



ALASKA RAILROAD

Track & Yard Vegetation Management: University-led Herbicide Research Project

The Alaska Railroad (ARRC) commissioned the University of Alaska Fairbanks (UAF) to conduct research on herbicide behavior in Alaska's environment. Scientists from the Alaska University Transportation Center (AUTC) and researchers from the UAF Water & Environmental Research Center are involved.

Scope and Purpose

- **Chemicals Studied:** AquaMaster® general use herbicide (glyphosate); Oust® Extra professional use herbicide (sulfometuron methyl and metsulfuron methyl); AgriDex® nonionic surfactant used to effectively apply herbicide.
- **Size and Location:** less than three acres total at the north and south ends of the railroad to capture the spectrum of climates along railroad operating property.
 - **South End:** Seward Yard and along the track between Seward and Portage.
 - **North End:** Along the track adjacent to UAF Experimental Farm near the Yard and along a section of the Eielson Branch.
- **Year One:** South End - Summer 2008 to Fall 2009; **Year Two:** North End - Summer 2009 to Fall 2010.

Preliminary Findings

- Herbicides behave similarly to how they behave in other climate and environments, enabling comparison to other locations where herbicides have been effectively and safely used.
- Samples from monitoring wells and soil samples indicate that the glyphosate degrades rapidly in Alaskan soil and does not migrate significantly in the soil.
- **Final Results:** Final results are expected by early 2011, with study wrap up by the end of 2011.

Cost and Funding

- The cost is \$400,000. ARRC is funding half (\$200,000) and an AUTC matching grant is funding the other half.

