

Kittitas County Conservation District

Serving
Landowners in
Kittitas County
Since 1942

April 2009



Office location:

607 E Mountain View Avenue

Ellensburg, WA 98926 Phone: (509) 925-8585 ext. 4 Fax: (509) 925-8591 Website: www.kccd.net

PAM Cost Share Program

The Kittitas County Conservation District, with funding from the Washington Conservation Commission and Kittitas County, is continuing to offer a cost share program for private landowners interested in reducing soil erosion through the use of Polyacrylamides (PAM). The cost share rate is 50% with a limit of \$1,000 per applicant (50% of \$2,000 in receipted PAM purchases). Any fields where PAM is used are eligible for the program.

PAM has been proven through numerous local field trials to reduce sediment levels in tailwater by as much as 80%. PAM is most commonly applied to sweet corn, potatoes, small grain and new seeding hay crops. It is an effective method to minimize the loss of soil and nutrients as well as reducing silt deposition in county maintained road ditches and improving the quality of tailwater entering streams and eventually the Yakima River.

Again this season, cost share for PAM application devices is available. The cost share rate is 50% with a limit of \$150 per cooperator (50% of \$300 in receipted purchases of PAM applicators). This brings total cost share payments to a maximum of \$1,150 per cooperator per year. Please call Sara at 925-8585 ext. 4 for more information.



Mark Crowley demonstrates using PAM to third graders at last year's AG Fair

Funding Available for Projects along Manastash Creek

Enhancing in-stream flow is a major component of the Manastash Creek Restoration Project. The KCCD has been tasked with finding and developing projects to improve efficiency of use and result in returning "saved" water to Manastash Creek. Projects may include piping earthen delivery ditches, converting to sprinklers, even converting to groundwater wells where possible and appropriate. This, as with all KCCD projects, is a voluntary program. At this time, the KCCD is seeking individuals interested in pursuing possible projects to conserve water. If you have a water right on Manastash Creek, you are potentially eligible to receive both technical and financial assistance to implement projects that improve water use efficiency.

If you are interested in learning more about the in-stream flow enhancement activities on Manastash Creek, please contact Sherry Swanson at 925-8585 ext. 4.



A successful sprinkler project that improves irrigation efficiency in the lower valley

Organics and Biosolids

An introduction to Organics and biosolids workshop is tentatively planned for July 14, 2009. Speakers will discuss various topics, to include an introduction to biosolids and Organics, how they can be used as fertilizer and soil amendment, as well as how others are using these products. A field tour with demonstration projects will follow. Watch for further announcements on this informative presentation.

Utilizing Woody Biomass

By Thembi Borrás

What is Biomass?

In the context of forests, a definition of biomass is woody material that accumulates to an amount that becomes a hazard or a management or disposal problem. Biomass is generated during fire hazard reduction, forest health improvement and from logging. It includes:

- Branches from pruning
- Small diameter trees from thinning
- Slash (tree tops, branches, broken stems) from operations

The Development of Biomass

Biomass is, in part, stored carbon and nutrients, the products of unique processes of plants.

Photosynthesis changes inorganic carbon (carbon dioxide) into organic carbon (carbohydrate). Organic carbon is translocated in vascular tissue from a source, such as a mature needle, to a sink such as roots, the tree bole, and developing cones. Organic carbon is used by the tree to increase biomass and provides the energy to build and maintain that biomass.

Transpiration transports minerals from the soil throughout the plant. In the above ground part of the tree, the needles, leaves, twigs and branches contain a significant portion these nutrients.

The following is excerpted from Keeping Our Forest Soils Healthy and Productive, a publication of WSU Extension. "Removing tree trunks may have little effect on site productivity, but "cleaning up" branches and foliage (i.e., slash) appears to have greater potential for nutrient removal than leaving them onsite."

Biomass Treatment Today

Usually biomass is seen as a nuisance to be disposed of quickly to reduce fire hazard, improve aesthetics and minimize habitat for undesirable insects. The least expensive way to get rid of biomass has been to pile and burn it, but in doing so carbon dioxide is released and the heat and energy created by combustion is not utilized. Also, the nutrients, nitrogen, phosphorus and sulfur, stored in the biomass are volatilized and lost to the atmosphere while other nutrients such as calcium, magnesium and potassium become available in the short term, but are easily leached.

Biomass Utilization

Biomass is a resource and higher and better uses for it include:

- Biomass may be left on-site, which will likely require that it be modified to reduce fire hazard, improve aesthetics and minimize habitat for undesirable insects. Modification methods include lopping and scattering and chipping. Slash may also be crushed into road surfaces no longer in use to augment existing drainage and reduce surface erosion. In this scenario, the release of carbon and nutrients stored in the biomass is metered. Note: Wood chips are one of the best mulch choices for trees and shrubs. They perform

Kittitas County Conservation District

Board of Supervisors

Mark Moore - Chair (Elected - term expires in 2010)
Lynn Brown - Vice Chair (Appointed - term expires in 2011)
Jeff Brunson - Auditor (Elected - term expires in 2012)
Dale Dyk - Member (Appointed - term expires in 2010)
Ron Gibb - Member (Elected - term expires in 2011)

District Staff

Anna Lael - District Manager
Sara Leist - Financial Manager
Suzanne Wade - GIS Specialist
Mark Crowley - Resource Technician II
Ryan Roberts - District Engineer
Sherry Swanson - Project Manager
DJ Shook - Resource Technician II

Board meetings are generally held on the second Thursday of each month. Call 24 hours prior to confirm meeting time.

The KCCD office is co-located with the USDA Service Center at 607 E Mountain View in Ellensburg.

well in terms of moisture retention, temperature moderation and weed control.

- Biomass, in the form of logs as short as 12' and with a small end diameter of 2", may be sold into the chip market. For example, a local landowner may be able to cover operational and hauling expenses if they are within 10 miles of the chipping facility in Cle Elum. Biomass may also be chipped before it is hauled; more biomass can be hauled in chip form than as logs. The advantage of this scenario is that it may help offset the cost of fire hazard reduction or forest health improvement projects. Note: Chips may be used in the pulp industry for paper, rayon or lyocell or the engineered wood products industry. Try to schedule fuel reduction projects to begin after Sept. 1 when trees are beginning to go into dormancy when beetles are not as attracted to fresh cuts and slash. Also, in most circumstances, if the project yields less than 5,000 board feet of timber per 12 month period and will be used by the landowner, a Forest Practice Application/ Notification is not needed. Otherwise, a Forest Practice Application/ Notification must be approved by the Washington Department of Natural Resources before operations begin.

- Biomass can be burned in controlled systems to produce heat and/or energy. At the smallest scale, firewood for home heating

systems can be gleaned from slash piles that would otherwise be burnt. The following are the approximate number of British Thermal Units (BTUs) produced per air dried cord burned of local species that may be found in a slash pile. Douglas-fir generates 21 million BTUs, white fir 20 million BTUs and ponderosa pine 17 million BTUs. A BTU is the amount of heat necessary to raise one pound of water by 1 degree Fahrenheit (F). A million BTUs equal 293 kilowatt hours. Therefore, one cord of Douglas-fir represents 6,153 kilowatt hours, a number of interest if you heat with electricity. For more information about this opportunity contact the Washington State Department of Natural Resources, the Southeast Headquarters of which can be contacted at 509-925-8510 or the United States Forest Service, which can be contacted at 509-962-9813; usually permits are available by the beginning of June. At a larger scale, biomass may be burned to create heat and/or energy for community facilities such as schools and hospitals. The Enterprise School replaced its oil boilers with an automated wood chip boiler. Due to rising heating oil costs, the school is projected to save over \$110,000 annually on energy costs with the new system. The following is excerpted from the 2008 publication *Where Wood Works Strategies for Heating with Woody Biomass* prepared by the Flexible Energy Communities Initiative, "Chip systems are well-suited for large buildings and campuses. Successful projects get their chips locally, usually within 30 miles or so. Chip-handling systems are complex and expensive to build and operate. This is offset by the low cost of the fuel."

- Biomass may be sold into the compost market.
- Biomass in the form of small diameter logs may be peeled into round wood products such as poles and posts or sawn into dimensional lumber.

Challenges

Challenges to biomass utilization include hauling distance to markets, processing cost, quality of product and storage. Overcoming these challenges, by in part, developing local markets may be advantageous in job creation, fire hazard reduction, forest health improvement and community self sufficiency.

Thembi Borrás is a forester living and working in Kittitas County, WA and can be contacted by email at thembi@mcn.org.

Sky Meadows landowner? Mark your calendars for the Firewise Workshop on May 2, 2009.

KCCD performs wildfire hazard severity assessments in the Wildland-Urban Interface upon request, free of charge. Please contact Suzanne Wade at the KCCD at (509) 925-8585 ext 113 or by email at suzanne-wade@wa.nacdn.net for more information.

Farm Financing Available from the Farm Service Agency

The Farm Service Agency (FSA) provides direct and guaranteed loan assistance to farmers and ranchers at all stages in their operation. It doesn't matter if you are just starting out or an established business looking to grow, change direction, or just get back on your feet. FSA provides financial assistance that helps sustain and grow American agriculture.



FSA has loans available to assist with purchase and development of farm ground, purchase of livestock and equipment, and to provide financing for annual crop/livestock production costs. FSA also has a rural youth loan program for kids between 10-21 who are involved with an organization like 4-H or FFA. Emergency loans to assist with recovery from losses due to a natural disaster are available when a county has been declared a disaster.

To be eligible for a FSA loan you must not be able to obtain credit from a traditional lender, have needed training and experience, operator of a family farm, and US citizen or legal resident.

If you have any questions about the loan programs available, please contact the FSA office at (509) 454-5746 ext. 2 and ask for Lisa, Scott, or Crispin.



Forestry Conference



The 2009 Washington State Society of American Foresters (SAF) Conference will be held on May 6-8 in Ellensburg at the Kittitas County Event Center.

The conference theme, "Forestland Management: Meeting the Challenges," will introduce participants to leaders in the fields of forest management, collaborative approaches, ecology, biology and marketing.

The two program tracks, "Ecosystem Services and Health" and "Forest Management and Markets," will help focus the speakers' successful ideas into approaches that can help you accomplish your goals during difficult times.

Set in an atmosphere of great speakers, exciting tours, excellent food, an informal job recruitment area, memorable social opportunities, a western museum and a cowboy poet, the 2009 WSSAF conference will be an enjoyable and worthwhile experience.

The registration form, payment options, detailed program information, local attractions, entertainment and more are available on-line at: <http://www.forestry.org/wa/annual/index.php>

For more information, please contact the 2009 WSSAF Conference Chair: Eric Watrud, 713 Bowers Road, Ellensburg, WA 98926 (509) 925-0947, eric.watrud@dnr.wa.gov

Get Paid for Planting Trees Along Your Stream

What is CREP?

CREP (Conservation Reserve Enhancement Program) is a voluntary program to establish forested buffers and similar practices (hedgerows, grass filter strips, wetland buffers) along streams to improve salmon and steelhead habitat. The buffers also prevent bank erosion, cool water temperatures, and keep sediment and pollutants from reaching streams. Water rights are not impacted. Land enrolled in CREP is removed from production and grazing under 10 or 15-year contracts. In return, landowners receive annual rental payments and are reimbursed for 100% of the eligible costs for planting and maintaining the buffer for the first five years. Additional reimbursements may be available for livestock exclusion fencing and watering facilities, and, in the case of small streams, for livestock crossings. Landowners also receive a bonus upon signing the CREP contract.

More About Streamside Buffers

Forested buffers must be designed according to Natural Resource Conservation Service (NRCS) standards which include planting with native trees and shrubs suitable for the site. Minimum forested buffer widths are 35 feet, however, landowners can enroll buffers averaging up to 180 feet in width if they choose. Wetlands associated with a stream can be enhanced as well under CREP as an anticipated new practice. CREP recognizes site variability. The buffer boundary can be moved toward or away from the stream at different locations to meet landowner needs, as long as the average meets the buffer standard. Landowners can enroll all or a portion of eligible streams on their land.

More About Reimbursement to Landowners

Installation and Maintenance Costs: CREP will cover 100% of the eligible costs of installing and maintaining the cover to NRCS specifications for the first five years. KCCD will write a maintenance prescription to identify activities and costs that will ensure the successful establishment of the planted stock. The maintenance prescription will usually cover the first five years after planting. Most projects will be well established by then. The applicant can choose a 10 or 15-year contract. A signing bonus is paid shortly after the CREP agreement is approved equal to \$100 per buffer acre. Annual rental payments are based on the FSA established rental rate for the soils in the offered acreage, which varies from \$69 to \$618 per acre for forested streamside buffers. Higher rates are paid for forested and wetland buffers, mid-level rates for hedgerows, and lower rates for grass filter strips. Contact DJ Shook, 509 925-8585 ext. 4 for more information.

Forestry Conference May 6-8th

PAM Cost Share

Financing Available from FSA

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Inside:

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