### Yellow-billed Loon (Gavia adamsii)

(2 subspecies/populations; 1 within plan area)

#### Conservation Concern Category:
High Concern

#### Population Trend (PT)

- **Unknown (Delany and Scott)**

  “unknown; may have been extirpated as a breeding species from mainland Canada near Liverpool and Franklin Bays because of climatic amelioration...numbers appear stable on Colville River Delta and Seward Peninsula, increasing at Alaktak…” (North 1994)

  “the unmonitored pool of non-breeding loons masks, or delays the detection of any trend on the breeding grounds…” (USGS 2004)

  “there are not sufficient data to estimate the world of Canadian populations” and “no adequate data exists for reliable trend estimates” Barr (1997)

  Systematic aerial surveys on northwestern Victoria Island, Canada in 1992 - 1994 and in 2004 and 2005 suggest that the population has not substantially changed in the last decade (Lynne Dickson, CWS Prairie and Northern Region, unpublished data).

  “no evidence of a long term trend in Yellow-billed Loons of the 18 year Arctic Coastal Plain Survey or the 12 year North Slope Eider Survey” (Earnest 2004)

  Apparent population decline resulting from extirpation from part of range (Marshbird Workshop 2005)

**PT FACTOR SCORE=4**

#### Population Size (PS)

- **12,000-15,000 (Delany and Scott 2002: WCA 2001 (Denver workshop)—estimate 4,000-5,000 pairs=12,000-15,000 total individuals)**

  “no worldwide or continental estimates based on data; estimates of 5,000-10,000 in Alaska...frequent extralimital records in Canadian arctic suggest a large surplus nonbreeding population…” (North 1994)

  “a reasonable range-wide estimate for North American breeding grounds plus cohorts at sea is 16,000 individuals…” (USGS 2004)

  16,000 in North America; 6,024 in Alaska and 9,975 in Canada (Earnest 2004)

**PS FACTOR SCORE=3**

#### Threats to Breeding Populations (TB)

“probably habitat-limited...often sensitive to disturbance...occasionally shot by natives for food...no known contaminants problems...limited degradation of breeding habitat...subject to breaching of rivers due to permafrost decay which could be caused by vegetation disruption by oil field exploration and development…” (North 1994)

“no data on the magnitude of effects of oil-field development on direct or indirect habitat loss...potential effects…” (USGS 2004)

“two major factors impacting breeding populations: global warming and inadequacy of existing regulatory protections.” (North pers comm.)

“most of northern Alaska’s Yellow-billed Loon population (91%) occur on the National Petroleum Reserve-Alaska, virtually all of which is open or proposed to be open to development” (Earnst 2004)

“...these threats are occurring or expected to occur and may have substantial effects on YBLO in Alaska.” (draft Conservation Agreement)

**TB FACTOR SCORE=5**

#### Threats to Non-breeding Populations (TN)

“frequently drown in commercial, native subsistence and fishery research nets and traps...winter and migration habitat degraded by oil spills...” (North 1994)

“...recent satellite tracking shows that the Alaska North Slope population migrates westward to wintering ranges off the coasts of Japan, the Koreas and China...). The Yellow Sea, home to 10% of the world’s human population, is one of the world’s most threatened marine areas from pollution, reduced river flows, coastal mudflat reclamation, and overfishing.”(North pers comm.)

**TN FACTOR SCORE=4**
**Global Range** (Harrison 1983; inset=plan area range)

**Breeding Distribution (BD)**

Arctic North America (Delany and Scott 2002)

1,069,900 km² (plan area distribution; estimated from range maps)

**BD FACTOR SCORE=4**

**Non-breeding Distribution (ND)**

NE Pacific (Delany and Scott 2002)

3,590,500 km² (plan area distribution; estimated from range maps)

**ND FACTOR SCORE=4**

**Literature Cited:**


