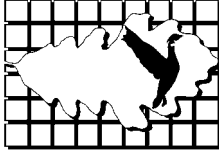


Attachment 5

Aerial photography correlation with vegetation
monitoring data on the reclaimed Flambeau Mine site

November 9, 2006



APPLIED ECOLOGICAL SERVICES, INC.

SPECIALISTS IN ENVIRONMENTAL MANAGEMENT AND RESEARCH

MEMORANDUM

TO: Jana Murphy, Flambeau Mining Company

FROM: Bill Stoll and Steve Apfelbaum, AES

DATE: November 9, 2006

RE: Aerial photography correlation with vegetation monitoring data on the reclaimed Flambeau Mine site (98-450).

This memorandum is submitted to Flambeau Mining Company to satisfy the monitoring requirement found in Section 4.6 of the Surface Reclamation Ecological Monitoring Program, Flambeau Mine (Hunt and Apfelbaum, 1998) that states "aerial photography will be qualitatively evaluated to gauge the vegetation cover and representative plant communities over the entire site."

The attached images (Figures 1 & 2) were created by scanning the minimum number of aerial photographs required to cover the entire mine site. These scanned images were combined to create one composite color photo (Figure 1) and one composite infrared photo (Figure 2). Color intensity differs between scanned images, and therefore composite photos show shade differences between the different images used to create the photo. These differences observed in the composite photos are an artifact of the process used to create them and are not a reflection of the condition of the vegetation.

Color and infrared aerial photographs of the reclaimed mine site were taken August 3, 2006. Although the 2006 photos reveal reduced productivity from previous years due to extreme drought conditions in the region this year, they confirm that the entire reclaimed mine site is still stable and well covered with productive vegetation. In addition, they indicate that the vegetation cover and productivity on site is greater than in adjacent areas to the northwest once used as gravel quarries, and approximately the same in most areas as similar offsite areas (e.g., grassland/pasture) not impacted by mining operations.

Each of the three plant communities is easily identified on the photographs. Open water areas (black) and productive wetland vegetation (deep red) in the mitigation wetland and biofilter ponds are evident in the infrared photograph. These same features are also easily seen in the color aerial photograph with dark green color indicating highly productive vegetation within these wetlands. These photos reveal an appropriate hemi-marsh structure in these two wetlands. All biofilter swales, including live-stake planting areas (e.g., willows), are also

evident on both aerial photographs. The locations of the woodlands on the site are also easily identified by the presence of conifers trees. Some of the planted deciduous trees are also visible in these woodlands, but most are still too small to be located on these photographs. In addition, a higher density of trees in the fenced (functioning as a white tail deer enclosure) woodland clearly indicates greater tree survivorship in this woodland than in any other (unfenced and unprotected) woodlands on site. The photographs also indicate that the remainder of the site, upland grassland, is not as productive as previous years but is still very well covered with productive vegetation.

The mine site as well as adjacent off-site areas are grayer in the infrared photograph and browner in the color photograph than last year. This may indicate lower productivity which is likely due to extreme drought conditions in the region this season. Field data collected this year indicates that the growth of both native and non-native vegetation was reduced this year. Cover data from this year (2006) indicates a reduced growth of native species, while biomass data indicates reduced growth of non-native species as well. 2006 was another extreme drought year and decreases in native cover and total biomass over the past year may be due to the cumulative effect of two extremely dry years in a row.

Although drought conditions have lead to a reduction in native cover and overall biomass productivity, site data documents that vegetation, including native species, is well established and abundant throughout the site. The average total plant percent cover of the entire reclaimed mine site is 99%. The three restored plant communities ; Woodland, Upland Grassland, and Wetland have total plant cover of 100%, 99%, and 98%, respectively.

In summary, the entire mine site is very well vegetated, and the three plant communities--- woodland, upland grassland, and wetland---are present and conspicuous , growing in appropriate locations, following the intent of the reclamation plan. Higher tree survivorship in the fenced woodland protected from deer herbivory is also confirmed by these photographs. Also, there is no indication of erosion or sedimentation on the site, and little to no evidence of vegetation failure or stress beyond what was experienced through regional drought conditions in 2006.