

A photograph of a wooden building under construction at dusk. The building features a gabled roof and vertical wooden slats. In the foreground, there are stacks of lumber and other construction materials. The sun is low on the right side, creating a bright glow and casting long shadows. Several power lines are visible against the blue sky. The text "Home ReSource" is overlaid in the center in a white, sans-serif font.

Home ReSource



“The first rule of intelligent tinkering is to keep all the parts”

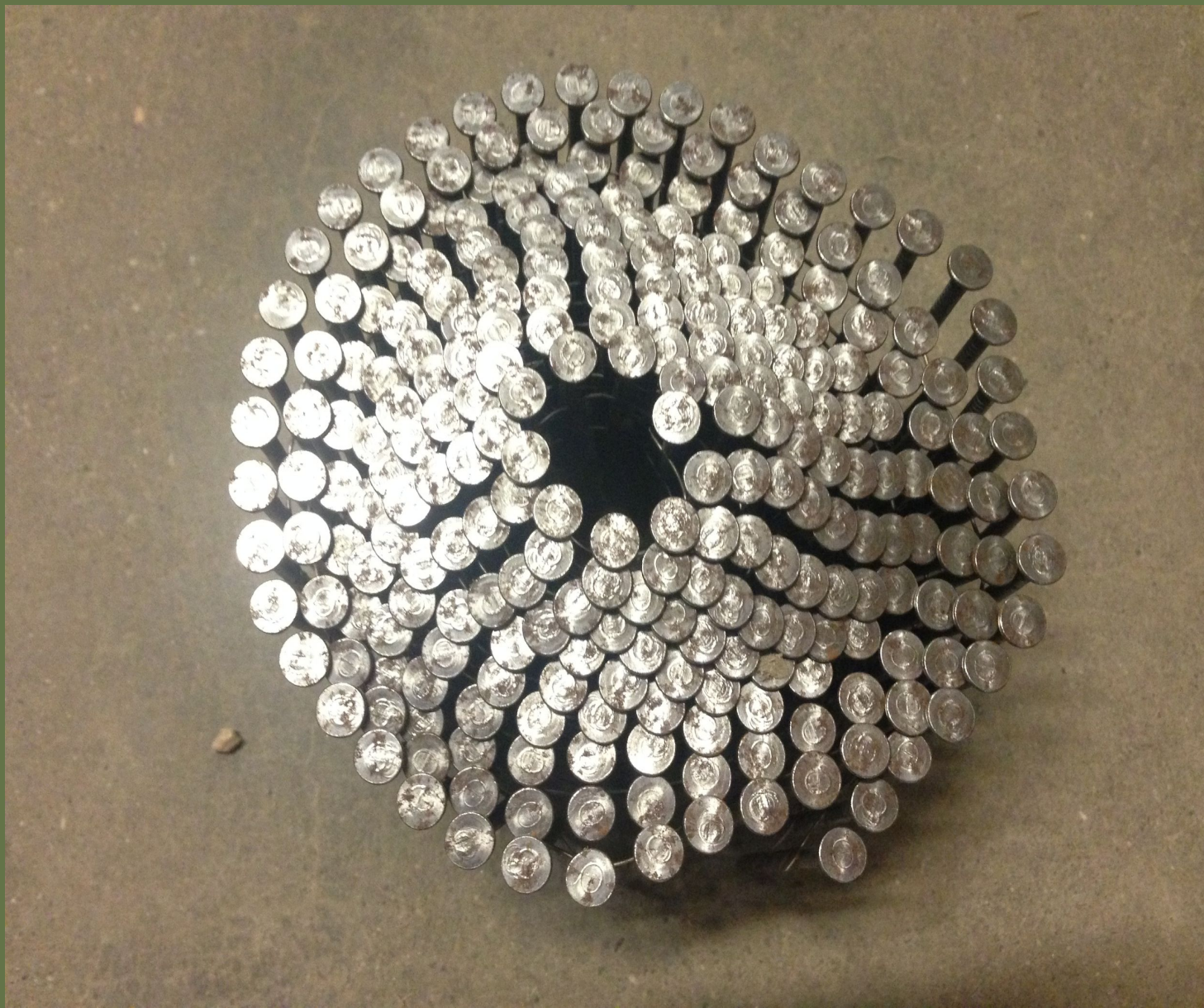
Robert Pirsig















Colter
52 Fellin
4-12-2018

Landfield closed
do to no waste



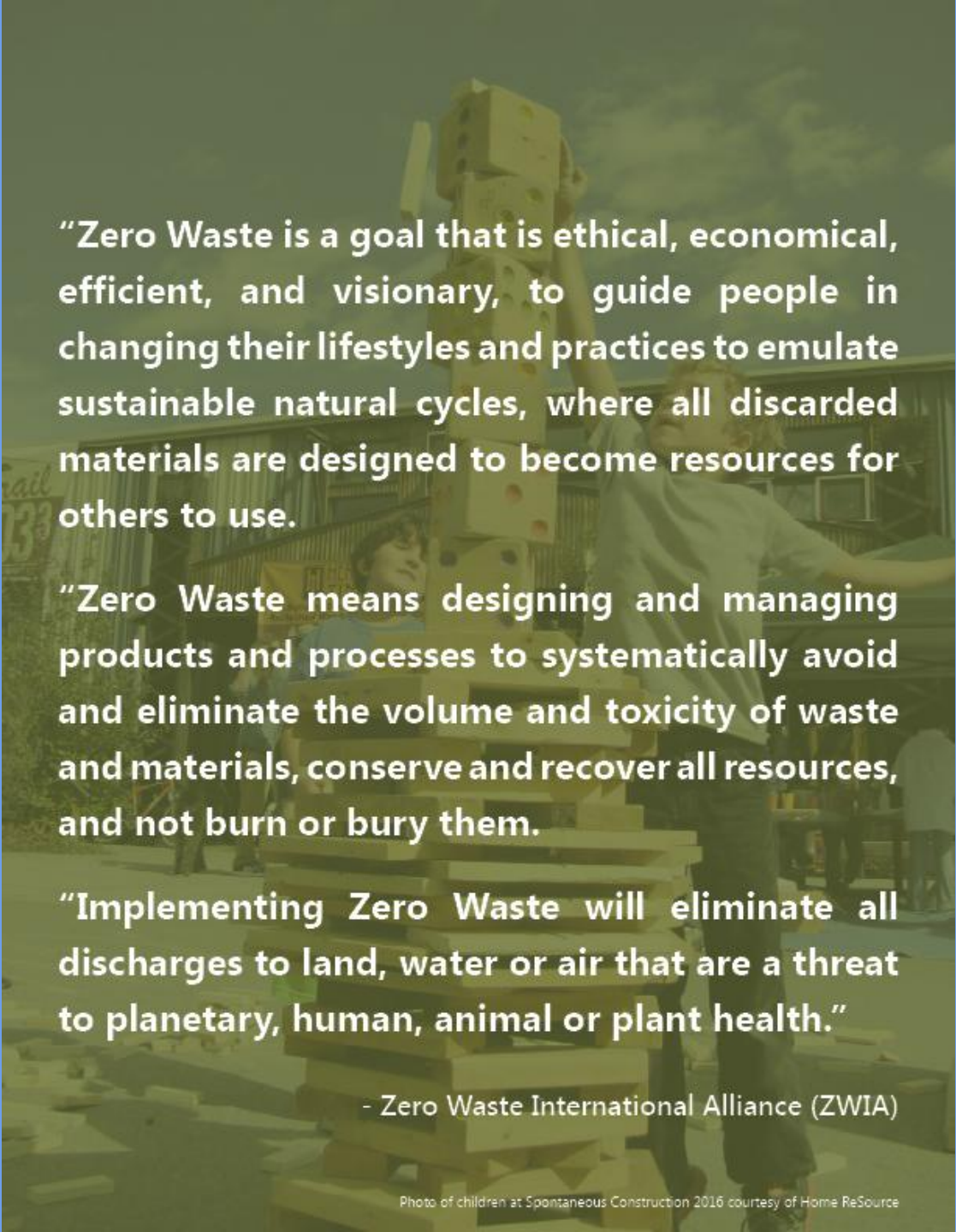


COMMUNITY CLIMATE SUMMIT #2 – MAY 2014







A photograph of two children building a tall tower of cardboard boxes. The child in the foreground is reaching up to place a box on top of the tower. The child in the background is looking up at the tower. The boxes are stacked in a way that creates a staircase-like structure at the base. The background shows a building with a sign that says "rail".

"Zero Waste is a goal that is ethical, economical, efficient, and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use.

"Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them.

"Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health."

- Zero Waste International Alliance (ZWIA)

PROCLAMATION

- WHEREAS,** Waste is not inevitable and is a significant and untapped resource; and
- WHEREAS,** our community can substantially reduce the amount of resources we send to the landfill as waste through an integrated approach to waste reduction, reuse, and recycling; and
- WHEREAS,** through education, engagement of local business leaders, and leadership from citizens and local government our community can lead the region in moving toward Zero Waste; and
- WHEREAS,** a robust reuse and recycling sector can contribute to building a vibrant and sustainable Missoula economy; and
- WHEREAS,** the City of Missoula supports the Missoula Climate Initiative, which has identified waste reduction as a key to mitigating climate change.

NOW, THEREFORE, I, John Engen, Mayor of the City of Missoula, in the State of Montana, do hereby proclaim the month of April 2015, in Missoula, Montana as:

MOVING MISSOULA TOWARD ZERO WASTE MONTH

IN WITNESS WHEREOF, I have hereunto set my hand and caused the great seal of the City of Missoula, in the State of Montana, to be affixed at Missoula, Montana, this 23rd day of March, in the year two thousand fifteen.



John Engen
Mayor

RESOLUTION NUMBER 8044

A Resolution Supporting the Creation of a Zero Waste Plan and Setting Waste Reduction Goals for the City of Missoula.

WHEREAS, Montana's current recycling rate of 22% is well below the national average of 35% and anecdotal evidence shows that the City of Missoula's recycling rate is below the state average; and

WHEREAS, in an average year the Missoula Landfill is lined with over 210,000 tons of material from the City of Missoula and surrounding communities, which represents a waste of valuable resources, increases the emission of greenhouse gases, and will transfer the liabilities associated with disposal to future generations after the responsibilities of the current operator have been fulfilled; and

WHEREAS, the Missoula City Council recognizes the life span of the open area of the Missoula Landfill is estimated to be 15 years at the City of Missoula's current rate of growth and disposal and the lifespan of the landfill property is estimated to be 79 years when fully developed; and

WHEREAS, the cost of landfill disposal is likely to continue to increase; and

WHEREAS, increasing reuse, recycling and composting can create new entrepreneurial and employment opportunities in the City of Missoula; and

WHEREAS, reducing disposal in landfills reduces emissions such as those required to convert natural resources into new goods and transport them to market as well as fugitive landfill emissions caused by discarded organic matter including food scraps, grass clippings, cardboard, and carpet; and



ZERO by FIFTY

Waste Reduction Targets

Goal:
90% by 2050

Target 1:
30% or better by 2025

Target 2:
40% or better by 2030

Target 3:
60% or better by 2040

“Zero Waste...or darn near”

Eric Lombardi. Eco-Cycle International. Boulder, CO.



ZERO BY FIFTY: THE FOUR PATHS

PATH A: ACCESS

PATH B: INFRASTRUCTURE

PATH C: EDUCATION

PATH D: POLICY



ACTIONS TIMELINE

PRIORITIZATION

Short – 1-3 yr

Medium – 3-5 yr

Long – 5-10 yr

Complete ZERO by FIFTY Actions Timeline			
ACTION	TIMEFRAME	DIVERSION POTENTIAL	UPSTREAM IMPACTS
A1.1: Transform the current collection infrastructure to support the ZERO by FIFTY goal	Short	Medium – High	Low – Medium
A1.2: Ensure availability of recycling and composting collection service to all Missoula households, businesses, & multi family residential housing units (MFUs)	Short	Medium – High	Low
A1.3: Support expansion of diversion options for household hazardous waste (HHW), e-waste, and universal waste disposal	Short	Low – Medium	Low
A1.4: Install Zero Waste stations in public parks and other popular public spaces such as Downtown	Short	Low	Low
B1.1: Work to expand materials accepted at Garden City Compost	Short	Medium – High	Low
B1.2: Assist with development of HHW facility	Short	Low	Low
B1.3: Ensure availability of materials & technical support for Zero Waste events	Short	Medium	Medium
B1.4: Support expanded drop-off options for recyclables & reusables	Short	Low	Low – Medium
B2.1: Develop Zero Waste start-up assistance program	Short	Medium	High
B2.2: Investigate development of a Zero Waste Business Park	Short	Medium	Low
C1.1: Develop community-focused, cross-platform education campaign	Short	Low – Medium	Low
C1.2: Support integration of the ZERO by FIFTY goal and framework across Missoula	Short	Medium	Medium
C1.3: Promote expansion of source reduction & reuse initiatives	Short	Low	Low
C1.4: Provide guidance for construction, demolition, and deconstruction (CDD) reuse and recycling service options	Short	Low	Low
C2.1: Support implementation of Zero Waste in K-12 schools	Short	Medium	Medium
C2.2: Support community opportunities to gain Zero Waste skills	Short	Low	Low
D1.1: Encourage environmentally preferable purchasing (EPP) practices	Short	Low	High
D1.2: Adopt and implement ZERO by FIFTY goals and action plans for all public venues and events	Short	Medium	Low
D2.1: Integrate the ZERO by FIFTY actions into existing comprehensive City & City partner planning documents	Short	Medium	Medium
D2.2: Develop incentives for new Zero Waste business start-ups	Short	Medium	High

Complete ZERO by FIFTY Actions Timeline (continued)			
ACTION	TIMEFRAME	DIVERSION POTENTIAL	UPSTREAM IMPACTS
D2.3: Provide incentives to developers & contractors who include reuse, recycling, and deconstruction in project plans	Short	Low – Medium	Low – High
D2.4: Encourage and provide incentives for homes, neighborhoods, schools, and businesses to compost food scraps and yard trimmings	Short	Low – High	Low – Medium
D2.5: Offer incentives for use of local compost	Short	Medium	Medium
D3.1: Adopt a community-wide Universal Zero Waste Ordinance	Short	Medium – High	Low – Medium
D4.1: Restrict free distribution of single-use disposables	Short	Low – Medium	Medium – High
C1.5: Develop & deploy outreach program & resources to support businesses moving toward Zero Waste	Short/Medium	Low – Medium	Low – High
D1.3: Integrate reuse, recycling, and deconstruction into all City-supported construction and demolition projects	Short/Medium	High*	Medium*
A1.5: Work with waste collection service provider to implement Every-Other-Week (EOW) trash collection	Medium	Medium	Low
B1.5: Support a more complete and comprehensive food recovery network	Medium	Low – Medium	Medium
B1.6: Explore development of additional Zero Waste facilities	Medium	Low – High	Low – Medium
D1.4: Require environmentally preferable purchasing (EPP) practices and incorporate Zero Waste objectives into all contractual purchases and services	Medium	Medium	High
D2.6: Develop a recognition & reward program for outstanding Zero Waste businesses & institutions	Medium	Low	Low
D3.2: Identify a path to a Universal Deconstruction Ordinance	Medium	Low*	Low*
D3.3: Establish minimum reuse and recycling requirements for construction, demolition, and deconstruction (CDD) materials	Medium	Medium	Low
D3.4: Implement mandatory retailer take-back	Medium	Medium	Low
D4.2: Ban landfill disposal of E-waste	Medium	High	High
D1.5: Incorporate reusable and recycled materials into municipal road construction and maintenance projects	Medium/Long	Medium	High
D2.7: Provide incentives for use of C&D recycling facilities	Long	High	Low
D3.5: Adopt an Equal Space policy that requires new construction to provide space for source separation of materials for collection	Long	Medium	Low
D3.6: Support Extended Producer Responsibility (EPR) laws for hard-to-recycle items	Long	Low	Medium
D4.3: Ban landfill disposal of reusable and recyclable materials from construction, demolition, and deconstruction (CDD) projects	Long	High*	High*
D4.4: Ban landfill disposal of compostable organics	Long	High	High

ACTIONS

Short – 25

Short/Med – 2

Medium – 9

Med/Long – 1

Long – 5



ZERObyFIFTY

Missoula's Pathway To Zero Waste

THE IMMEDIATE PATH FORWARD



1. Establish and Fund a Full-Time, Dedicated Staff Position to Implement this Plan
2. Conduct a Community Baseline Waste Study
3. Create a Budget and Financing Strategy





CITY OF MISSOULA ZERO WASTE PLAN



Parks & Conservation Committee Presentation

Wednesday, July 25, 2018













COMPOST



LANDFILL



REUSE



LIQUIDS











NO PLASTIC
BAGS



Margot

NO Plastic
straws



healthy environment



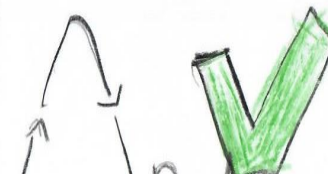
clean rivers

5 loya

after



Clean
earth



Savannah

Before



Trash

Dirty
earth











