

ADDENDUM

Response to Pre-Proposal Questions
Washington State Department of Natural Resources
Request for Proposals No. 11-10
Washington Forest Biomass Supply Assessment
August 30, 2010

CLARIFICATION #1

RFP REFERENCE: Pg. 4, Sec. 1 (Introduction); *"...project to estimate the long-term sustainable volume of forest biomass available from non-reserved timber lands in Washington state for use in energy production..."*

- QUESTION:
- A. Definition of long-term?
 - B. Definition of sustainable? Is this left to consultant in proposal?
 - C. Timber lands --- does this follow USFS FIA terminology (forestland vs. timberland)?
 - D. Is project only concerned with forest biomass, no mill residuals? Section 3.1.2 seems to indicate residuals are to be considered (or is logging residue only being referred to on page 13 in that section)?
 - E. Forest biomass – any limits on definition for utilization? Stumps included? All branch wood? Etc. Or, is this left to consultant to define while addressing sustainability issues.
 - F. Energy production – all types (wood pellet, cellulosic ethanol, CHP, etc.) or specific types of energy production to be considered?

- RESPONSE:
- A. Multi-decade, recognizing that there are tradeoffs with compounding the amount of error and uncertainty in the data under longer-term projections.
 - B. To be determined by the aggregate of operational, economic and environmental analysis components and scenarios specified in Sections 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.8, and 3.1.9.
 - C. Correct.
 - D. The desired scope of material includes logging residue, and in-woods material from standing trees as specified in Section 3.1.3. Mill residuals are already well accounted-for in previous studies and could be included, but are not required within the technical proposal specifications.
 - E. Appropriate limits as determined under Sections 3.1.4 and 3.1.5. Stumps are not intended to be included.
 - F. At minimum, CHP (and any relevant material suitability distinctions from co-firing, direct firing for stand-alone energy, facility or district heating), wood pellet, and transportation fuel (thermochemical or digestion processes). However, the RFP is not asking for any analysis of energy conversion types, sizes or technologies outside the context of a range of prices and material characteristics.

CLARIFICATION #2

RFP REFERENCE: Pg. 5, Sec. 1.: *"This project will also result in development of a biomass calculator*

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tool that allows for customized biomass availability estimates based on user-defined inputs.”

Pg. 15, Sec. 3.1.12.: *“As a separate component, the proposal must include a methodology for development and delivery of a biomass supply assessment calculator tool, simplified as appropriate; to enable users to modify basic inputs and arrive at customized estimates of biomass availability and sustainability over time.”*

QUESTION 1: Is your vision of the calculator tool a product that can predict biomass availability by characteristic through time? – Spatially or Tabularly? Predict potential future availability of biomass?

QUESTION 2: Are there expectations for how this will be delivered to the public? Web-based? Visual basic program?

RESPONSE: The calculator is intended to be an extension tool of the supply study outputs. The desired end use is to predict available biomass outputs within a specified tributary supply area, using product utilization, silvicultural activities producing the biomass, characteristics of the material, associated costs and operational considerations.

The end user interface may be either spatial or tabular. DNR intends to make the tool available for public web access, either by download, web based mapping, or other suitable format.

CLARIFICATION #3

RFP REFERENCE: Pg. 13-15, Sec. 3.1. (Project Scope of Work)

QUESTION: Does WADNR anticipate any field work necessary to fill data gaps?

RESPONSE: Some level of field work is likely to be necessary, to verify assumptions underlying the estimates. The purpose of this assessment is to attain a degree of accuracy and precision which surpasses the quality of previous assessments, and is suitable for use in investment decision-making. The data used must at least have been based on actual harvest information, field measurements, and inventory analysis. For example, predicting the volume of logging residuals likely to result from harvest operations based on pre-harvest stand data may require field verification if reliable conversion factors are discovered to be lacking.

CLARIFICATION #4

RFP REFERENCE: Pg. 13, Sec. 3.1.1. (Project Scope of Work); *“The proposal must specify how the methodology will anticipate and take into account the potential for long-term changes in forest cover or forest ecosystem type over a multi-decade period.”*

QUESTION 1: We request clarification. Are you particularly referring to climate change, deforestation or generalized disturbance/harvest vegetation class changes through time?

QUESTION 2: Related to long-term question above from page 4. Any further specification/expectation than “multi-decade period”? 3 decades? 5 decades? 10 decades?

RESPONSE: Refers to climate change impacts.

CLARIFICATION #5

RFP REFERENCE: Pg. 13, Sec. 3.1.1. (Scope of Work); *“Stratification of the relevant components of the supply assessment by; a) landownership categories of: Federal, state, tribal, large private industrial, large private non-industrial, small private; b) forest ecosystem type; c) species (or, at a minimum, hardwood and softwood), d) logical supply areas across the state tributary to a set of hypothetical or existing processing sites to be determined by the contractor; and e) time periods in decades (see 3.1.9 below).”*

QUESTION: How many “hypothetical or existing processing sites” are you hoping to see analyzed?

RESPONSE: A sufficient number to achieve statewide timberland coverage with their associated tributary supply areas. Using estimated costs and assumed price information, the methodology should allow for an estimate of economic travel distance and time, and thus the number of facilities needed, to utilize the long-term sustainable biomass volume estimated to be available.

CLARIFICATION #6

RFP REFERENCE: Pg. 13, Sec. 3.1.2. (Project Scope of Work); *“The proposal must indicate how the methodology will accommodate high stocking levels where they exist now but may not persist in the future.”*

QUESTION: Would you clarify this sentence. Is this driven by future disturbance or other factors?

RESPONSE: Refers to a potential pulse of previously deferred thinning activities precipitated by near-term growth in the biomass market, which may not persist into subsequent planning periods.

CLARIFICATION #7

RFP REFERENCE: Pg. 13, Sec. 3.1.2 (Project Scope of Work)

QUESTION: Is recent Washington harvest data available spatially? In the form of shape files?

RESPONSE: Spatial and tabular data are available. DNR Forest Practices division reviews applications from landowners for each timber harvest proposed on state and private lands in Washington State, including basic parcel location and volume. These data are available in shapefiles. DNR also annually collects [harvest data](#) from the Washington State Department of Revenue by county for timber tax collections, including landowner type and species.

CLARIFICATION #8

RFP REFERENCE: Pg. 13, Sec. 3.1.2, 3.1.3. (Project Scope of Work): *“DNR Forest Resource Inventory System data for state forest lands will be available to the Contractor.” ... “DNR information, if available, on estimated treatment acres relevant to DNR-managed state forest lands will be available to the Contractor.”*

QUESTION 1: Does this data base contain characteristics of timber harvest residuals such as piece size, mixture of inorganic materials, density, moisture content, and distribution across logging areas?

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- QUESTION 2:
- A. A data dictionary of what is available in the WA DNR Forest Resource Inventory System would be helpful. Could it be provided?
 - B. Is example DNR Forest Resource Inventory data system available?
 - C. Is road information on DNR lands available, including road class and type of surface?
 - D. What would be the format of any DNR-supplied information available for use that is referred to in the RFP?

RESPONSE: The Forest Resource Inventory System contains standard forest condition and inventory data; it does not contain information on the characteristics of timber harvest residuals.

A.Yes. Dictionaries will be posted to the external DNR FTP site with the posting of this addendum. They can be found at:

ftp://ww4.dnr.wa.gov/lm/for_RFP_1110_biomass/

The following files are available for download from this site:

- DNR_FRIS_2009.zip – Stand level inventory in a Personal Geodatabase (Microsoft Access mdb) format – data dictionary included.
- DNR_TREE.zip - Microsoft Access mdb of tree lists in 1.0 inch diameter class.
- WADNR-NortheastSupposeReadySetup.exe – Downloadable executable of FVS Suppose Ready DNR FRIS data in Microsoft Access mdb format with a FVS Suppose as an example.

This data will be removed from the site on the date the RFP closes (September 17).

Other GIS data, including Forest Practices Application and Transportation data is available on DNR’s website:

<https://fortress.wa.gov/dnr/servicessa/dataweb/dmmatrix.html>

- B. Yes. FRIS products will be posted to the external DNR FTP site.
- C. Yes. The DNR transportation layer will be posted to the external DNR FTP site.
- D. ESRI geodatabase format.

CLARIFICATION #9

RFP REFERENCE: Pg. 13, Sec. 3.1.5. (Scope of Work); *“An analysis and estimate of the operationally feasible volume, cost, and quality of removed biomass under a range of reasonable scenarios.”*

QUESTION: Are expectations for number of scenarios closer to 3 or 10 scenarios? Is expectation scenarios will be constructed using simulation-based estimates or extrapolation of simple trends under varying assumptions.

RESPONSE: Trend-based estimates inasmuch as current harvest levels are used to project available biomass under the cited considerations and constraints (items a-f). Simulation may be desired for material categorized under Section 3.1.3 because one desired policy and management outcome of additional biomass utilization is to improve the economics of precommercial thinning, fuels and forest health

treatments so that more acres may be accomplished.

CLARIFICATION #10

RFP REFERENCE: Pg. 14, Sec. 3.1.9.; *“The volume results of the foregoing analysis shall be broken down, with any appropriate distinctions in assumptions and calculations of logging areas and volumes, biomass residuals, thinning, site conditions, and technology, by a) supply tributary areas (and, for state lands, further breakdown by Water Resource Inventory Area or other scale indicated by available data); b) landowner category (see 3.1.1(a) above); c) forest ecosystem type; d) species (or, at a minimum hardwood and softwood); and e) time period in decades. The methodology shall account separately for biomass already being utilized in 2010, based on the analysis is 3.1.3.”*

QUESTION: Could you provide a definition of Water Resource Inventory Area? Are they the same as [NRCS's Hydrologic Unit Codes](#)? If so, at what level are they defined? Two-, four-, six-, or eight-digit level.

RESPONSE: Watershed Resource Inventory Areas boundaries are defined by the Washington State Department of Ecology under Washington Administrative Code (WAC) 173-500-040 and are, in most cases, consistent with US Geologic Survey Hydrologic Unit Code-8 subbasin scale watersheds. However, some disparities in the boundaries between WRIAs and USGS exist because the basin groupings differ and the latter units extend beyond the Washington state boundary into Canada, Oregon, and Idaho.

<http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm>

CLARIFICATION #11

RFP REFERENCE: Pg. 16-17; Sec. 3.4 (Deliverables); *“The Contractor shall be responsible for submitting the following draft reports and a final report (deliverable):*

Draft and final versions of overall study report, including text, tables, graphs, and maps, in both paper (original and five copies) and electronic format.” ... “Preliminary work products corresponding generally to the sections in the Technical Proposal, to be delivered on a reasonable schedule estimated in the proposal, so as to ensure continual progress in the overall scope of work.”

QUESTION: What is the review process and acceptance procedure for draft work products? For example, is there a review committee that will review and comment on all work? If so, approx. how many reviewers will there be? Will there be more than one round of reviews?

RESPONSE: The reviewers will include internal DNR staff and external science and policy evaluators, as may be appropriate for different aspects of the draft product's subject matter. There is no pre-selected team at this time, but it would be likely to include many of the same reviewers who will participate in the RFP evaluations. Responses from among the reviewers will be compiled by the DNR project contact and returned to the contractor as a single product. An ongoing and iterative communication between the successful contractor and the DNR project contact is also expected, for the purposes of minimizing unproductive work and reducing

review time. However, if preliminary or draft work products are unresponsive to the Contract, improvements will be required. As per the discussion in section 3.4 of the RFP, we anticipate one review of a draft products and one review of final products for any last changes.

CLARIFICATION #12

RFP REFERENCE: Pg. 18, Sec. 4.2 (Qualifications)

QUESTION: There is a possibility that we may add staff as a result of being awarded this assignment. The RFP asks for specific names and resumes of employees assigned to the project. The RFP also indicates that staff substitution will require prior approval of the DNR. If we were to add staff to the project, what would be the provisions/requirements the DNR would use to review such requests?

RESPONSE: The intent of Sec. 4.2 is to enable DNR to evaluate the qualifications, education and experience of the actual staff working on the project, and to ensure that the contracted level of expertise is in fact applied to the actual project completion. Alternative means that provide this same assurance are acceptable. Alternative means that do not provide this same assurance will result in an accordingly deducted score for this element.

CLARIFICATION #13

RFP REFERENCE: Pg. 5, Sec. 1.4 (Funding)

QUESTION: Will cost sharing be required on the part of applicants?

RESPONSE: No, the funding that DNR received from the USFS does not require a match. We are covering the match with the forest health capital budget money.

CLARIFICATION #14

RFP REFERENCE: Pg. 20-21, Sec. 5.1 (Identification of Costs)

QUESTION: The policies of the institutions of some potential proposers require that State agencies pay Facilities and Administration costs (aka indirect costs) at the negotiated rate. Should applicants include the standard indirect costs when preparing the budget to be included in the proposal?

RESPONSE: Yes, in the budget that is submitted with the proposal, please include all costs (both direct and indirect) that will be billed to the project.
