

FACT SHEET

AFVR-DE-PSE/Environmental Resources Branch
Alan Bennett & William Gossweiler/862-0188
31 July 1989

1. SUBJECT: Current Status of Eagle River Flats Investigation

2. FACTS:

a. Eagle River Flats, a 2500-acre wetland, is Fort Richardson's only impact area for heavy artillery training. It was established about 40 years ago and has been used continuously ever since. The area is also an important staging ground for waterfowl during spring and fall migrations.

b. In the fall of 1981 Army biologist, Alan Bennett, discovered what he considered an unusually high number of duck carcasses in a sector of the Eagle River Flats.

c. Between 1982 and 1985 a number of random ground searches were carried out on the Eagle River Flats by the Army, U.S. Fish and Wildlife Service and the Alaska Department of Fish and Game. The discovery of abnormally high numbers of dead waterfowl during these searches (total of 642) led biologists to suspect that a potentially serious problem existed.

d. Also in 1985, Fort Richardson requested and received assistance from the Army Environmental Hygiene Agency (AEHA) which analyzed water and sediment samples taken from a number of sites inside and outside the Eagle River Flats. Results from these tests, received in 1986, were inconclusive.

e. In 1987 a decision was made by all agencies previously involved in the Eagle River Flats waterfowl matter to approach the problem in a more organized and scientific manner. It was obvious that although some important information had been obtained from the prior investigations, the situation warranted a more intensive effort. An interagency task force was, therefore, established to investigate the Eagle River Flats waterfowl mortality problem. It consisted of representatives from the U.S. Fish and Wildlife Service (USFWS), U.S. Army (Army), U.S. Environmental Protection Agency (EPA), Alaska Department of Fish and Game (ADF&G), and the Alaska Department of Environmental Conservation (ADEC). The major goal of the task force is to identify the causative agent(s) and recommend mitigating actions.

f. The objectives of the task force in 1988 were to determine if a waterfowl die-off was still occurring, survey bird populations utilizing the Eagle River Flats area, and document and collect dead birds for laboratory analysis. All three of these objectives were met in 1988. Army and USFWS wildlife biologists conducted over 30 systematic ground searches along with some aerial surveys during this field season.

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g. Approximately 80 of the bird carcasses collected between 1983 and 1989 were sent to labs in the continental U.S. for analysis. Early findings ruled out disease, trauma, concussion and direct injury from fragments as causative agents. Preliminary results from recent chemical analysis have tentatively eliminated heavy metals and organic compounds such as DDT and PCBs as contributing factors. Due to limited budgets and monetary constraints, only the most routine chemical analysis could be performed to date.

h. In a continuing effort to resolve the problem, the U.S. Army Garrison, Alaska, requested technical assistance from the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA). In response, USATHAMA contracted Hunter/ESE, Inc., Denver, Colorado, to conduct a site investigation of the Eagle River Flats problem. The value of the contract was \$485,000. Hunter/ESE began work on the contract in April 1989 and a final report is due by 28 February 1990.

i. The objectives of the Eagle River Flats investigation as stated in the Hunter/ESE sampling design plan are to:

(1) Determine the site characteristics that are potentially relevant to the bird mortalities.

(2) Determine the type, concentrations, and general distribution of potential contaminants that could be related to the bird mortalities.

(3) Evaluate the potential cause(s) of bird mortalities on the Eagle River Flats.

j. Hunter/ESE initiated fieldwork on the Eagle River Flats in June 1989. A bioassay, using sediment and water from two sites, and the exposure of sentinel ducks to three regions of the Flats have been successful in identifying several "hot spots" where ducks have become sick or died (see attached map). The clinical signs exhibited by the sentinel and bioassay ducks were identical to those observed in wild ducks during previous years.

k. Sentinel duck studies will continue through 10 August 1989. Sediment and water samples will then be collected at sites where sentinel ducks become sick. The results from this sampling, along with analysis of blood and tissue samples from sick or dead ducks, will be available in late November.

3. ACTION TAKEN.

a. The Army has been an active member of the investigative task force and has contributed significantly toward the entire effort.

b. Flexibility and concern for the resources was clearly demonstrated last fall when the Army "shut down" scheduled firing activities for nearly three weeks in October, which is normally one of the most active training periods,

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while trumpeter and tundra swans gathered on the Flats before heading south. Furthermore, this cease fire will occur annually when swans are present in large concentrations in accordance with current Army policy.

c. The Garrison Commander has been providing the task force and Hunter/ESE with all information currently available regarding the chemical composition of munitions being fired into Eagle River Flats.

4. ACTION REQUIRED.

a. Ensure administration of the contract is carried out in a professional and timely manner.

b. Modify training schedules to accommodate the study.

c. Assist contractor in securing access to the targeted sample sites and provide helicopter support when needed.

d. Make every effort to ensure that any additional funding determined to be necessary or crucial to the success of the study is adequately budgeted for and requested.

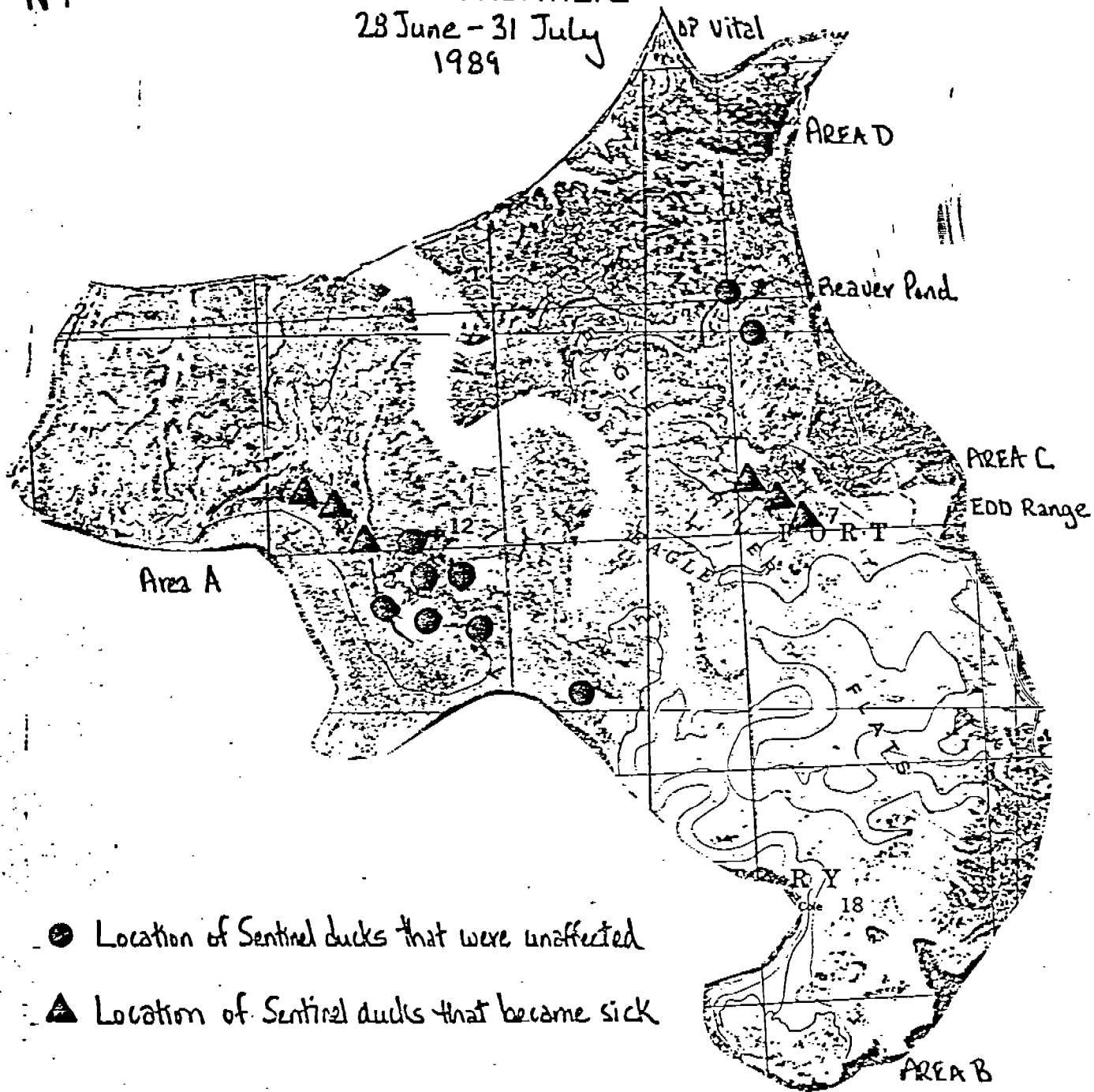
e. As a member of the interagency task force, the Army will continue to play a key role in the investigation. We, like our civilian neighbors, are committed to the conservation of natural resources and preservation of the environment.

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RUFF

PRELIMINARY RESULTS OF SENTINEL DUCK
INVESTIGATION
28 June - 31 July
1989

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- Location of Sentinel ducks that were unaffected
- ▲ Location of Sentinel ducks that became sick

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