

To; Kirk Piehler
From; Steve Sjogren
Re; Kirtland's Warbler Reforestation

March 18, 2005

As requested, I reviewed the document KW Management Costs (where does all the money go) prepared by the silviculture shop and Faxed to me on February 15, 2005. I also discussed costs and options with Biologists and Foresters from the Huron-Manistee. The following are my comments relative to the silviculture document, and KW reforestation opportunities on the Hiawatha NF.

KW management provides some very strong benefits to the Hiawatha;

- Contribute to the recovery of an endangered species
- Multiple-use approach to resource management
- Support high volume and sustainable jack pine harvest
- Support Healthy Forest Initiative and fuels reduction objectives
- Benefits Hiawatha MIS and many other species of jack pine ecosystems

The KW program recently helped us withstand an appeal of the Raco project where the Defenders of Wildlife suggested we harvest fewer acres of jack pine. Our rationale to be aggressive in the establishment of KW habitat helped to justify our decision and we were upheld. Because of the desire to provide quality KW habitat, the selected alternative was the maximum jack pine harvest level alternative. KW management was also tied to the Healthy Forest Initiative, and will produce about 1,000 acres of fuels reduction target in 2005.

The amount of potential additional cost to establish KW habitat on the Hiawatha is speculative. Funding options to help pay for additional cost have not been explored. For example, KW reforestation on the Huron-Manistee NF is covered through sale design that enables KV funding to cover the cost of their KW reforestation program.

The Hiawatha must find new and creative ways to either reduce the projected cost of KW reforestation, and/or explore new approaches to funding KW reforestation. The Huron-Manistee has over 40 years of experience in managing KW reforestation, most of it without the luxury of natural regeneration. They currently establish KW habitat with their planting program (about 1,070 acres per year). The Hiawatha can and should benefit from their experience. However, a fundamental ecological difference is the cooler climate, higher water table, and richer soils of the U.P. which make natural regeneration a cheaper option for establishing KW habitat in many Hiawatha stands (see stocking survey summary below).

This is an important distinction. Natural regeneration is cheaper than planting. Since natural regeneration technique and cost does not vary based on the tree-stocking goal, there is no additional cost for establishing KW habitat through natural regeneration. However, there is an additional cost for planting to KW stocking densities since trees must be purchased. Jack pine seedlings currently cost about \$150/1000 seedlings, so

Because the Hiawatha is so successful with natural regeneration, it is hard to imagine that the Forest would have to pay \$415/acre or more, for the same stocking levels that cost the Huron \$250/acre. Logically, if we rely on natural regeneration for a portion of our program, then our costs should be less (not more) than the full-planting program of the Huron. It is not clear from the silviculture spreadsheet which reforestation costs are due to natural regeneration and which costs are due to planting. Costs would be much higher if you assume all KW acres will be hand planted. Not all KW stands need to be planted, and not all standard stocking stands are successful under natural regeneration. As clearly shown in the first table, KW stocking levels have been created on large portions of the Hiawatha without any additional cost, just by using natural regeneration techniques.

Potential additional costs are just one aspect of the issue. Seeking solutions and methods to pay any additional cost are just as important. There are proven ways to pay for the KW program which will meet timber, fuels and wildlife goals and not seriously impact the Forest's or any one program's budget.

Some possible solutions and approaches;

1. Favor natural regeneration over planting for KW. Timing of site-prep is very important (must prepare seed bed before seeds fall off slash in July/Aug). Little additional cost.
2. On KW planting sales follow the Huron-Manistee process and include red pine, hardwood or aspen in the sale to provide a species mix and help fund reforestation. Use separated sale area boundaries as necessary.
3. Meeting KW stocking levels is part of essential KV reforestation, based on NEPA decisions. KV handbook does not specify a stocking level but the NEPA decision does. Allows Forest to fund KW reforestation before pay salvage fund cost. Prioritize salvage fund payments on non-KW salvage sales.
4. On KW planting sales use stewardship contracting to reduce costs and improve natural regeneration (i.e., site prep preformed by operator prior to sale closure reduces fuels and improves timing of jack pine regeneration).
5. Continue to use adaptive management to refine techniques and reduce costs. For example, try trench and hand plant (no chop-chain) to increase survival, lower cost and provide better habitat for other grassland birds due to slash retention. Try seed-tree method, with or without burn or mechanical scarification. Try natural regeneration then wait 1-2 years to see results before hand plant.
6. Employees agree to work on solutions. Specialists from silviculture, timber, reforestation, soils and wildlife work to develop an integrated KW reforestation program on the Hiawatha. Set up initial meeting to discuss solutions and view ongoing field work.

Sincerely,

/s/ Stephen Sjogren
Stephen Sjogren
Wildlife Biologist

