

CITY OF BURNABY

ENVIRONMENT AND WASTE MANAGEMENT COMMITTEE

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

RE: WATERFOWL IN BURNABY LAKE AREA

RECOMMENDATION:

1. **THAT** Council receive this report for information.

R E P O R T

The Environment and Waste Management Committee, at its Open meeting held on 2001 May 08, received and adopted the attached report providing information on the number of waterfowl seen in the Burnaby Lake area in recent months. The Committee advised that there is presently no conclusive data to indicate a decrease in waterfowl. The Committee noted, however, that this matter will be closely monitored in the years ahead.

Respectfully submitted,

Councillor D. Johnston
Chair

Councillor C. Redman
Vice Chair

Councillor B. Der
Member

COPY - CITY MANAGER
- DIRECTOR ENGINEERING
- DIRECTOR PLNG. & BLDG.
- DIRECTOR PARKS, REC. & CULT. SERV.

TO: CHAIR AND MEMBERS
ENVIRONMENT AND WASTE
MANAGEMENT COMMITTEE

May 1, 2001

FROM: DIRECTOR PLANNING AND BUILDING

SUBJECT: WATERFOWL IN BURNABY LAKE AREA

PURPOSE: To provide insights into waterfowl observations at Burnaby Lake.

RECOMMENDATION:

1. **THAT** this report be forwarded to Council for information.

REPORT

1.0 BACKGROUND

At the March 12, 2001 Council Meeting, the Mayor noted that on three recent visits to Burnaby Lake, he had observed a relative lack of waterfowl. Staff were directed to prepare a report to the Environment and Waste Management Committee providing information on the number of waterfowl seen in the lake area in recent months, and provide an explanation of their presence at this time of year.

2.0 OVERVIEW OF WATERFOWL AT BURNABY LAKE

The Fraser River estuary is a critical part of the Pacific Flyway - the migratory bird route that stretches from Alaska to Central America. Since European settlement, over 75% of wetlands in the Lower Mainland have been drained and developed for agriculture and urban development. The remaining wetlands and waterbodies, such as Burnaby Lake are therefore extremely important for supporting both migratory and resident birds.

The habitats in and around Burnaby Lake support over 200 bird species, including waterfowl, shorebirds, birds of prey, and songbirds. Waterfowl commonly seen around Burnaby Lake include American coots, Common and Hooded mergansers, Canada geese, Mallard ducks, Green-winged teals, and Wood ducks. Some of these species are year-round residents (e.g. Canada geese, Mallard ducks), while others winter in the region before heading to their summer breeding grounds (e.g. Green-winged teals, Hooded mergansers).

3.0 REASONS FOR CHANGES IN POPULATION NUMBERS

City staff discussed the Mayor's observations with local naturalists, including Al Grass, George Clulow, Lynn Castagner, and Bob Gunn. While Al Grass had noticed an apparent decline in some waterfowl observations, the other naturalists had not noted any changes. George Clulow organizes

the annual Christmas Bird Count at Burnaby Lake, where local naturalists work together to document bird sightings over the Christmas period. Species populations observed in the count do vary depending on natural population cycles and weather. However, Mr. Clulow noted that this year's count showed no unusual or obviously different trends.

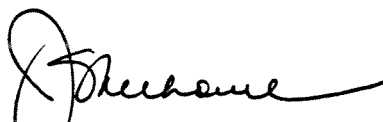
If in fact there has been a decrease in waterfowl, there are several possible explanations for this:

1. **Natural population cycles.** A decline in waterfowl could be due to natural population cycles, from factors such as increased predation, disease, climatic variations, or poor survival of young (e.g. from gull predation). A decline could also be a result of habitat loss or pollution at any part of their migratory route. While the habitat around Burnaby Lake has remained fairly constant over the past few years, populations could be impacted by changes in habitat in other areas, resulting in lack of food or nesting areas.
2. **Waterfowl spent less time at Burnaby Lake this year.** This trend could be due to the fact that this winter has been unusually warm and dry, possibly triggering a change in the bird's migratory patterns -- they may have left the lake earlier this year.
3. **Localized changes in waterfowl's use of Burnaby Lake.** Raptors such as the red-tailed hawk are predators of waterfowl, and are part of the lake's ecosystem. When raptors are hunting, waterfowl may be flushed to other parts of the lake, or may hide within the wetland vegetation. These behaviours may account for apparent changes in waterfowl populations.

4.0 CONCLUSION

Waterfowl populations are affected by numerous factors, both at Burnaby Lake and elsewhere on their migratory routes. Burnaby Lake continues to provide excellent habitat for bird species, but the habitat will change over time - either due to eutrophication or human interventions such as dredging and park use. There is presently no conclusive data that waterfowl have decreased in number at Burnaby Lake.

There is no one obvious answer for the Mayor's observation of an apparent decline in waterfowl numbers, but staff will continue to liaise with local naturalists to determine whether this observation is substantiated over the coming years.


J.S. Belhouse, Director
PLANNING AND BUILDING

RW/sla

cc: City Manager
Director Engineering
Director Parks, Recreation & Cultural Services

