals.

We understand that the County is moving forward on other projects such as the Strategic Plan, which represents an important vision statement for conducting County operations in future years.

Following the discussion at our April meeting, the members asked me to check in with you to ask about your assessment of the role of the Environmental Responsibility Policy and its utility at this time. We certainly believe that a strong commitment to environmental responsibility is important, but even more so is the need to embed this commitment within the fabric of the organization. We would be available to discuss some examples of what other organizations are using for these purposes. We know, for example, that systems like the ISO 14001 Standard have been very effective for some organizations, and that others use their strategic planning process for these purposes.

I very much appreciate the opportunity to consult with you on this topic. Please contact me or Doug Ryan if you would like to discuss any of these comments in greater detail.

**Email correspondence**  
**August 19, 2016**

**From: Richard Alper, ESAB Solid Waste Committee**

**To: Honore Depew, Chair Wasteshed Technical Advisory Committee**

Honore,

You asked our group to make suggestions for clarification or framing at the upcoming public sessions in preparation for the PAC meeting on 8/26.

The Environmental Science Advisory Board (ESAB) appreciates the opportunity to participate in the Wasteshed Coalition's process and to submit comments on this Report.

The ESAB Solid Waste Sub-committee has reviewed the Final Regional Wasteshed Planning Study, dated mid July, 2016.

I circulated the Report to the committee members and to Doug Ryan for their review. Doug and I then met to organize those comments. They are presented in the attached document.

The Report is an important and comprehensive document. It is clear that it will be very useful for technical planning purposes at the TAC and PAC level. It is our hope that the suggestions offered here can be helpful in framing the information it contains for the more general public forums. We ask that you consider sharing these comments with the TAC/PAC in advance of their planning session for the public forums.

In the event there might be a subsequent consultant report going forward, please know that we would be available to review a pre-final draft report in its earlier stage, if that would be helpful to you and the PAC/TAC.

Please feel free to contact me if you have any questions or would like to discuss this in greater detail.

**Larimer County Environmental & Science Advisory Board (ESAB)  
Solid Waste Committee  
Feedback for the public forums concerning the Regional Wasteshed Planning  
Study  
August 19, 2016**

The ESAB was asked to review the R3 Consulting Group Final Regional Wasteshed Planning Study dated July 15, 2016, and to provide suggestions for sections that may benefit from clarification or special framing when the report is used for planned public engagement sessions in September.

The ESAB solid waste committee completed that review, and offers the following suggestions:

**Suggestions for preparing for the public forums.**

- Section 5 outlines the "feasible options". That may be better labeled something like "options evaluated" together with list of those options not considered such as incineration for electric power generation.
- Include a poster for the public session that defines the various alternatives. Options such as "clean MRF" and "dirty MRF" are not widely understood or clearly defined in the report.
- Plan the public sessions to illustrate the connection between goals or vision, and what the outcome the options can produce to help meet those goals.
- Include a few selected examples of "mixed systems" and the overall impact they might achieve for waste diversion from a landfill. An example might include a landfill with a co-located composting facility and central transfer station, etc.
- The general concept of a "wasteshed", as description in the R3 Report was vague and unclear. Alternative explanations already exist within the Coalition and should be used in public presentations instead of the R3 wording.
- Clearly explain the difference between "Solid Waste" and "Garbage" as used in the report. The greatest opportunities for enhancement seem to exist in the realm of "Non-Garbage Solid Waste" and people need to clearly understand what that is.
- Better explain the role of C&D waste in the SW equation - in several tables it is shown as 0 tons, yet a prominent option outlined in the report is to build a separate facility to manage it.
- The public desirability of creating, and potentially publically subsidizing, Wasteshed facilities as a means to promote APPROPRIATE SW disposal practices should be emphasized. The lack of convenient and economical facilities can lead certain

members of the public to utilize INAPPROPRIATE practices such as roadside dumping or utilizing "the back 40" to make SW go away. These can lead to greater long term public costs for clean-ups and a degraded environment that are outside the equations of this report.

**Issues to consider for the public forums, but also appropriate for detailed review at the PAC/TAC level.**

- SW "Diversion Rates" are quoted as ranging from 60 to 100%. Explain what these mean and how they are calculated by each separate stakeholder. On face value the quoted diversion rates often don't match the collective numbers.
- If presenting Table 1, be prepared to explain why 3X more garbage received at the Larimer landfill comes from locations OUTSIDE FoCo and Loveland (where the population is centered).
- Clearly explain why R3 indicates a new Central Transfer Station could, by itself, significantly reduce CO2E emissions (i.e., 10,000,000 car-equivalents). The SW wouldn't just disappear there; it would have to be hauled away and disposed by some other means.
- The relationship between PAYT regulations and the common practice of neighborhood/HOA collaborative contracting of waste haulers may be important to evaluate. PAYT is intended to incentivize lower garbage generation, yet fixed contracts with haulers are often set at the highest volume for convenience and consistency. This can result in houses that generate only a few pounds of SW per week, but have the largest possible container size as that is what they are paying for through our HOA. Meanwhile, other neighbors may completely fill their large containers as they don't pay any more, and are not incentivized to generate less waste.

**Suggested questions or discussion points for the public forums:**

- Recycling as a Strategy: The survey indicates that some members of the community question the value and effectiveness of recycling while others do not understand its purpose compared to sending waste to the landfill. Assuming that recycling is an important separate activity for managing solid waste, how would you go about educating communities around the County about its value and effectiveness? Should education be a primary strategy to encourage recycling?
- The Economics of Recycling: The survey indicates that some members of the community believe that recycling should be made easier and less expensive than landfilling, so that the public is incentivized to use recycling more than landfilling. Do you agree that recycling should be incentivized? If so, is this the best way to incentivize recycling? What are other ways to incentive recycling?

- **Scope of Recycling:** The survey indicates that several members of the community believe that recycling should be required or at least convenient to multi-family dwellings, retail and commercial establishments and construction sites. Does this make sense? Should recycling be made convenient or should it be required for these types of uses? What kinds of measures are necessary to expand the scope of recycling?
- **Education about Logistics of Recycling:** The survey indicates there is much confusion in the public mind about recycling glass, household hazardous waste and generally what can and cannot be recycled depending on different local rules for recycling around the County. Do you think education would be effective to reduce this confusion? If so, what kinds of education do you think would be effective? If you do not think education would be effective, what other kinds of actions do you think would be effective? (regulations? enforcement? economic incentives?)

**Email correspondence  
December 4, 2016**

**From: Jim Gerek, ESAB Solid Waste Committee**

**To: Honore Depew, Chair Wasteshed Technical Advisory Committee**

Honore:

Thank you for your reply of Nov 15. The current work of the Wasteshed Coalition was a major topic of discussion at the Larimer County ESAB's monthly meeting in November. After our subcommittee's presentation centering around the data in the R3 report and the September Public Forums, the entire ESAB formally directed our Solid Waste Subcommittee to closely monitor the process and communicate, as appropriate, with the County Commissioners.

Our subcommittee is pleased that the TAC is following up on the source data in the Final R3 report to better understand it. While our subcommittee does not have any independent Larimer County data to bring to the table, we do have members on the ESAB that are very skilled in data analysis and data manipulation. Should there be an opportunity we would be pleased to sit down together with TAC members to parse any of the available data sets. We also may be able to suggest creative alternative data options that could be obtained in a fairly short time period.

We are also pleased at the apparent will and resources committed by the current Wasteshed Coalition members to select and implement infrastructure options. But our ESAB subcommittee would find it difficult to predict the outcome of implementing ANY new options with certainty, based on the currently available source data. To borrow an old information management phrase: "Garbage In - Garbage Out" (please forgive the pun in this instance).

The consolidated opinions from participants in all the September Public Forums should also be an interesting input to the process. (The stakeholders at the Wellington forum that I attended seemed to be fairly narrowly focused in their interests.) We are most interested in how the stakeholder input will be translated into the scope of work for the next round of consulting services to look at implementation options. And also whether there will be another round of source data analysis by the (new) consultants.

Thanks once again for the continued dialogue on this important subject. I look forward to seeing you again soon at the December PAC meeting, along with my colleagues.