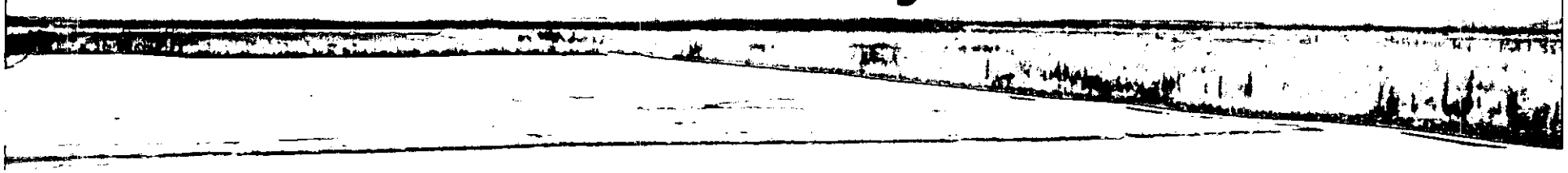
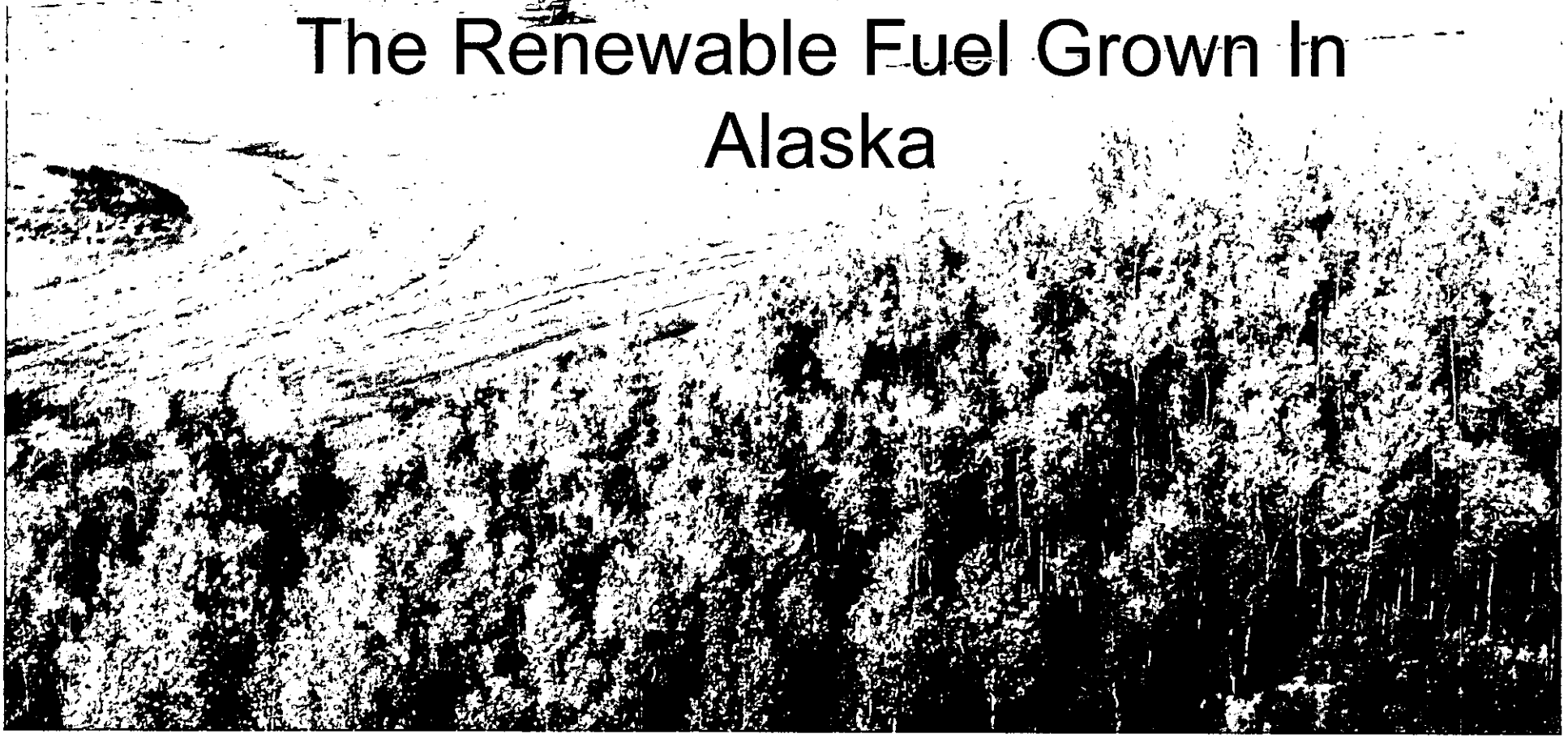
2/18/09 PRESENTATION: BARLEY FOR FUEL

2015

Barley



The Renewable Fuel Grown In Alaska

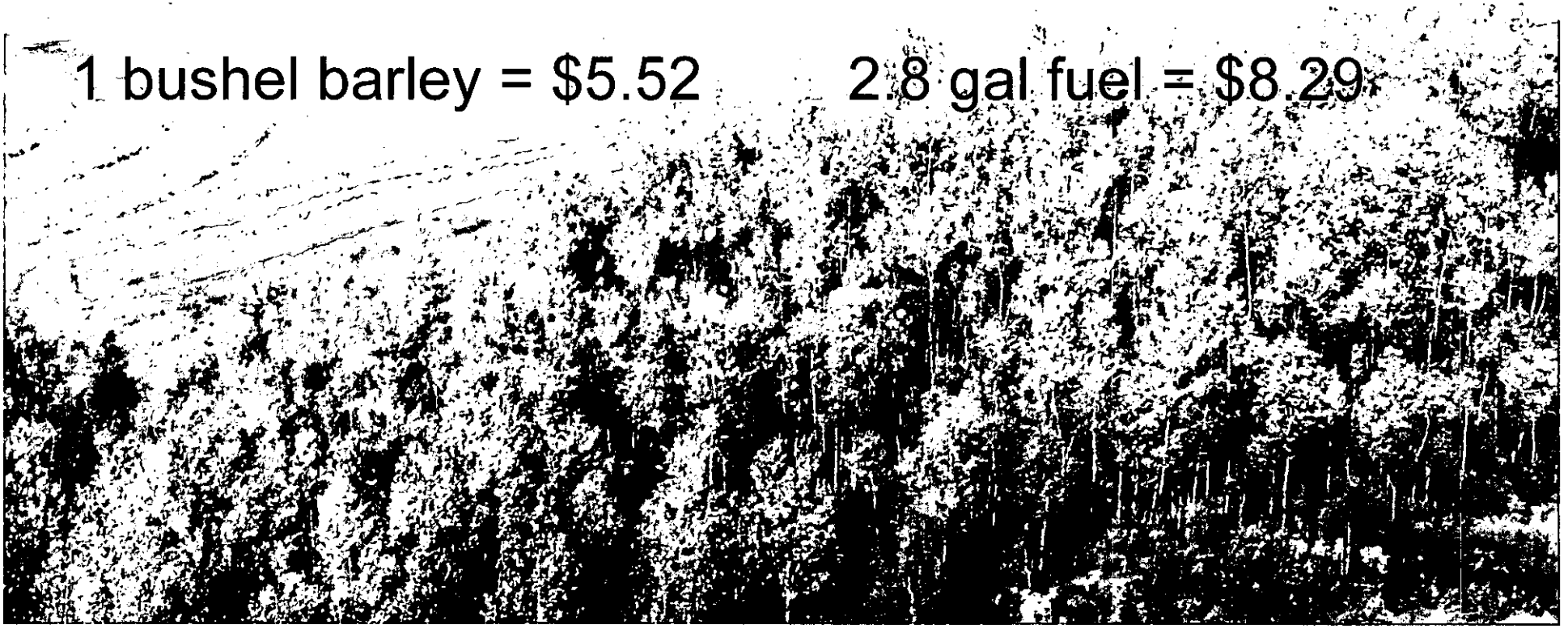


Economics

Cost comparison with fuel oil

1 bushel barley = 2.8 gallons fuel oil

1 bushel barley = $5.52 2.8 gal fuel = $8.29



Economics

Cost per million BTU

1,000,000 / 393,600 x $5.52 / .85 = $16.50 (barley)

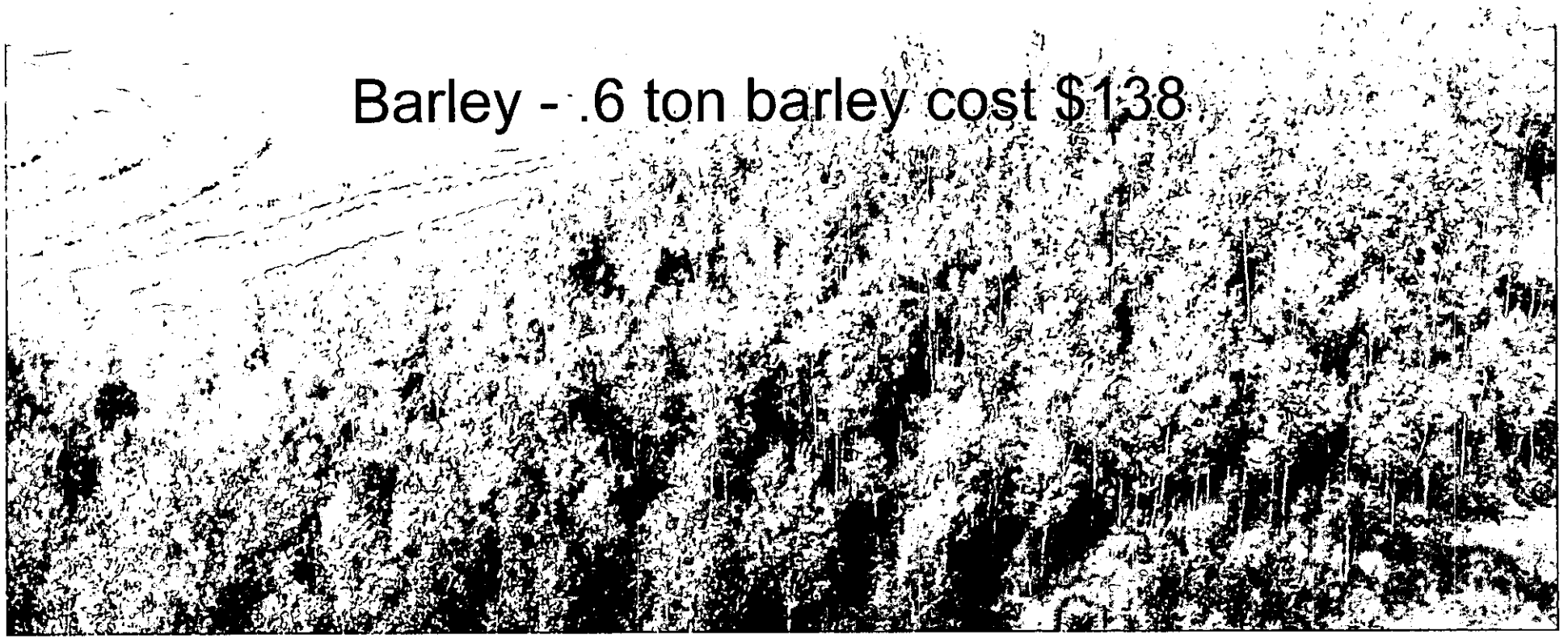
1,000,000 / 142,393 x $2.96 / .85 = $24.46 (fuel oil)

Economics

Monthly consumption

Fuel oil - 100 gal cost $296

Barley - .6 ton barley cost $138



Benefits of Barley Fuel

- 1 year harvest cycle vs. 100 years for wood and 40 million years for oil
- Most renewable resource grown in Alaska
- Low particulate levels
- Environmentally safer to ship and store
- Dollars from ag receipts stay in Alaska
- Reduce dependence on foreign oil

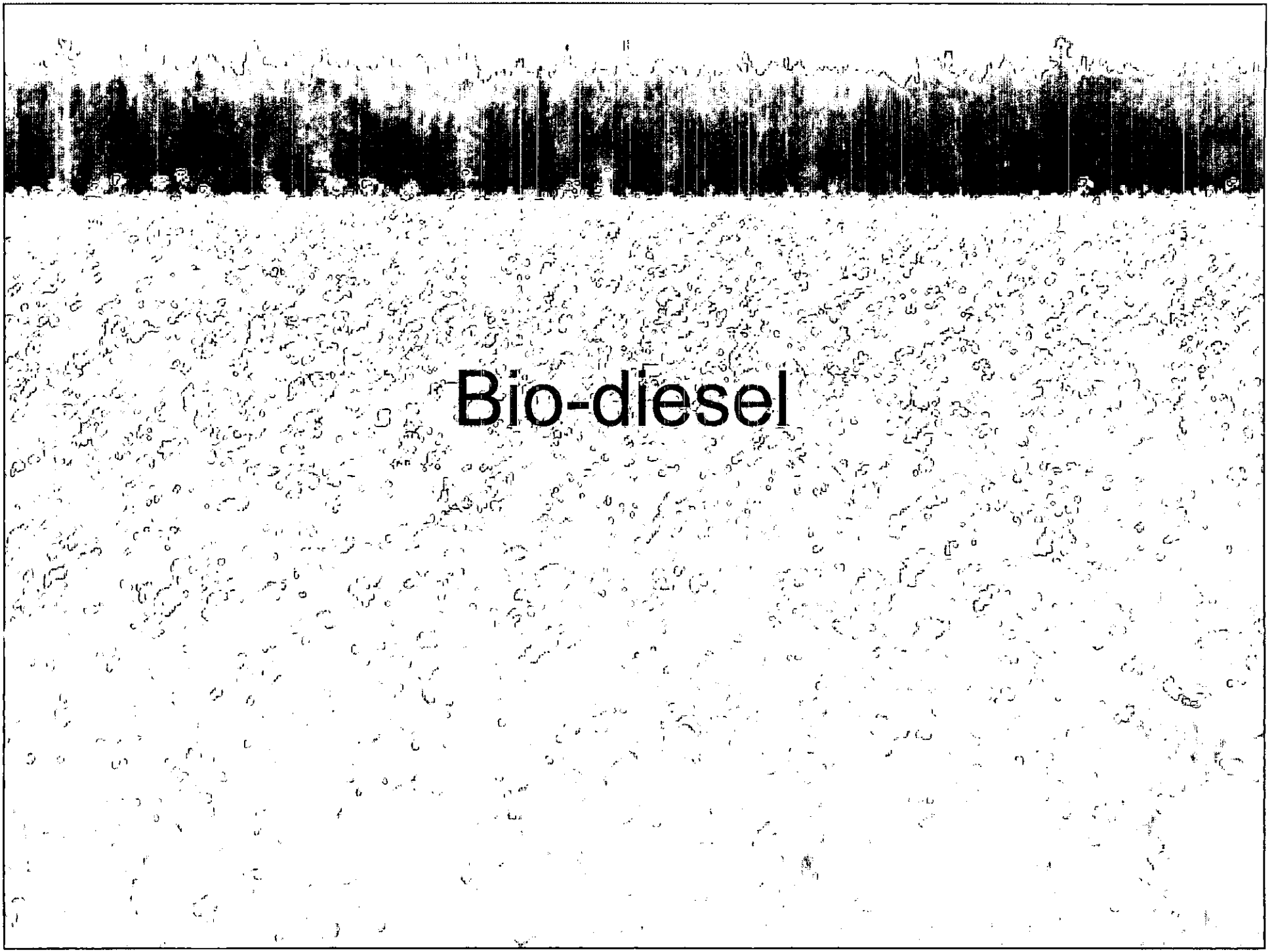
Current Production Capability

- Markets are the limiting factor to grain production in Alaska
- ~4,000 acres of barley grown in Delta last year
- 18,000 acres in Delta in < 2 years
- 25,000 acres < 3 years
- 50,000 acres is possible by 2015

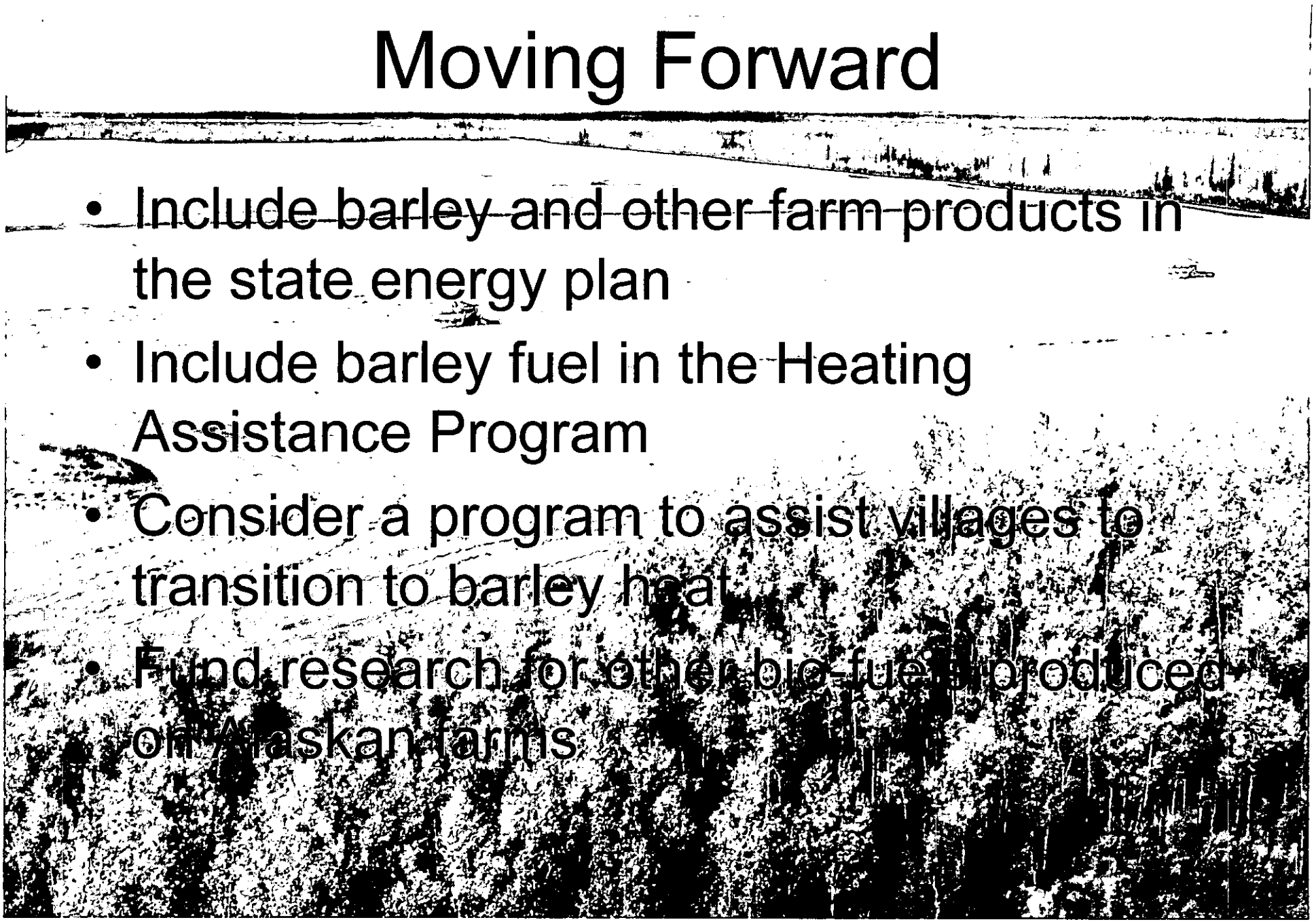
Potential Production

- 8.9-18.5 million acres in Alaska suitable for agriculture
- 500,000 acres for grain production
- 25,000 acres = ~1,000,000 bushels
- 1,000,000 bushel will heat 5,000 homes
- 500,000 acres will heat about 100,000 homes.

2022



Moving Forward



- Include barley and other farm products in the state energy plan
- Include barley fuel in the Heating Assistance Program
- Consider a program to assist villages to transition to barley heat
- Fund research for other bio-fuels produced on Alaskan farms

Questions

- Is it ethical to use feed for fuel?
- Is there be enough barley to meet feeding needs and also burn?