

#### **Mark Your Calendar**

- VSP Information Meeting on Thursday, October 20, 6:00 PM; Commissioners' Office, Republic (see box below)
- Our Board of Supervisors will meet on Tuesday, October 25 at 3:30 PM and again in mid –December (Date TBD)
- NRCS EQIP Grants for Conservation Projects, deadline for 2017 applications (first round) is Nov.



#### **Inside this issue:**

Conservation Consid- 1 erations for Home Heating

Voluntary Stewardship 1 (VSP) to Meet (9-20-16)

NRCS Offers EQIP 2 Grants for 2017

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2017 Spring Plant 4
Sale Preparations
Underway

District Staff / Board of 4 Supervisors

# CONSERVATION CONNECTION



#### FERRY CONSERVATION DISTRICT

Our mission is to safeguard the rural lifestyle and sustainable use of natural resources of Ferry County for present and future landowners, residents, and visitors by offering technical and financial assistance, outreach, and education through partnerships.

## Choose Your Fuel Wisely – Conservation Considerations for Home Heating

Perhaps you are considering retrofitting your heating system, or you will be building a new house and choosing a heating method. Do you presently heat with propane, electricity (baseboard, wall heater, heat pump), fuel oil, cordwood or pellets? Though the devices used to generate heat from each of these fuels vary greatly, a reasonable comparison can be made of the costs of generating a given amount of heat from each one (dollars per million British Thermal Units (BTU)).

Before taking a broad look at all these heat sources, a close-up examination of cordwood BTU values is necessary. Why is it more efficient to burn western larch than ponderosa pine? This is because a cord of larch has more BTUs than a cord of ponderosa pine. It has more BTUs because it is denser (heavier). All firewood has an approximate heating value of 6,500-7,500 BTU/pound (at 20% moisture content [airseasoned]). So, for example, a cord of seasoned ironwood weighs 4,250 pounds while a cord of seasoned balsa weighs 935 pounds. Therefore, it will

take more than 4 cords of balsa to produce the same amount of heat as one cord of ironwood. While larch (3,145 pounds/cord) is not as dense as ironwood, it is denser than ponderosa pine (2,380 pounds/cord) and will therefore

provide more BTUs per cord.



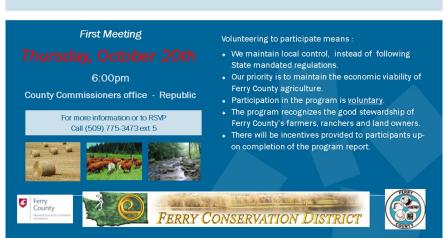
So, let's compare. How much would it cost to get one million BTUs from each fuel?

**FUEL CHOICES—**3

## Agriculture, Water, & Local Control

YOUR PARTICIPATION IS ENCOURAGED AND NEEDED!

The Voluntary Stewardship Program (VSP) is the final step for Ferry County to opt out of the Growth Management Act (GMA). It is about making rules locally to fit local needs.



### Natural Resource Conservation Service Taking Applications for 2017 EQIP Cost Share Program

The Environmental Quality Incentives Program (EQIP) is a voluntary program that provides financial and technical assistance to agricultural producers to plan and implement conservation practices to improve soil, water, plant, animal, air and related resources on eligible land. EQIP may also help landowners meet Federal, State, Tribal and local environmental regulations.

Owners or operators with a natural resource concern on their land may apply to participate in EQIP. Eligible land includes cropland, rangeland, pastureland, non-industrial private forestland and other farm or ranch lands.

Financial assistance payments through EQIP are made to eligible producers to implement approved conservation practices; to help producers develop Conservation Activity
Plans (CAP; to
address specific
land use issues; or
to conduct energy
audits on equipment and the operation. Payments

pleted practices or activities identified in an EQIP contract that meet NRCS standards. Program information and current payment rates can be found at <a href="http://www.nrcs.usda.gov/wps/portal/nrcs/site/wa/home/">http://www.nrcs.usda.gov/wps/portal/nrcs/site/wa/home/</a>.

In Ferry County typical conservation measures include precommercial thinning for fuels reduction and forest health, livestock watering facilities, fencing for water quality protection and livestock distribution, energy audits on irrigation systems, high tunnel/hoop house installation to



are made on com- EQIP Grants May be Used for Irrigation Water Conservation

lengthen the growing season for commercial operations, and irrigation water conservation to name a few.

EQIP is now accepting applications for fiscal year 2017 funding. Applications received by November 18, 2016 will be considered in the first round of funding. Contact Patrice Beckwith at the conservation office 509-775-3473 x102.

USDA is an equal opportunity provider, employer and lender.

## **Firewise Returns to the Ferry Conservation District**

Good News! The Ferry Conservation District will again be offering a Firewise program.

Firewise is an educational program providing important information to private landowners and communities about actions they can take to prepare for and prevent damage to their home and property from wildfire.

Thanks to the Washington State Conservation Commission, funding has been made available for a multifaceted program.

Teaming up with the Washington Department of Natural Resources and local fire districts, the Conservation District will offer a series of informative workshops for local residents. Participants will learn the concepts of "defensible space", i.e., developing a safe zone around a home to help prevent the possibility that an ember storm would ignite the



Are You Prepared for This?

home during a wildfire event. These workshops will be offered on weekday evenings or on Saturdays. The dates are to be determined.

The Conservation District staff will have a presence at community events, such as the Ferry County Fair, the Spring Conservation Fair, Prospector's Day and Friday Market, with an educational display and information on Firewise principles.

Cost-share funds are available from DNR for forest landowners for fuel reduction. Thinning and pruning forests to proper specifications will not only reduce the risk of catastrophic wildfire, but will improve the health of a forest, making it less susceptible to damage from disease and forest pests. The Conservation District may be able to offer some cost-share assistance for fuel reduction in the future.

Conservation District staff will also be trained to conduct Firewise assessments to help landowners determine the necessary measures to take to make their homes safer.

Watch our website or Facebook page for more details.

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"Participants

#### Wise Fuel Choices (continued from Pg.1)

#### Heat Source Cost: \$/Million BTUs (MBTU)

**Cordwood** (@ \$150 /cord, cut, split and delivered; 20% moisture content [air-seasoned]. Standard stove efficiency. [BTUs/cord from www.chimneysweeponline.com]):

Western Larch \$7.65
Douglas Fir \$8.53

Ponderosa Pine \$10.14 (More difficult to split than fir or larch)

Quaking Aspen \$10.95

#### Processed wood waste heating products:

Pressed Wood Waste Logs \$15.93

(@\$260/pallet - local price) This is calculated from information on <a href="www.chimneysweeponline.com">www.chimneysweeponline.com</a> website. The manufacturer of locally available pressed wood logs claims a slightly lower \$/MBTU.)

Wood Pellets (@\$195 or \$220/ton) \$11.61/\$13.10 (two qualities available locally)

**Electricity** (based on current PUD rate [\$.08298 per Kilowatt Hour (KWH)]; 1 KWH provides 3415 BTUs; prices given for heat pump BTUs reflect a range of efficiency):

Electricity (wall heater, baseboard heater,

space heater, etc.) \$24.93 Electricity (Air source [ductless] heat pump) \$15.59-\$12.47 Electricity (Geothermal heat pump) \$7.13-\$5.80

Oil and Propane (based on local prices; range of prices reflects differences of efficiency in heating units [70%-90%]):

Heating oil (@\$2.00/gal; 138,690 BTUs/gal.) \$20.67-\$16.07 Propane (@\$1.69/gal; 84,000 BTUs/gal.) \$28.38-\$22.31

Additional factors to consider; local prices may fluctuate, efficiency of heating systems varies, moisture content of cordwood varies and will effect efficiency, cutting your own firewood saves money, upfront costs for replacement heating systems can be expensive, systems using even a small amount of electricity leave you vulnerable during a power outage.

Is a major retrofitting, renovation or new construction project on the horizon? Carefully consider the placement of your home. Build your house on a south-facing slope with no coniferous shade trees. Large windows on the south side will provide passive solar heating. This can help conserve energy in the winter, but make sure you incorporate overhangs or awnings to prevent overheating in summer. Other energy efficient design elements include proper landscaping, sufficient insulation, use of energy-efficient windows, skylights and doors, and designing for good daylighting. Ferry P.U.D. will provide some reimbursements for home conservation efforts (primarily insulation) for electrically heated homes meeting certain criteria. For details, contact Ed Forsman at 775-3325 before beginning your project.

The subject of energy efficient building and renovation is much too broad to adequately cover here. To explore further, visit the U.S. Dept. of Energy website: <a href="http://energy.gov/public-services/homes/home-design-">http://energy.gov/public-services/homes/home-design-</a>



remodeling , the Passive Home Building website: http://www.phius.org/ or the Oregon State Extension website: https://catalog.extension.oregonstate.edu/ec1643 Information on heating costs varies slightly from source to source. Figures have been presented as accurately as possible.

Fall along the Kettle River near Curlew

"Is a major retrofitting or new construction project on the horizon? Carefully consider the placement of your home."

### Ferry Conservation District

84 East Delaware Ave. PO Box 1045 Republic, WA 99166 (509)775-3473 Ext. 5

### We're Already Planning for the 2017 Spring Plant Sale

We hope you all have had a great growing season!

The days are getting shorter and cooler and most of you are focused on preparing for winter. However, here at the Conservation District, we are already thinking about our 2017 Spring Plant Sale and Seed Exchange! Nursery catalogs are arriving and we will soon be choosing the variety of native and ornamental trees and shrubs, reforestation trees, fruit trees, and berry plants to be offered at our April event. Is there a plant you'd like to see us offer? Let us know. If there is sufficient interest, we will consider adding it to our sale. Watch for our Plant Sale flyer in your mailbox in late December. Plants will be available by pre-order only.

## Conserving Natural Resources Since 1947

We're on the Web. Visit us at :

http://www.ferrycd.org



Reforestation: Larch in fall.



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Liz Carr, Water Quality Specialist
Candy Lammon, Financial Administrator

Bill Chamberlin, Resource Assistant

Patrice Beckwith, NRCS Resource Conservationist

Aspens are ablaze around the county.

