DRAFT
MEETING SUMMARY
FERNALD NATURAL RESOURCE TRUSTEES
EM CONFERENCE ROOM
April 11, 2001

Attendees: Joe Bartoszek (OEPA)
Donna Bohannon (OEPA)
John Homer (Fluor Fernald)
Bill Kurey (FWS)
Lisa Ludwick (Fluor Fernald)
Tom Schneider (OEPA)
Harold Swiger (Fluor Fernald)
Eric Woods (Fluor Fernald)
Pete Yerace (DOE)

SCHEDULE FOR NEAR-TERM RESTORATION ACTIVITIES

Field work in the morning took longer than expected. Therefore, the meeting started at approximately 2:30 pm. Because of the late start, Pete Yerace suggested that the agenda be shortened in order to discuss DOE's proposal for near-term (2001 – 2003) restoration activities. Pete asked Eric Woods to describe the activities proposed for 2001. Eric referred to the DOE response letter submitted to the Trustees on March 20, and summarized the actions planned for 2001. These actions include the following:

1. Initiate a contract grow arrangement to secure plant material for future restoration
2. Conduct baseline data collection and analysis of Fernald site habitats this year, with reference site data to be collected in 2002 and 2003
3. Implement invasive species control across the northern portion of the site (A1PI and A1PIII)
4. Investigate the extent of drain tiles present within the northern pine plantation (A1PI)

Eric stated that additional invasives control activities would take place in 2002 (the western corridor of Paddys Run) and 2003 (A8PIII – North).

Tom Schneider stated that he was comfortable with conducting the invasives sweep in the northern woodlot this year, but he wanted to make sure that invasives are also maintained in the A1PI and A8PII restoration projects. Tom also stated that interim restoration will be required in A2PI once remediation activities are completed this summer. Tom suggested that the restoration grading plan be sent to the Ohio Department of Natural Resources for review, since a subcontractor will not be procured to assist in design.

Pete added to the list of action items for 2001 by stating that he will complete the deer management plan, submit it for review, and initiate the establishment of a deer management team. This team will evaluate the deer situation at the Fernald site and make recommendations for population control and protection of restoration projects. With respect to the drain tiles in the northern pine plantation, Pete suggested that Carl Summe should be consulted, since he installed many of them.

Pete also committed to working with DOE management and Fluor Fernald to resolve issues related to the scope of the closure contract and to minimize impacts to planned restoration work.

BASELINE MONITORING

John Homer summarized the baseline monitoring approach that was described in an annotated outline handout. The trustees collectively agreed on locations for monitoring, as summarized in the table below:

Ecosystem	Monitoring Location	Comments
Grazed pasture	A8PIII - North	Include a wet area within the transect. Sample grasses before Carl Summe mows and bales the area.
Successional woodlot	A1PIII (the Northern Woodlot)	Establish transect across a younger woodlot within A1PIII
Riparian corridor	A8PIII – North (the "Old Oxbow" area)	
Pine plantation	A1PI (the Northern Pine Plantation)	
Open water	A1P2 (the Sewage Treatment Plant basins)	

The discussion of baseline ecosystems led to a clarification of the term "developed area." OEPA contended that the baseline ecosystem for comparison to restored areas should be the condition of the specific area following soil certification. For example, an area requiring soil excavation, where no vegetation or topsoil remains once remediation is complete, would be considered a developed area. The baseline condition of developed areas would be "0," since no vegetation or meaningful habitat is present for the restoration effort to restore or enhance. The trustees agreed that this was an appropriate application of the "developed area" criterion.

John Homer then discussed the monitoring parameters that would be used to characterize baseline ecosystems. The trustees were in general agreement on the parameters to be used, which include several vegetation indicies [Floristic Quality Assessment Index (FQAI), percent cover, percent native cover, percent canopy cover, dbh/foliage area for woody vegetation, and calculation of a modified Simpson's index that uses cover classes instead of species abundance counts], breeding bird surveys, and several indicies unique to open water (amphibians, invertebrates, and migratory waterfowl). Tom Schneider requested that butterfly surveys be added to the list of baseline monitoring parameters. Tom and Joe Bartoszek also stated that vegetation monitoring should be included in the open water evaluation.

John Homer expressed concern over the status of Coefficient of Conservatism (CC) values for use in FQAI. Currently, the only CC values available are specific to northeastern Ohio. Development of statewide CC values are apparently in process, but nothing has been published to date. Tom Schneider pointed out that as long as a data set is available and used consistently among baseline, restored, and reference sites, the regional applicability is of little consequence. Also, once data is collected, CC values can be modified once statewide or regional CC values are published.

Tom also suggested that the process for estimating percent cover should be modified to include a "0%" cover class that differentiates between no individuals present and 1% to 5% cover. The current cover class assignment uses a 0% to 5% designation. The trustees agreed.

John Homer then described the process for collecting data. In summary, a single line transect will be established as roughly the longitudinal axis of the monitoring location. From this transect, 10 square quadrats for each vegetation layer will be placed at random sides and distances from regularly-spaced intervals. The herbaceous layer will be sampled with $1m^2$ quadrats, while shrubs and trees will be

sampled using $10m^2$ quadrats. Usually, the transect will extend across the entire baseline area. For very large areas such as the grazed pasture, the transect will be shortened to a standard 100m length.

SCENARIO 6 HYBRID PLANTING APPROACH

Eric Woods presented the proposed hybrid planting approach for site restoration. This approach expands the use of prairie grasses and forbs in the former production area, the borrow area, and the OSDF, thereby reducing the overall number of trees and shrubs required for restoration. The hybrid approach is required in order to implement the refined conceptual restoration for the Fernald site within the compressed schedule under Baseline Scenario 6. Eric handed out two spreadsheets that compared sapling, seedling, and shrub quantities between the existing refined scope and the proposed hybrid approach. Tom Schneider was comfortable with the changes to the OSDF. For the borrow area, Tom and Joe Bartoszek suggested that a savanna system replace the forested system around the perimeter of the borrow area, and that shrubs remain as part of the borrow area scope.

OEPA raised concern regarding the hybrid approach for the former production area, and requested that some trees and shrubs remain in the restoration design. Tom Schneider also expressed concern that locking down plant numbers now would take away options for adaptive management. In addition, Tom pointed out that the hybrid approach estimates are based on out-year engineering estimates. In reality, we won't know the extent of restoration required until remediation is complete. Pete Yerace agreed with Tom's concerns, and stated that any contract grow arrangement must have risk contingencies and "cushioned" plant quantities in order to account for adaptive management, mortality, etc. Pete suggested to round off the plant quantity estimates as a first step in adding flexibility to the hybrid approach.

With respect to contract growing, Eric Woods proposed the use of plant stock grown in "Spin-Out" containers as opposed to balled and burlapped saplings and shrubs. John Homer described several ecological and logistical benefits to such an approach. The trustees were in general agreement, but warned that the site deer population must remain under control in order for the approach to be successful.

MOU DEVELOPMENT

Pete Yerace inquired about the status of the MOU. Tom Schneider indicated that their legal counsel will want to revise the language as a result of the revised remediation and restoration schedules.

The meeting adjourned at approximately 4:30 pm.