Biochar: Potential New Market for Low-Value Biomass

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April 15, 2016

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Overview

- Introduction
- II. Biochar projects in Oregon
- III. Resources for more information

Introduction: What is Biochar?

 Biochar is a fine-grained, highly porous charcoal that helps soils retain nutrients and water (IBI)









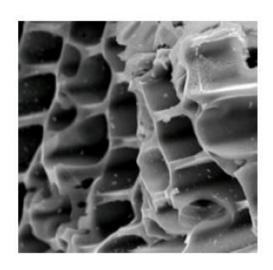


Image courtesy of Tom Miles, TR Miles Consultants Inc.

What Can It Do?

- Filter pollutants out of water (ag runoff, stormwater, wastewater)
- Enhance plant productivity when used as a soil amendment

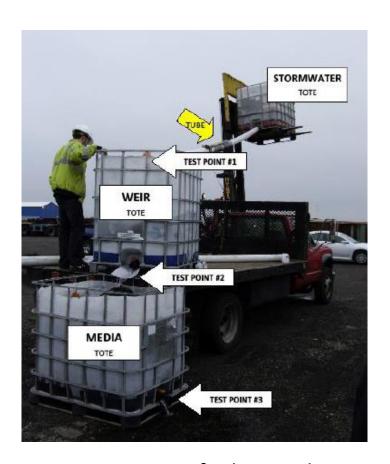


Image courtesy of John Miedema



United States Forest Service: Biochar Interest

- Enhance low-value biomass utilization
- Create new markets for nontimber based forest products
- Support job creation in rural communities
- Enhance water quality in priority watersheds





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Family Forests of Oregon

- 2015 Wood Utilization Assistance Grant
- Private sector partners
- USDA Ag Research Service, OSU Extension







Family Forests of Oregon

- USDA ARS & OSU Extension
 - Blueberries, hazelnuts, other crops





North Slope Resource Company

- Farm scale combined heat and power with biochar
- USFS, ODF
- Cohesive Wildfire Strategy
- East Face Forest Vegetation Project







Farm soil issues

- Using biochar made from low-value ponderosa pine...can it help with current soil issues?
 - High pH
 - Salts
 - Low organic matter
- Preliminary data on garlic and sunflowers, very encouraging





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Resources for more information

- Northwest biochar working group
 - http://www.nwbiochar.org/
- US Biochar Initiative—August 2016 conf at OSU
 - http://usbi2016.org/
- International Biochar Initiative
 - http://www.biochar-international.org/

Conclusions

- Emerging Sector
- Bringing research-to-real world applications
- Enormous potential:
 - Low value biomass, rural jobs, new enterprises

Questions

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