WORKSHOP · WED, OCT 14 · 2:30-3:30 PM

Coalition, System, Site: Building Resilience with Community-Scale Biochar

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Biochar, made by heating wood and other organic waste with little oxygen, can turn wildfire slash into a soil amendment while cutting smoke, landfill loads and erosion. Park City and its partners showed how to map waste streams, end uses, funding and partners, and what a real project takes on the ground.

KEY TAKEAWAYS

1. **One process, several town problems.** Biochar handles slash from defensible space work without smoky pile burns, holds water in dry soils, and keeps material out of a filling landfill.
2. **Start with inputs and end uses.** Biochar is a category, like concrete. Your feedstock and your goal (soil, restoration, mine remediation) decide how you make and process it.
3. **Kilns beat pile burns for land managers.** They run at a lower clearing index, so material leaves the woods faster. Park City had piles sit for seven years waiting for burn conditions.
4. **Permitting is doable; start early.** In Utah, the burn plan went to the city, state smoke management, the county fire marshal and the fire warden. Contract to first burn took about a week and a half.
5. **Carbon credits are possible but not proven.** Few projects have reached payment. Carbon accounting for insetting may be the simpler path for a town tracking its own goals.

WHAT LOCAL OFFICIALS CAN DO

- ☐ **Map what you have.** List woody, agricultural and wet waste streams at city, county and state level, plus who holds the levers on each.
- ☐ **Write biochar into defensible space contracts.** Park City's resource manager structured fuel reduction contracts so biochar could be included.
- ☐ **Call your fire marshal and state fire officials now.** Invite them to a small demo burn first. Showing beats telling.
- ☐ **Check the site before you commit.** Confirm accessible biomass, equipment access and grades, kiln clearance, and water on hand to quench.
- ☐ **Plan for the char before you make it.** Park City is applying biochar in parks and open space restoration where there is compaction or erosion.
- ☐ **Use planning grants to build the coalition.** Park City's grant brought about six community partners together for a year of planning.

BY THE NUMBERS

~$108K
Climate Smart Communities Initiative planning grant

~11 cu yd
Biochar per kiln per day, from 7 to 8 tons of feedstock

300 to 500 gal
Water to quench each kiln

80 acres
Thaynes Canyon site, in a critical drinking watershed

Under 25%
Target feedstock moisture for carbon credit protocols

70%+
Typical minimum carbon content for biochar standards

WATCH OUT FOR

- ! Rules vary by state. Washington regulated these kilns like burn barrels until a law change moved them under pile burning rules.
- ! Wet or thin material burns poorly. Layer it with dry slash.

RESOURCES

Climate Action Reserve
climateactionreserve.org (biochar credit protocol)

International Biochar Initiative
biochar-international.org

USU "big box" kiln plans
Free kiln plans from Darren McAvoy, Utah State University

Circular Spring
circularspring.com

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Summarized from the session recording and presenter slides. Figures are as presented; confirm with presenters before citing.

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