

## 4.4 EDUCATION AND OUTREACH

### 4.4.1 Informed Stakeholder Assessment Study

In recent years, there has been significant attention paid to the technology required for the creation of biofuels from various cellulosic feedstocks. In the Pacific Northwest region of the US, this focus has resulted in several alliances addressing numerous feedstocks relevant to the region (safnw.com; nararenewables.org; ahb-nw.com). This research addressed the impacts of social acceptance on biofuel project success. While scientific, infrastructure, and community physical asset development are significant and important to the success of this emerging industry, key questions must also be addressed regarding the perceptions, experiences and potential acceptance or rejection of this emerging industry by local stakeholders and communities.

The informed stakeholder assessment study examines informed stakeholder perceptions regarding the social factors which impact a biomass-to-biojet industry based on forest residues in the WMC. Key issues under investigation using a mixed-method approach include forest management practices, trust, communication, knowledge, experience, social acceptance, local community impact, and environmental concerns.

#### STAKEHOLDER ASSESSMENT METHODS

A mixed methods process was used to administer an in-progress survey, which consists of open ended, multiple choice and Likert Scale questions. The instrument was pilot tested using in-person interviews with 10 WMC informed stakeholders. Using pilot test feedback and in collaboration with other USDA-NIFA agricultural and food research Initiative grant researchers the instrument was refined. Those collaborators include: Dr. Stanley T. Asah, Advanced Hardwood Biofuels Northwest (AHB), University of Washington; Dr. Sudipta Dasmohapatra, Southeast Partnership for Integrated Biomass Supply Systems (IBSS), North Carolina State University; and Dr. Darin Saul and Priscilla Salant, University of Idaho.

The preliminary findings are presented below. Data collection continues and will include additional geographic areas of interest to the NARA project in the Pacific Northwest, including the I-5 Corridor and the Columbia Plateau. Ultimately, we anticipate triangulating the results with existing county level, national, and local data sets for cross-validation and further statistical analyses to allow informed selection of optimal community sites for NARA project activities.

#### STAKEHOLDER ASSESSMENT FINDINGS

To date, preliminary analysis was conducted on 52 responses from the WMC; 41 surveys were completed online, one via phone interview and 10 through in-person interviews. Figure 4.4.1 shows the location of respondents in the WMC by zip code.

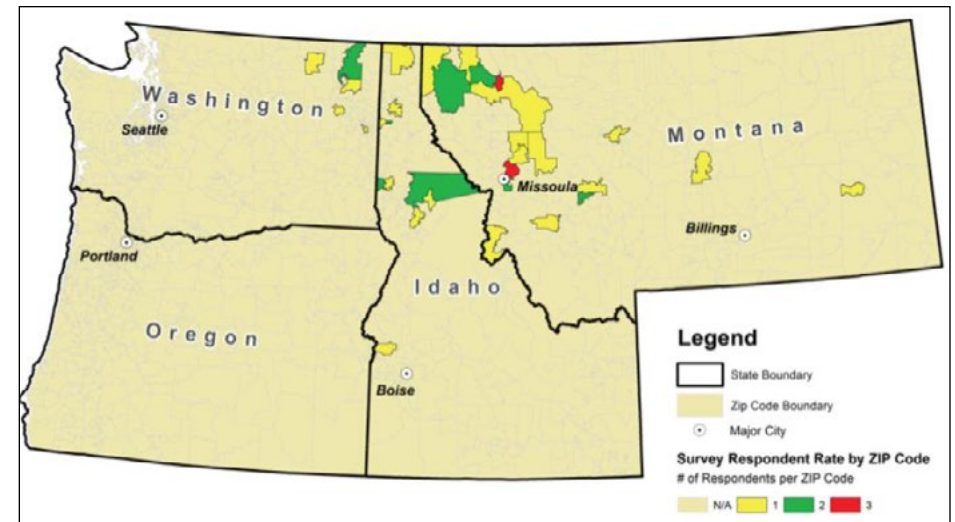


Figure 4.4.1 WMC Survey Respondents by Zip Code

Survey participants were categorized into three large stakeholder groups consisting of government, industry and environment (see figure 4.4.2). Within the government category, we included local, state and federal agencies, as well as elected officials; in the industry category we included all participants associated

with private industry ranging from forest operations to refineries; the environment category captured nonprofit organizations and regional collaborative organizations. To further understand survey participants, we asked them to provide their political preference. Figure 4.4.3 shows the participants' self-described political preference.

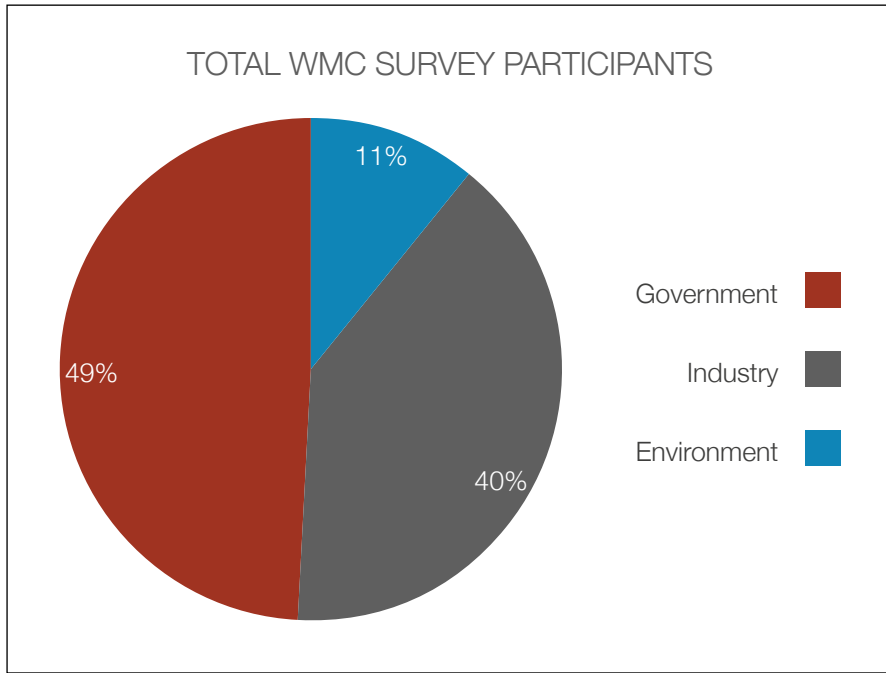


Figure 4.4.2 WMC Survey Participants by Stakeholder Category

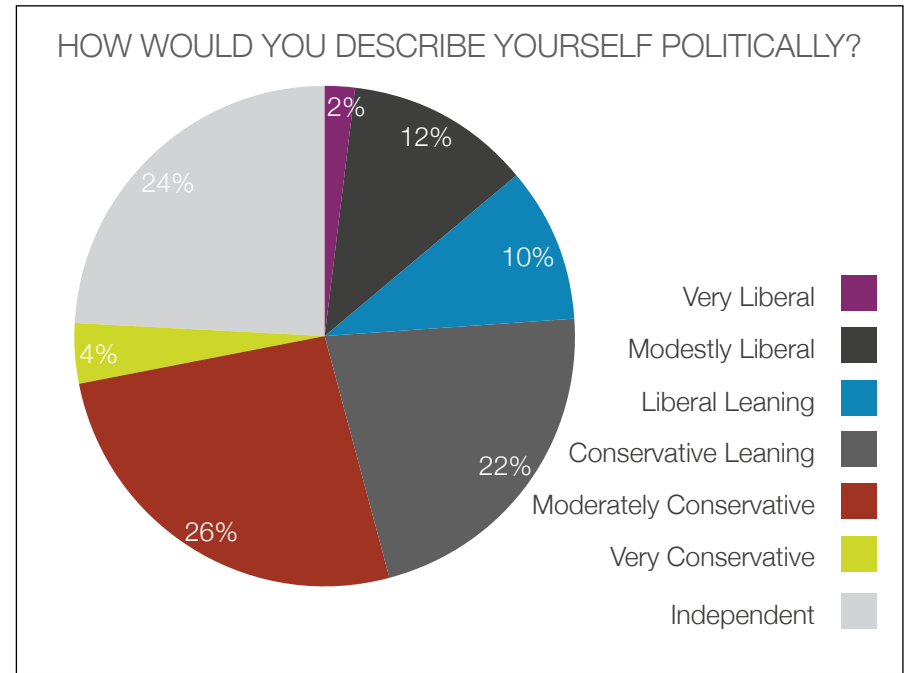


Figure 4.4.3 WMC Survey Participant's Self-Described Political Preference

The following figures show the participants' responses to a number of questions regarding their support and concerns for a biofuels industry in the region. Figure 4.4.4 shows the level of participants' support for a biofuels industry in the region. The graph shows that the majority of participants (86.2%) believe development of a biofuels industry in the Pacific Northwest would be good for the region, even though some (27.5%) had concerns.

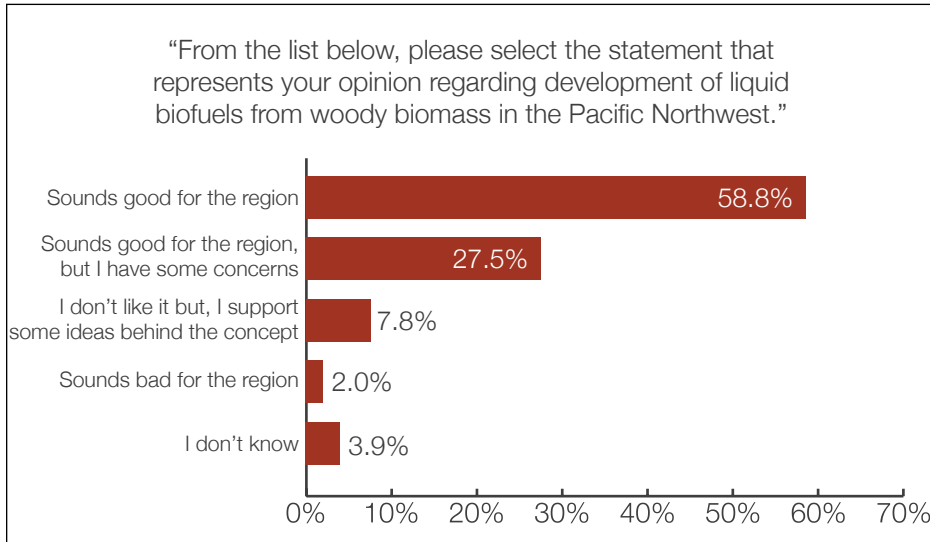


Figure 4.4.4 Participants' opinions regarding the development of liquid biofuels from woody biomass in the Pacific Northwest

Figure 4.4.5, shows participants' level of concern regarding multiple topics. From the items listed, the 'local economy' in their region, 'forest health in the Pacific Northwest,' and 'forest management practices on public lands in the Pacific Northwest' show the highest levels of concern.

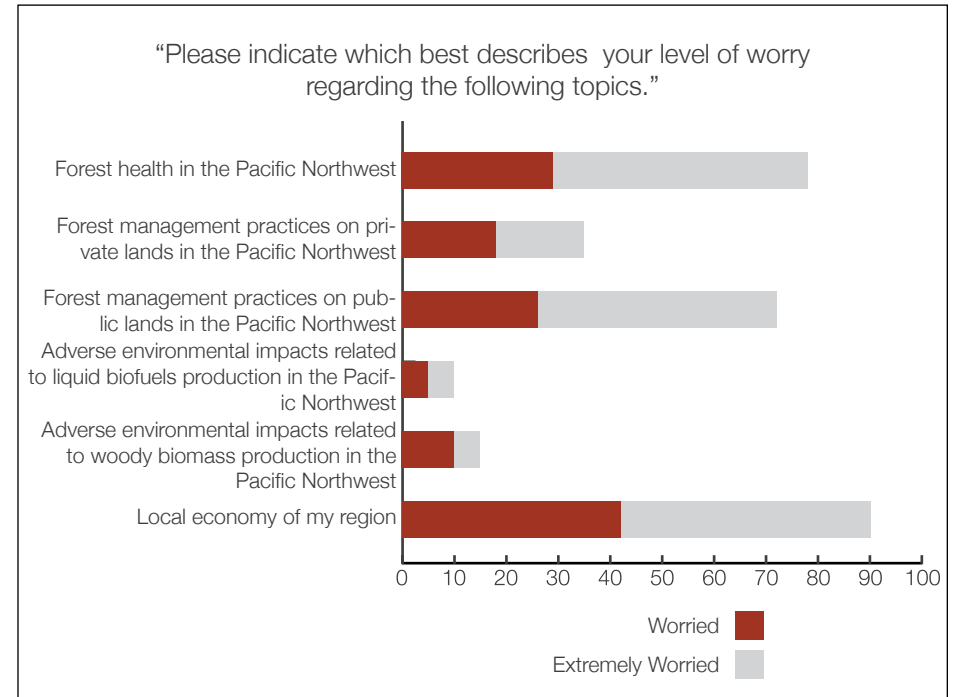


Figure 4.4.5 Participants' level of worry regarding several topics related to biofuels

We asked participants to indicate how much they agree with or disagree with a number of potential sources of woody biomass (Figure 4.4.6). There was significant agreement among the majority of participants that woody biomass from multiple forest management activities should be collected and used to produce bioenergy. Their sentiments suggest that biomass from areas treated for insect disease, restoration thinning and from logging operations should be considered.

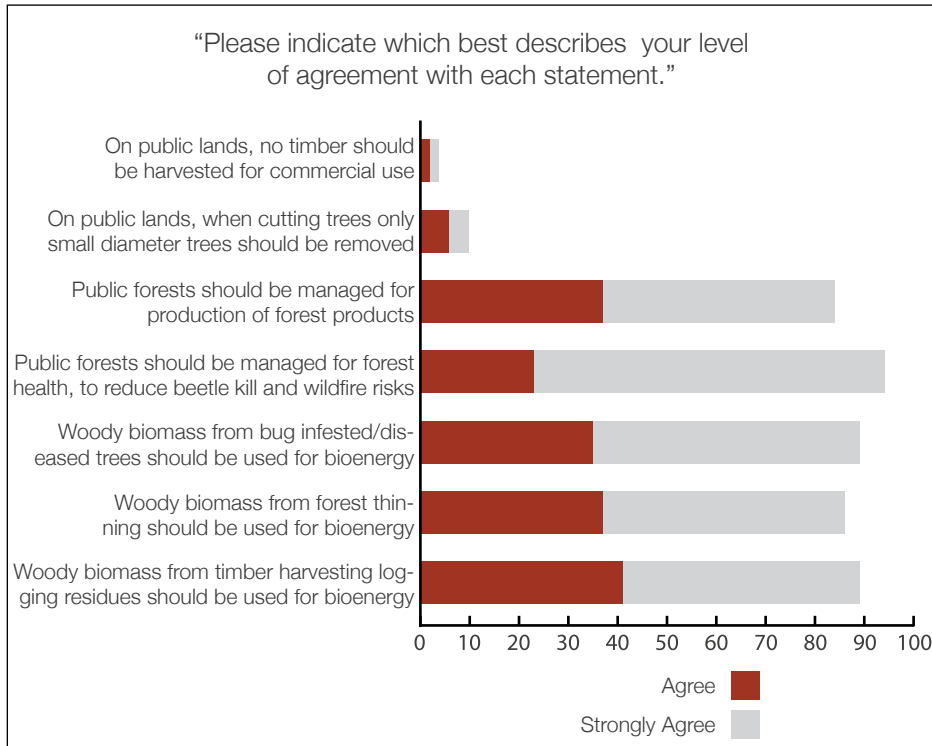


Figure 4.4.6 Participants' agreement with statements about sources of woody biomass

Participants were also asked to select the entities they trust to monitor forest management activities, especially as it relates to bioenergy production. Figure 4.4.7 shows responses that indicate significant trust in state foresters, independent 3rd party certifiers, university scientists and the US Forest Service.

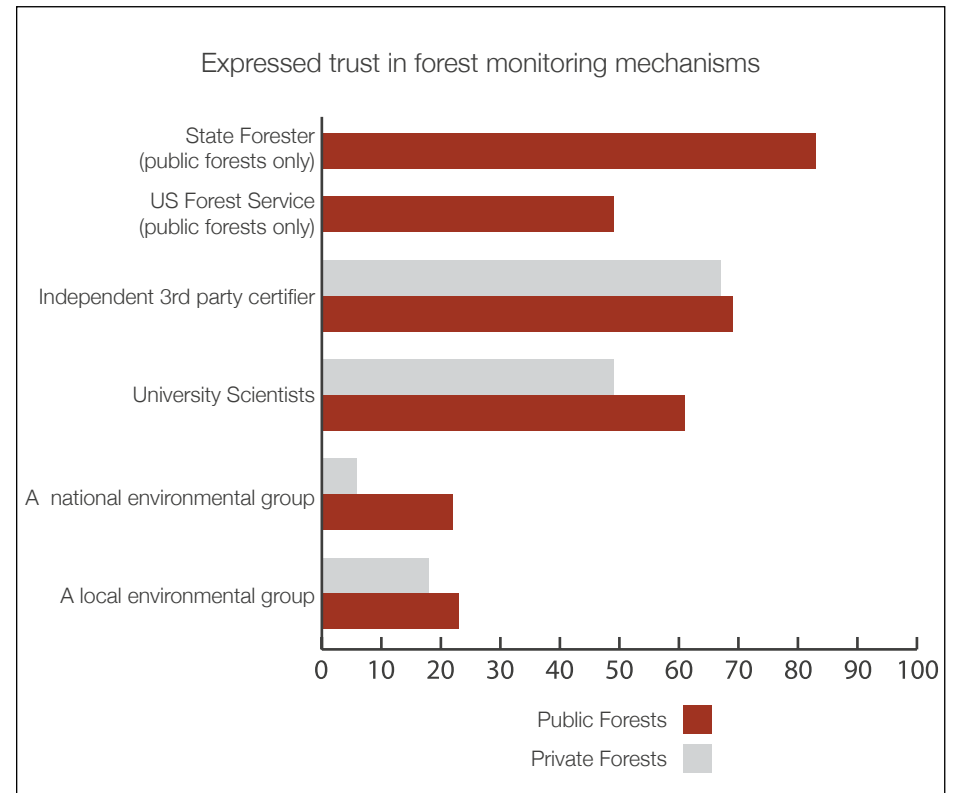


Figure 4.4.7 The expressed level of trust in groups of people potentially responsible for monitoring forests used as a potential source of woody biomass

