

Introductory Report from GIS Team

**SunGrant/DOE Regional Feedstock Partnership
Working Meeting
February 27-28, 2008**

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Goals and objectives of GIS tasks

- Collect point data on feedstock yields, composition, and environmental factors (includes past experiments, future experiments, and literature).
- Analyze data to develop relationships between yields, composition, and environmental factors.
- Collect spatial data that will aid in mapping feedstocks based on above relationships.
- Provide data and analysis capabilities to your region.

Data collection and analysis

- Data collection / literature review is beginning now.
- Data spreadsheets can now be submitted via website.
- Previous experiments will summarize currently available data.
- New experiments will provide additional needed data (e.g., **yields over initial establishment period, production inputs, available feedstock, etc.**).
- Yields will need to be estimated across Sun Grant regions.

Data submission webpage

Department Of Energy OBP
Sungrant Initiative
Oak Ridge National Laboratory



Data submission form

- Data Submitter Name
- Organization/Affiliation
- Address
- City
- State, ZIP code (xxxxx-xxxx)
Alabama, AL
- Phone (area code) phone-number
- E-mail
- Feedstock (multiple selection allowed, please hold CTRL)
 Corn stover
 Switchgrass
 Poplar
 Willow
- Region
Select one
- Data File



Please enter the anti-spam control words above:

[Get another words](#)

- 10MB file size limit
- Case-sensitive anti-spam control

<http://cdiac3.ornl.gov/feedstock/>

Near-term goals

- **Preliminary data sets submitted by December 2008.**
- **Completion of preliminary analysis of feedstock yields by February 2009.**
- **Submit abstract to Special Session at 2009 SSSA/ASA/CSA meeting.**
- **Considering a special journal issue that documents current and potential feedstocks for each region.**

Summary from NE Feedstock Meeting

- **Discussed primary point data collection and available spatial data sets for estimating yields and biomass locations.**
- **GIS systems as an integrator tool, showing us what we know and what we don't know.**
- **Data on current biomass (NASS, FIA) is good, but biomass removal is not as good.**
- **Discussed needs and methods for sub-county spatial resolution.**
- **Investigators are looking for data. Need to find what we have and what we need.**

Break-out session for
GIS working group

How will data be collected?

How will data be analyzed?

How will data be mapped?

Additional topics...

Data collection

- According to spreadsheets that have been circulated
- Literature reviews, field stations, new experiments

Data analysis

- Develop relationships between yields, environmental variables, and management inputs. **Many of these relationships will be among the first developed!**

Map feedstock yields

- **Needed as a point coverage and estimated at the county level.**
- **Can be done using empirical equations, developed from previous analyses.**
- **Can be done using plant mechanistic models where the model has been calibrated based on newly developed relationships.**

Additional discussion topics for break-out group

- What are core data needs and final products?
- What standard data are needed for these products?
- What are our options for spatial distribution/mapping?
- Data needs for prediction of land-use change and sustainability issues? (LULCC: pests or pathogens that would increase adoption risk; planting or harvesting dates; issues other than cost of production and farm gate price??)

