

Shape File Standards for Aerial Herbicide & Aerial Seeding Applications

With the advent of electronic mapping devices such as AgNav, Satloc, and Del Norte, it is now possible to provide the applicator with an electronic map of the treatment area. Participants in DNR-Forestry's Aerial Herbicide and Aerial Seeding Contracts are required to provide the Aerial Forest Management Coordinator (AFMC) with shape files for each treatment area.

The shape files should be submitted at the same time as the project proposal.

The AFMC will compile the shape files and forward them to Forest Management Helicopter Coordinator (FMHC). The FMHC and the other helicopter managers will convert them into files that are compatible with the vendor's GPS system.

Keep the following items in mind when creating your shape files:

- The shape file you provide should be of the treatment area. Buffer strips should not be included in your shape file.
- Provide a shape file that is "clean." Eliminate "bird nests" and crossings that may occur when using a GPS and gathering track log points while the operator is stationary, or if the GPS's track log is on and the GPS is acquiring satellites.
- The shape file should be projected, utilizing the DNR standard NAD 83 UTM zone 15N.
- Name the shape file with the project number as indicated in aerial herbicide and seeding directions provided by the AFMC.
- Areas not to be treated inside the treatment area (exclusion areas) should have their own shape file and should be named with the matching project number followed by an indicator that it is not to be treated (i.e. "XCL" or "reserve" or "leave"). If there is more than 1 exclusion area in a treatment area, give each one a number after the indicator (i.e. "XCL 1").
- Check the acreages of your shape files and confirm they match the acres on the project proposal.

The shape file acres will be considered the treatment and payment acres, for these reasons:

- 1 Shape file acreage is presumed to be accurate.
- 2 Proper amount of material can be obtained to treat the site.
- 3 GPS map is based on shape file.
- 4 These are the acres that are provided to the vendor.
- 5 Eliminates vague or confusing verbal communication.
- 6 Calibration depends on set amount of material applied over a defined area.
- 7 Treatment record is based on the shape file.
- 8 Aerial seeding only—using the correct amount of seed/carrier at contract volume (one or two lbs/acre) allows helicopter operations staff to effectively load multiple sites in the hopper and increase efficiency.

- Acres will be rounded off to the nearest whole number.
- If possible, combine aerial projects that are within one mile of each other, but not more than two miles apart, and give it one project number. When projects are combined at the helicopter manager level, the possibility of error messages are increased.
- Do not combine all the treatment areas for your Area/Agency in one shape file. Please provide a separate shape file for each project.

Acre changes and discrepancies

Acre changes and discrepancies discovered after the project has been submitted will be handled as follows:

- Aerial Herbicide:
 - Discovered at the Area/Agency level—inform the AFMC and HFMC of the changes and provide revised shape files
 - Discovered when converting shape files to application files (NO1, etc.). The HFMC will inform Area/Agency. The HFMC will also notify the AFMC of the acreage changes so that the herbicide order can be adjusted.
 - Acreage discrepancies of 1 acre will simply be changed on the contract and site data information sheet without notifying the Area or Agency verbally.
- Aerial Seeding:
 - Discovered at Area/Agency level—inform the AFMC, HFMC, and Badoura Nursery of acreage changes/discrepancies.
 - Discovered when converting shape files to application files (NO1, etc.). The HFMC will inform Area/Agency and Badoura nursery of the discrepancy.
 - Large acreage discrepancies that involve stratified seed (White Pine, White Spruce) will have to be rectified between the Area/Agency and Badoura Nursery.
 - Acreage discrepancies of 1 acre will simply be changed on the contract and site data information sheet without notifying the Area or Agency verbally.