

## ***POLICIES/INCENTIVES CAPITAL***

*By Lanier Nabahe, Matt Janz, Anna Moody, and Xin Tan*

The Policies/Incentives Capital section of the Clearwater Basin Biomass Atlas reviews policies and incentives relevant to Nez Perce, Clearwater, Idaho, Lewis and Latah counties in North-Central Idaho, as well as the Nez Perce Tribe. This section explores and identifies existing or pending policies or incentives at federal, state, and local levels, as well as at the regional level within the states of Washington, Oregon, Idaho, and Montana to support woody biomass utilization. In addition, this section includes resources pertaining to research and development in the area of woody biomass utilization in the Northwest.

### ***In this section:***

- FEDERAL POLICIES/INCENTIVES
- REGIONAL
- STATE POLICIES/INCENTIVES
- LOCAL POLICIES/INCENTIVES
- RESEARCH & DEVELOPMENT
- SUMMARY



<http://brainwaves.corante.com/>

The Clearwater Basin is located in North-Central Idaho, consisting of parts or all of five counties and drained by the Clearwater River. Figure 5.1 is a map of the Clearwater Basin, with several of the cities in the region labeled.

**Figure 5.1 North-Central Idaho, the Clearwater River Basin and several towns and cities in the region.**

*Source: Jason Fales and Anna Moody utilizing ArcGIS and State of Idaho coverages.*



- FEDERAL POLICIES/INCENTIVES

This section provides an overview of federal policies and incentives for woody biomass utilization and energy production.

In order to maximize the efforts to utilize potential funding opportunities, several federal agencies are working on the issues of woody biomass. The following paragraphs summarize the policies and incentives that several of the federal agencies have in place, including the US Forest Service, Bureau of Land Management, and National Association of Conservation Districts.

- US FOREST SERVICE

The United States Forest Service (USFS) is an agency of the United States Department of Agriculture (USDA). This agency dedicates its mission to forest resource management in the nation's forests, for sustained yields of wood, water, forage, wildlife, and recreation. "Through forestry research, cooperation with the States and private forest owners, and management of the national forests and national grasslands, the agency strives to provide increasingly greater service to a growing Nation."<sup>1</sup>

- The USFS seeks to increase the amount of energy produced from forests resources in the U.S., in order to improve the utilization of woody biomass from forest management activities. There are several federal policies that relate to the utilization woody biomass from the USFS lands. These policies including, but are not limited to: The Biomass Research and Development Act of 2000, the Healthy Forest Restoration Act of 2003, and the Energy Policy Act of 2005.<sup>2</sup>

- The Biomass Research and Development Act of 2000 encourages collaboration between the United States Department of Energy and United States Department of Agriculture to create the Biomass Research and Development Board.

- The Healthy Forest Restoration Act of 2003 has programs to reduce accumulation of woody fuel in order to lower the risk of catastrophic wildfire.

- The Energy Policy Act of 2005 describes the federal tax credit that provide for energy production using renewable fuels, the grants for forest biomass utilization, and grants for small enterprises, training, and outreach.

- The Fuels for Schools and Beyond Program promotes and encourages the use of wood biomass as a renewable, natural resources to provide a clean, readily available energy source suitable for heat and power in public and private buildings.<sup>3</sup> The Council School District, in Council, Idaho, received the first Fuels for Schools grant in the state. It has been operating a woody biomass boiler since the mid-2000s.<sup>4</sup>

The Bureau of Land Management (BLM) is an agency of the United States Department of the Interior (DOI) which administers America's public lands. The BLM's goal is to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations. Woody biomass is a part of BLM's forest product line and primarily includes restoration residues and smaller diameter material from forestry, fuels and rangeland treatments.<sup>5</sup>

- BUREAU OF LAND MANAGEMENT

The U.S. departments of Agriculture, Interior, and Energy produced a joint Memorandum of Understanding (MOU) to support the economic and ecological use of woody biomass. "The USFS and BLM commit to offering woody biomass for utilization as a component of all applicable contracts or agreements offered under this MOU."<sup>6</sup>These contracts and agreements would allow the contractor, if allowed by the government, to remove woody biomass for utilization and require payment of a minimum appraised value or payment for services. "This option would be contained in any type of contract or agreement the federal agencies utilize for vegetation management projects which are expected to generate woody biomass, unless such biomass was reserved for ecological reasons."<sup>7</sup>

The National Association of Conservation Districts (NACD) is the non-profit organization that represents America's 3,000 conservation districts and the 17,000 men and women who serve on their governing boards. "The Conservation districts are local units of government established under state law to carry out natural resource management programs at the local level. Districts work with millions of cooperating landowners and operators to help them manage and protect land and water resources on all private lands and many public lands in the United States."<sup>8</sup>The NACD's goal is to serve conservation districts by providing national leadership and a unified voice for natural resource conservation. The NACD participates in the federal biomass MOU, which guides the processes by the agencies work with communities to improve woody biomass utilization. The MOU specifies Eight Policy Principles, which are:<sup>9</sup>

- Include local communities, interested parties and the general public in the formulation and consideration of woody biomass utilization strategies.
- Promote public understanding of the quantity and quality of woody biomass available from federal lands and neighboring tribal, state and private forests; as well as nationwide woodlands and rangelands.
- Promote public understanding that woody biomass utilization can be an effective tool for restoration and fuels treatment projects.
- Develop and apply the best scientific knowledge pertaining to woody biomass utilization and forest management practices for reducing hazardous fuels and improving forest health.

- Encourage the sustainable development and stabilization of woody biomass utilization markets.
- Support Indian tribes, as appropriate, in the development and establishment of woody biomass utilization within tribal communities as a way to create jobs, establish infrastructure and support new economic opportunities
- Explore opportunities to provide a reliable sustainable supply of woody biomass.
- Develop and apply meaningful measures of successful outcomes in woody biomass utilization.

There are also many incentives through the federal government, particularly the U.S. Department of Energy, promoting renewable energy and energy efficiency for private companies and states. The online Database of State Incentives for Renewables and Efficiency (DSIRE) is a comprehensive source of information on state, local, utility, and federal incentives. The database can be searched for federal incentives, state specific incentives, or by technology, such as a biomass plant.

Searching for Federal incentives for biomass plants, a list of 12 incentive programs were found, and are listed below:

- Business Energy Investment Tax Credit (ITC)
- Clean Renewable Energy Bonds (CREBs)
- Modified Accelerated Cost-Recovery System (MACRS) + Bonus Depreciation (2008-2012)
- Qualified Energy Conservation Bonds (QECBs)
- Renewable Electricity Production Tax Credit (PTC)
- Renewable Energy Production Incentive (REPI)
- Residential Energy Efficiency Tax Credit
- Tribal Energy Program Grant
- U.S. Department of Treasury - Renewable Energy Grants
- USDA - High Energy Cost Grant Program
- USDA - Rural Energy for America Program (REAP) Grants
- USDA - Rural Energy for America Program (REAP) Loan Guarantees

Additional information on any of these programs is available on the DSIRE website: <http://www.dsireusa.org/incentives/>.

#### - REGIONAL

This section provides an overview of the Western Governor's Association (WGA), a regional political organization that focuses, among other issues, on woody biomass. It includes a brief summary of what the organization is and programs of interest.

#### - WESTERN GOVERNOR'S ASSOCIATION

The Western Governor's Association is an independent, non-partisan organization of Western Governors from 19 states, two Pacific-flag territories and one commonwealth. "Through their Association, the Western Governors identify and address key policy and governance issues in

natural resources, the environment, human services, economic development, international relations, transportation and public management.”

The WGA seeks to advance regional interests through expressing a group position and advocate this position to the federal government. With regards to woody biomass, the WGA has an initiative that they want the federal government to emphasize woody biomass from the western region. Additionally, there is a grant program that the WGA takes part in from the United States Department of Energy.

The WGA is a proponent of woody biomass energy. Currently, they function as a lobby organization trying to rally Congress behind the idea of a Woody Biomass Initiative to establish Woody Biomass alternative energy sites throughout the West.

Additionally, the WGA oversees a grant program with its member states to look into the feasibility of biomass which has in the past included woody biomass projects. Idaho is not currently one of the 13 states to receive these grants.

This section provides an overview of current incentives in the State of Idaho and some comparison to incentives in the State of Oregon. It includes a brief summary of the program with: name, addresses and contact information.

- STATE POLICIES/INCENTIVES

The Idaho Bioenergy program is a technical organization that assists people in developing bioenergy projects. The Program’s technical assistance includes evaluation of plans, referral to equipment vendors and other technical experts and assessment of biomass feedstock supply and bioenergy product markets.<sup>12</sup>

- IDAHO

THE IDAHO BIOENERGY PROGRAM

304 N. 8th Street, Suite 250  
 P.O. Box 83720  
 Boise, Idaho 83720-0199  
 Phone: (208) 332-1660  
 Fax: (208) 332-1661

cluded the recommendation that the Idaho State Legislature revisit the plan every five years. The draft 2012 Idaho Energy Plan was released October 14, 2011. The draft plan praises the use of woody biomass, but states that two impediments limit its potential: a higher comparable cost to hydropower and a perception that woody biomass is not environmental.

While Idaho does not have a renewable energy portfolio, they do have a precursor organization reviewing the implementation of such a scheme in Idaho. The ISEA is Idaho’s primary mechanism

- IDAHO STRATEGIC ENERGY ALLIANCE (ISEA)

to engage in seeking options for, and enabling advanced energy production, energy efficiency, and energy business in the State of Idaho. The purpose of the Alliance is to enable the development of a sound energy portfolio for Idaho that:

- includes diverse energy resources and production methods,
- provides the highest value to the citizens of Idaho,
- ensures quality stewardship of environmental resources, and
- functions as an effective, secure, and stable system.

The Board of Directors provides options and support to the Governor's Council regarding renewable energy and energy efficiency activities for the State of Idaho.<sup>13</sup>

Lisa La Bolle  
208-332-1679  
lisa.labolle@oer.idaho.gov

*- STATE OF IDAHO'S ENERGY PLAN*

In 2007, the Idaho Legislature's Interim Committee on Energy, Environment and Technology submitted the 2007 Idaho Energy Plan, with an explicit section on woody biomass. Part of this plan included the recommendation that the Idaho State Legislature revisit the plan every five years. The draft 2012 Idaho Energy Plan was released October 14, 2011. The draft plan praises the use of woody biomass, but states that two impediments limit its potential: a higher comparable cost to hydropower and a perception that woody biomass is not environmental.<sup>14</sup>

*- STATE OF IDAHO'S OFFICE OF ENERGY RESOURCE'S RENEWABLE ENERGY ENTERPRISE ZONE (REEZ) PROGRAM*

In 2009, the state of Idaho dispersed \$1.5 million in grants gained from the American Recovery and Reinvestment Act. These were given to local governments in Idaho for two purposes: the first for the purchase and installation of facilities or infrastructure to produce renewable energy within the zone or for sale outside the zone; and the second for feasibility studies, resource assessments, or marketing plans to develop, sustain, or expand the value of the zone. Unfortunately, this was a one time expenditure, but it was considered successful and may have additional support and funding in the future.

Below is a list of expenditures for this program.<sup>15</sup> Clearwater County was one of the recipients of the REEZ grant. The county utilized this grant to hire consultants to conduct a biomass feasibility study for energy and power at a facility in Orofino, Idaho. This study is referenced in the local section of this Atlas.

City/County	Project Name/ Type	Award Amount
INTEREST AREA #1	Purchase and installation of facilities or infrastructure to produce renewable energy within the zone or for sale outside the zone.	
Kootenai County	Landfill Gas-to-Energy	\$205,000
Twin Falls County	Milner Butte Landfill Gas & Wind	\$154,000
City of Sandpoint	Woody Biomass Combined Heat & Power - Sandpoint CHP Feasibility Study	\$250,000
City of McCall	Solar City Project	\$171,957
City of Nampa #2	Wastewater Biogas Boiler System- Final Report	\$143,738
City of Franklin	Solar & Hydropower Projects	\$45,000
<b>Area 1 Total</b>		<b>\$969,695</b>
INTEREST AREA #2	Feasibility studies, resource assessments, or marketing plans to develop, sustain, or expand the value of the zone.	
City of Nampa #1	Amalgamated Sugar Biogas Feasibility Study -Final Report	\$37,290
Adams County	Woody Biomass - Business Plan	\$70,000
Boise County	Woody Biomass Combined Heat & Power - Boise County Feasibility Study	\$140,000
Clearwater County	Woody Biomass Feasibility Report- Final Study	\$140,000
City of Hailey	Resource Recovery Center Feasibility Study - Final Study	\$130,000
Clark County	Waste-to Energy Plant - Clark County Biomass Feasibility Study	\$113,015
<b>Area 2 Total</b>		<b>\$530,305</b>
<b>REEZ Program Total</b>		<b>\$1,500,000</b>

**Table 5.1 Renewable Energy Enterprise Zone Program Summary**

Source: [http://www.energy.idaho.gov/stimulus/enterprise\\_zoneprogram.htm](http://www.energy.idaho.gov/stimulus/enterprise_zoneprogram.htm).

This statute creates a 40% income tax deduction of the cost of installing biomass for heating or electricity generation. Taxpayers can apply this 40% deduction in the year in which the system is installed and can also deduct 20% of the cost each year for three years thereafter. The maximum deduction in any one year is \$5,000. The total maximum deduction is \$20,000. The biomass devices can be a pellet stove or an wood stove with EPA certification if it's installed in the residence of the taxpayer, replaces a wood stove that does not meet EPA certification requirements, the purchase and replacement happens in the same year, and the replaced wood stove is dropped off at a Department of Environmental Quality (DEQ)-approved site within 30 days.<sup>16</sup>

- RESIDENTIAL ALTERNATIVE ENERGY TAX DEDUCTION, IDAHO CODE § 63-3022C

Contact Information:

Idaho Tax Commission

800 Park Blvd. #4

Boise, ID 83722

Phone: (208) 334-7660

Phone 2: (800) 972-7660

Fax: (208) 334-7846

E-Mail: [taxrep@tax.idaho.gov](mailto:taxrep@tax.idaho.gov)



- RENEWABLE ENERGY PROJECT BOND PROGRAM, IDAHO CODE § 67-8901 ET SEQ.

This legislation allows the Idaho Energy Resources Authority to give bonds to finance construction of electricity generation and transmission projects by public utilities. Public utilities include independent renewable energy producers that are not “qualifying facilities” under the federal Public Utility Regulatory Policies Act of 1978 (PURPA). This program defines renewable energy as “a source of energy that occurs naturally, is regenerated naturally or uses as a fuel source, a waste product or byproduct from a manufacturing process including, but not limited to, open or closed-loop biomass, fuel cells, geothermal energy, waste heat, cogeneration, solar energy, water power and wind.”<sup>17</sup>

Ron Williams  
Idaho Energy Resources Authority  
1015 West Hays Street  
Boise, ID 83702  
Phone: (208) 344-6633  
Fax: (208) 344-0077  
Web Site: <http://www.iera.info>

- OREGON

RENEWABLE PORTFOLIO STANDARD

This is an Oregon Initiative that utilities must have a certain percentage of their electric generation from renewable sources including biomass. Large utilities, which are defined as those that supply 3% or more of Oregon’s electricity must show that electricity used by in-state consumers be created by renewable energy in the following amounts: 5% by 2011, 15% by 2015, 20% by 2020, and 25% by 2025. Similarly, small utilities, which provide between 1.5% and 3% must have 10% by 2025 and the smallest utilities must have 5% by 2025.<sup>18</sup>

REBECCA SHERMAN  
Oregon Department of Energy  
625 Marion Street, N.E.  
Salem, OR 97301-3737  
Phone: (503) 373-2295  
Fax: (503) 373-7806  
E-Mail: [rebecca.sherman@state.or.us](mailto:rebecca.sherman@state.or.us)  
Web Site: <http://www.oregon.gov/energy>

- OREGON'S BIOMASS PRODUCER OR COLLECTOR TAX CREDIT

The state of Oregon offers a tax credit to producers and collectors of biomass that is used in Oregon as biofuels, or to produce biofuels or biogas. Oregon Department of Energy has entered rulemaking to implement changes made by HB 3672<sup>19</sup> during the 2011 legislative session. HB 3672 changed the credit rate from \$10 per green ton to \$10 per bone dry ton from woody biomass, grass, wheat and straw, and other vegetative matter from agricultural crops.<sup>20</sup>

This section provides a review of local policies for the five North-Central Idaho counties and the Nez Perce Tribe, as they pertain to energy and woody biomass utilization. For this review, county comprehensive plans were read and contact was made with local officials. In addition, where organizations that either have facilities that create power from woody biomass, or are planning for facilities that utilize woody biomass, staff was contacted for further information.

- LOCAL POLICIES/INCENTIVES

Patty Weeks, Nez Perce County Clerk and Auditor, stated that the County does not have any policies regarding alternative energy production or utilization of woody biomass for that production.<sup>21</sup> She also has not heard of any policies being developed. However, the Nez Perce County Comprehensive Plan<sup>22</sup> under Natural Resources Goal and Policies states the county “should encourage the”:

- NEZ PERCE COUNTY

- Conservation of land most capable of crop and timber production;
- Conservation of existing energy resources and develop new energy sources; and
- Development and utilization of renewable or alternative energy sources compatible with environmental and public safety.

Each of these policy statements are part of the county’s goal to “manage Nez Perce County’s natural resources so as to provide for future as well as present needs.”<sup>23</sup> They are relevant to woody biomass utilization for the production of energy, but do not have supporting ordinances, initiatives of incentives county-wide.

Of all the North-Central Idaho counties, Clearwater has the most directive policy language related to alternative energy and woody biomass. As the county was updating their Comprehensive Plan<sup>24</sup> they were also contracting with a consulting firm to develop the county Biomass Energy Report,<sup>25</sup> which was partially funded through the Idaho REEZ and U.S. DOE American Recovery and Reinvestment Act funding.<sup>26</sup> Therefore, it is timely for the county to recognize potential economic development opportunities in energy-production projects. In addition, the county recognizes regional plans and policies of the Clearwater County Economic Development (CCED) council and the Clearwater Economic Development Association (CEDA) that pertain to biomass utilization for energy production and other economic development. The CEDA plan is their Comprehensive Economic Development Strategy 2009-2014.<sup>27</sup>

- CLEARWATER COUNTY

The county has policies related to electrical-power production, timber industries, and biomass in five sections of their comprehensive plan.

timber industries, and biomass in five sections of their comprehensive plan.

- The first section, 304.6 is titled Electrical Power Production and specifically provides direction for the county to “explore and implement” alternative energy production that is practical, including, but not limited to that which utilizes biomass.<sup>28</sup>
- In section 304.15 Economic Development Planning Policies specify that timber industry revitalization, with year-round operations, infrastructure maintenance such as roads, and electrical power production should be part of a diverse, collective economy.<sup>29</sup>
- The Land Use Planning Policies in section 305.9 describe forest products, their sustainability and best uses as being an important part of the county’s goal for the long term uses of all land and for economic growth and stability.<sup>30</sup>
- Finally, the Resource Expectations policies in section 306.13<sup>31</sup> and Natural Resources Planning policies in section 306.16<sup>32</sup> specify that renewable resources should be utilized, but at a rate that does not exceed their renewable capacity, and industrial use of forest products should be encouraged.

#### - LEWIS COUNTY

Lewis County does not currently have a policy for energy and biomass and county commissioners do not have a plan to develop any policies.<sup>33</sup> According to Carroll Keith, Lewis County Commissioner, the county does not have the raw materials for such power generation, and thus, the county has not taken the time to explore this any further. The Lewis County Comprehensive Plan<sup>34</sup> also recognizes the CEDA Comprehensive Economic Development Strategy, as well as the Ida-Lew Economic Development Council (EDC) and any of their policies pertaining to energy and biomass utilization.

Latah County does not currently have a policy in place regarding energy and biomass utilization. Amanda Bashaw, Latah County Solid Waste Coordinator says that due to costs and regulations the county also does not have future plans to explore this possibility.<sup>35</sup> However, the Latah County Comprehensive Plan<sup>36</sup> does have a few policies that could guide the potential development of energy production industries utilizing biomass.

#### - LATAH COUNTY

In Latah County’s comprehensive plan section 4, Economic Development policies related to land uses of agriculture and for

estry practices, and the commercial and industrial uses of these lands, provide a possible framework for innovative new industries and biomass utilization.<sup>37</sup>

- Protect agricultural and forestry land from scattered development.
- Encourage agricultural and forestry diversification and experimentation, and “value added” industries.
- Designate a sufficient amount of land suitable for commercial and industrial uses.
- Ensure buffering of new commercial and industrial uses from surrounding land uses.

The University of Idaho owns and operates a steam plant that utilizes woody biomass. This plant provides heat to a majority of campus facilities through steam generated from wood products residues (woody biomass). This plant has been in operation since 1929, although it was originally designed to run from oil and was modified in the mid-1980s to utilize woody biomass.

- UNIVERSITY OF IDAHO STEAM PLANT, MOSCOW

Scott Smith  
 Steam Plant Supervisor  
 University of Idaho  
 Moscow, Idaho 82281  
 (208) 885-6271  
 wolzr@uidaho.edu

Idaho County does not have policies related to energy and biomass. The County dissolved their Planning and Zoning commission in the late 1980’s through a ratified ordinance. The County has not since developed a Comprehensive Plan. However, the County is a member of Ida-Lew EDC and CEDA.

- IDAHO COUNTY

Skip Brandt, Idaho County Commissioner indicates that although he has been to several seminars on the topic of woody biomass utilization for energy production, it is not feasible in the region he serves.

Framing Our Community, Inc. (FOC) is a non-profit organization located in the unincorporated town of Elk City, Idaho. FOC integrates restoration, business and other economic development programs to promote a “Healthy Forest, Health Community”<sup>38</sup> as their motto states. One of the projects FOC has identified for economic development and to provide power to their Small Business Incubator in Elk City is to install a pyrolysis gasifier plant. The

- FRAMING OUR COMMUNITY BIOMASS COGENERATION PROJECT, ELK CITY

plant is in the planning phase and FOC is moving toward the design phase in which they are seeking grant source funding for.

Joyce Dearstyne said that the plant would be capable of producing heat and power with from woody biomass, and produce biofuels. Other than the jobs created by this project, FOC has not found and policy or financial incentives in Idaho to support this project. They are reviewing US Forest Service grant opportunities for potential funding and FOC has money in the bank for match. Joyce says the plant could run off of waste from the FOC woods product businesses at the incubator, as well as waste from fuels reduction and restoration projects FOC is involved with. In addition to producing power, Joyce states the cogeneration plant may produce biofuels such as bio-gas or jet fuel.<sup>39</sup>

Joyce Deatstyne  
Executive Director  
Framing Our Community, Inc.  
P. O. Box 321  
Elk City, ID 83525  
(208) 842-2939  
(208) 842-2322 fax/phone  
joyce@framingourcommunity.org

The Nez Perce Tribe is currently working on a Strategic Energy Plan. Based on Jon Paisano's estimate, this plan should be complete in about 10 months.<sup>40</sup> Jon Paisano is the tribes Energy Efficiency/Conservation Technician out of Lapwai, Idaho. The staff members working on this plan are coordinating with the Tribe's Enterprise office in Oregon to determine the for-profit components of the plan, as the Lapwai office staff members are part of the Tribe's energy committee and are working not for profit. Jon says the Tribe has "narrowed down their renewable resources to biomass, small hydro, solar and geo-thermal for direct-use (heating/cooling)."<sup>41</sup>

Jon Paisano  
Efficiency/Conservation Technician  
Nez Perce Tribe  
Lapwai, Idaho  
(208) 843-7368  
jonp@nezperce.org

#### - RESEARCH & DEVELOPMENT

This section provides an overview of current research and development at the University of Idaho, Washington State University, University of Oregon, and University of Montana on areas of woody

biomass. It includes a brief summary of research focus, name, addresses and contacts information for possible technical assistance and other support.

Under the Northwest Advanced Renewables Alliance, the University of Idaho - College of Natural Resources is partnering with Washington State University, to gather information to build a supply chain for domestic biofuel alternatives for U. S. commercial and military aviation. Four different teams will conduct research on feedstocks, conversion, systems metrics and education and outreach.<sup>42</sup>

- UNIVERSITY OF IDAHO

NORTHWEST ADVANCED RE-  
NEWABLES ALLIANCE

Steve Hollenhorst, Associate Dean  
College of Natural Resources  
Phone: (208) 885-8981  
toll free: 88-88-UIDAHO  
P. O. Box 441142  
Moscow, ID 83844-1142  
<http://www.uidaho.edu/cnr/newsevents/featurestories/researchfeatures/woodwaste>  
<http://www.nararenewables.org/>

The University of Idaho was funded by Texas entrepreneur, Randy Hill, to research pyrolysis of woody biomass into bio-oil. As part of the funding, the university will be installing a pilotscale pyrolysis unit at the steam plant. The goal of the research project is to assess the potential success of generating substantial amounts of clean energy with little to no waste.<sup>43</sup>

- FOREST PRODUCTS/WOOD  
BIOMASS PYROLYSIS

Armando McDonald, Professor  
Biomaterials and Bioproducts  
College of Natural Resources  
Phone: (208) 885-8981  
toll free: 88-88-UIDAHO  
P. O. Box 441142  
Moscow, ID 83844-1142  
<http://www.uidaho.edu/newsevents/item?name=donation-drives-new-direction-of-bioenergy-research-at-university-of-idaho>

The Washington State University, in partnership with the Port of Benton, Clean-Vantage, LLC., and the Pacific Northwest National Laboratory (PNNL), will conduct the \$1.5 million "BioChemCat" pilot project in the Bioproducts, Science and Engineering Laboratory (BSEL) at WSU Tri-Cities. BioChemCat refers to the biofinery process that makes use of both biochemical and thermochemical processes for making biofuels and biochemicals.<sup>44</sup>

- WASHINGTON STATE UNIVER-  
SITY

Birgitte K. Ahring, PH.D  
 Center for Bioproducts and Bioenergy  
 cbb@tricity.wsu.edu  
 Phone: (509) 372-7683  
 Washington State University  
 2710 Crimson Way  
 Richland, WA 99354  
<http://www.tricity.wsu.edu/cbb/pnnl.html>

- UNIVERSITY OF OREGON

The Oregon Department of Energy and the University of Oregon is completing development program, called the Oregon's Biomass Producer or Collector (BPC) tax credit, which encourages the production, collection, and transportation of biomass for biofuel production. This research is to understand the affect of how policies, like the Biomass Producer or Collector tax credit, has on woody biomass utilization.<sup>45</sup>

Cassandra Moseley, Director  
 Ecosystem Workforce Program  
 Institute for a Sustainable Environment  
 ewp.@uoregon.edu  
 Phone: (541) 346-4545  
 Fax (541) 3462040  
 5247 University of Oregon  
 Eugene, OR 97403-5247  
<http://ewp.uoregon.edu>

- UNIVERSITY OF MONTANA

The Rocky Mountain Research Station of the USDA Forest Service and The University of Montana are partners in a biomass research project funded through the Biomass Research and Development Initiative. This project will investigate biomass feedstock production, logistics, conversion, distribution and end use centered on using advanced conversion technologies at existing forest industry facilities. The intent of this project is to help increase the availability of alternative renewable fuels and bio-based products to diversify the nation's energy resources.<sup>46</sup>

Professors Woodam Chung  
 Christopher Keyes and Tyron Venn  
 College of Forestry and Conservation  
 request@cfc.umt.edu  
 Phone: (406) 243-5521  
 Fax: (406) 243-4845  
 32 Campus Drive  
 Missoula, MT 59812  
<http://news.umt.edu/2011/10/100311biom.aspx>

Based on a review of policies and incentives related to the utilization of woody biomass for energy production in North-Central Idaho and some in other Northwestern states, following are constraints, opportunities and recommendations.

- OPPORTUNITIES

Financial constraints and a lack of statewide incentives appear to be a drawback for initiation of woody biomass projects in Clearwater Basin. Such projects require a substantial amount of initial capital investment and local governments currently can purchase inexpensive hydro-power for less money from power companies than if they were to produce their own. Therefore, local governments are less inclined to plan for and/or implement a project unless there are substantial grant sources for funding.

- CONSTRAINTS

Local governments do however, recognize that new jobs can be created from woody biomass projects, but they still look at the cost versus benefit and costs appear to outweigh the benefits. Some regional organizations, such as the Clearwater Economic Development Association (CEDA) recognize the potential for woody biomass projects in the Clearwater region and all five counties support CEDA. Regional support is also evident in the Western Governor's Association, another supporter of woody biomass. Therefore, an opportunity may exist for willing participants to learn more about woody biomass utilization beyond power generation and how it can fit into their economic development goals. Continued outreach and education is both an opportunity and a recommendation.

- SUMMARY

It is recommended that local governments and regional organizations be informed about opportunities for woody biomass utilization. Peer to peer type information sharing may be an option. Such as learning about these types of projects from organizations are working on the planning and implementation of such projects. The Nez Perce Tribe, Framing Our Communities and the University of Idaho may be great sources of information for local governments. CEDA is also an excellent resource for information and may have opportunities in the future to provide outreach and education pertaining to the research, funding and opportunities for woody biomass utilization. The NARA grant and other University of Idaho woody biomass projects are an opportunity to partner with communities in the Clearwater Basin for outreach and education, or to implement pilot-projects

- RECOMMENDATIONS



- 1 US Forest Services, 2011. Last Accessed November 30, 2011. <http://www.fs.fed.us/woodybiomass/resources/index.shtml>
- 2 US Forest Services, 2011. Last Accessed November 30, 2011. <http://www.fs.fed.us/woodybiomass/resources/index.shtml>
- 3 U.S. Forest Service. 2011. Fuel for Schools and Beyond. <http://www.fuelsforschools.info/>. Accessed December 20, 2011.
- 4 Barnes, Kiley. 2010. Fuels to Schools Heats and Warms a Community. <http://www.extension.org/pages/26555/fuels-to-schools-heats-and-warms-a-community>. Accessed December 20, 2011.
- 5 Bureau of Land Management, 2011. Last Accessed November 30, 2011. <http://www.blm.gov/wo/st/em.html>,
- 6 US Forest Service. 2007. Woody Biomass Utilization Desktop Guide. 2400 Forest Management. Pg 2. Accessed November 30, 2011. [http://www.forestsandrangelands.gov/Woody\\_Biomass/documents/biomass\\_deskguide.pdf](http://www.forestsandrangelands.gov/Woody_Biomass/documents/biomass_deskguide.pdf)
- 7 Memorandum Of Understanding Between The Confederated Tribes Of The Warm Springs Reservation Of Oregon And USDA Forest Service: Pacific Northwest Region, January 25, 2006
- 8 National Association of Conservation Districts, 2011. Last Accessed November 30, 2011. <http://www.nacdnet.org>,
- 9 Memorandum Of Understanding Between The Confederated Tribes Of The Warm Springs Reservation Of Oregon And USDA Forest Service: Pacific Northwest Region, January 25, 2006
- 10 Database of State Incentives for Renewables and Efficiency. 2011. <http://www.dsireusa.org/>. Accessed November 10, 2011.
- 11 Western Governor's Association. "How Does WGA Work?" Last Accessed Nov 5, 2011. <http://www.westgov.org/about/how-wga-works>.
- 12 Idaho Governor's Office of Energy Resources. "Bioenergy." Last Accessed Nov 8, 2011. <http://www.energy.idaho.gov/renewableenergy/bioenergy.htm>
- 13 Idaho Office of Energy Resources. "Idaho Strategic Energy Alliance." Last Accessed November 8, 2011. <http://www.energy.idaho.gov/energyalliance/>.
- 14 2012 Idaho Energy Plan. October 14, 2011. Last Accessed November 8, 2011. [http://legislature.idaho.gov/sessioninfo/2011/interim/energy1020\\_draftplan.pdf](http://legislature.idaho.gov/sessioninfo/2011/interim/energy1020_draftplan.pdf).
- 15 Idaho Office of Energy Resources. "Renewable Energy Enterprise Zone Program." Last Accessed December 2, 2011. [http://www.energy.idaho.gov/stimulus/enterprise\\_zoneprogram.htm](http://www.energy.idaho.gov/stimulus/enterprise_zoneprogram.htm).
- 16 U.S. Department of Energy, DSRE. "Residential Alternative Energy Tax Deduction." Last Accessed Nov 8, 2011. [http://www.dsireusa.org/incentives/incentive.cfm?Incentive\\_Code=ID01F&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=ID01F&re=1&ee=1).
- 17 U.S. Department of Energy, DSRE. "Renewable Energy Project Bond Program." Last Accessed Nov 8, 2011. [http://www.dsireusa.org/incentives/incentive.cfm?Incentive\\_Code=ID06F&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=ID06F&re=1&ee=1).
- 18 U.S. Department of Energy, DSRE. "Renewable Portfolio Standard." Last Accessed Nov 8, 2011. [http://www.dsireusa.org/incentives/incentive.cfm?Incentive\\_Code=OR22R&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=OR22R&re=1&ee=1)
- 19 Oregon House of Representatives. House Bill 3672. June 21, 2011. <http://www.nwfpa.org/images/pdfs/hb3672.pdf>
- 20 Oregon Code of Statutes. 315.141 Biomass production or collection; fee; rules; list of taxpayers allowed credit; documentation.
- 21 Patty Weeks, Nez Perce County Clerk and Auditor. 2011. Personal Communication. Anna Moody, November 4.

- 
- 22 Nez Perce County. 1998. Nez Perce County Comprehensive Plan. Nez Perce county, Idaho. December 1998. Pp 7-6.
- 23 Ibid.
- 24 Clearwater County Building and Planning Department & Clearwater County Planning and Zoning Commission. 2011. The Clearwater County Comprehensive Plan. Clearwater County, Idaho. January, 2011.
- 25 Clearwater County. 2011. Clearwater County Biomass Energy Report Prepared by Tetra Tech NUS, Inc., Pittsburgh, PA. September, 2011.
- 26 Renewable Energy Enterprise Zone Program. 2011. [http://www.energy.idaho.gov/stimulus/enterprise\\_zoneprogram.htm](http://www.energy.idaho.gov/stimulus/enterprise_zoneprogram.htm), accessed November 21, 2011
- 27 Clearwater Economic Development Association. 2011. Comprehensive Economic Development Strategy 2009 – 2014. Clearwater Economic Development Association, Lewiston, Idaho. February 2011
- 28 Clearwater County Building and Planning Department & Clearwater County Planning and Zoning Commission. 2011. The Clearwater County Comprehensive Plan. Clearwater County, Idaho. January, 2011. pp 3-17 & 18.
- 29 Ibid. pp 3-21 & 22.
- 30 Ibid. pp 3-26.
- 31 Ibid. section 306.13, p 3-37.
- 32 Ibid. sections 306.16, pp 3-39.
- 33 Carroll Keith, Lewis County Commissioner. 2011. Personal Communication. Anna Moody, November 8.
- 34 Lewis County Board of County Commissioners. 2008. Lewis County Comprehensive Plan\_Draft. Lewis county, Idaho.
- 35 Amanda Bashaw, Latah County Solid Waste Coordinator. 2011. Personal Communication. Anna Moody, November 4.
- 36 Board of Latah County Commissioners. 2010. Latah County Comprehensive Plan and Land Use Map Resolution #2010-32. Latah county, Idaho. December 2010.
- 37 Ibid. pp 4-5
- 38 Framing Our Community (FOC). 2011. Last Accessed November 1, 2011. [http://www.framingourcommunity.org/?page\\_id=26](http://www.framingourcommunity.org/?page_id=26)
- 39 Joyce Dearstyne, Executive Director, FOC. 2011. Personal communication. Anna Moody, November 30.
- 40 Jon Paisano, Nez Perce Tribe Energy Efficiency/Conservation Technician. 2011. Personal Communication. Anna Moody. November 1.
- 41 Ibid.
- 42 University of Idaho. College of Natural Resources. “Two \$40 Million Grant Fuel Collaborative, Renewable Energy Research in Northwest” Last Accessed Nov. 4, 2011. <http://www.uidaho.edu/cnr/newsevents/featurestories/researchfeatures/woodwaste>
- 43 University of Idaho. News & Events. “Donation Drives New Direction of Bioenergy Research of University of Idaho” Last Accessed Nov 4, 2011. <http://www.uidaho.edu/cnr/newsevents/featurestories/researchfeatures/woodwaste>
- 44 Washington State University Tri-Cities. Center For Bioproducts & Bioenergy. “Relationship between Washington State University (WSU) and Pacific Northwest National Laboratory (PNNL)” Last Accessed Nov 4, 2011. <http://www.tricity.wsu.edu/cbb/pnnl.html>
- 45 University of Oregon. Ecosystem Workforce Program. “Briefing Paper 33: Impact of The Biomass Producer or Collector Tax Credit on Oregon’s Wood Fuels Market and Economy” Last Accessed Nov 8, 2011. <http://ewp.uoregon.edu>
- 46 The University of Montana. UM News. “UM Land \$1.1 Million To Study Biomass As Fossil-Fuel Replacement” Last Accessed Nov 4, 2011. <http://news.umt.edu/2011/10/100311biom.aspx>