Post-Emergency Response and Management: Compost Issues

Colorado SWANA
Estes Park, Colorado
October 9, 2014

Boulder County Floods
September 2013
- 17 inches of rain in eight days
- 4 lives lost
- Nearly 600 homes and businesses damaged
- Flooding in all major canyons
- 150 miles of roads damaged
- Estimated $217 million in repairs

Photo by Boulder County Staff

Upwards of 100,000 tons of Flood Debris
16,000 tons managed
- Hazardous materials
- Electronics
- White Goods
- Tires
100,000 tons of MFW (muddy, floody, woody debris)

Photo by Boulder County Staff

Added Complication: EAB
Emerald Ash Borer AKA “The Green Menace”
- Deadly to all types of ash trees, regardless of size or species
- Weakens limbs, making them more susceptible to wind and snow burden
- Challenging to detect and treat

Photo from USDA

You Could Be Next
City of Boulder: ~ 98,000 ash trees
Boulder County: Thousands more
Colorado Front Range: ~ 1.5 million ash trees

Photo by Lisa Friend

Managing Limbs and Branches
Windstorm
Snowstorm
Flood
Disease

Photo by Boulder County Staff
Wood Collection Strategies
- Remove from Rights of Way – nearly 3,000 large truck loads
- Stream Beds – another 3,000 truck loads

Threats to Stream Beds
- Logs can be carried in spring runoff or subsequent floods
  - Endanger life and property
  - Can cascade downstream destroying roads and bridges
  - Block culverts, creating more flood potential

Boulder County Considerations
- Highest and Best Use
  - Lumber
  - Firewood
  - Bio-Mass boiler fuel
  - Mulch
  - Compost

What About That Quarantine?
- Western Disposal Composting Facility, Boulder
- Denver Regional Landfill, Erie
- Front Range Landfill, Erie
- Republic Landfill, Golden

Many Counties Lack Landfills
- 19 of 64 Colorado counties do not have landfills of their own

Chipping IS an Option
- Couldn’t Burn
- Couldn’t Compost
- Couldn’t Export
- CAN Chip to 1” or less in two dimensions
Few Colorado Counties Offer Permitted Compost Facilities

Only 20 Colorado counties host permitted compost facilities.

Wood Must Be Processed Prior to Export

- Milled
  - All bark removed
  - ½ inch of wood removed
- Firewood
  - Heat-treated
  - Fumigated
- Chipped

Staging Yards Effective

FEMA can reimburse costs

Best to have contracts arranged in advance of disaster

EAB-Damaged Trees Must be Removed

Safety Hazard

- Urban landscapes
- Brittle
- Hazardous in windstorms or when burdened by snow

Property also at risk

Infestation Can Jump Borders

Naturally moves only 2-3 miles/year

Humans can transport borers

- Firewood
- Nursery Stock
- Crafts

Damage hard to spot at first

$1,000 per offense

Is Your Community Prepared?

Costs of management

- Testing
- Prevention
- Removal
- Discard management

Costs of Replacement

June 2006

August 2009
Businesses Must Be Watchful

Landscaping: Trees that beautify your business

Transport: What is in your trucks?
- CD & Landclearing
- Transport of compost
- Household debris
- Special pick-up (Bagster™, etc.)

Photo by Boulder County Staff

Questions?
Thank You!

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