# Sec. 4(a)(1) Determination of Endangered or Threatened Species -- LISTING FACTORS

#### (A) the present or threatened destruction, modification, or curtailment of its habitat or range;

Loss of terrestrial habitat is not an issue

Indications that prey availability and quality may have been causing the decline, through decreased juvenile survival

#### (B) overutilization for commercial, recreational, scientific, or educational purposes;

Overutilization has not been a significant contributing factor for either education or scientific purposes

#### (C) disease or predation;

Predation by orcas is well known but the quantity and significance is not known, some shark predation as well

No evidence that disease is a significant factor

#### (D) the inadequacy of existing regulatory mechanisms;

Take Prohibitions: under the ESA and MMPA (adequate)

Regulations Prohibiting Discharge of Firearms: ESA buffer zones and MMPA rules about firearms (effective)

No Approach in Buffer Zones: 3 nm around rookeries (effective)

Quotas on Incidental Takings: MMPA requirements, PBR, Strategic Stocks, Negligible impacts on incidental takings in fisheries (effective)

Critical Habitat: designated

Restrictions on fishing activities: NMFS had implemented a suit of closures to protect prey availability around important rookeries

Other Regulatory Mechanisms: Other agencies cooperate and under section 7 these mechanisms are adequate

Conclusions under regulatory mechanisms:

No final conclusion can be reached, it will be explored further through section 7 and research

### (E) other natural or manmade factors affecting its continued existence

Removals from the Western Segment: incidental take in fisheries and subsistence harvest have contributed - 'should the western population segment continue to decline, these removals may become significant'

Food Availability for the Western Population Segment: likely that both human induced changes in the ecosystem (fishing) and natural change (regime shift, climate change) resulted in adverse prey conditions

Contaminants: No evidence as a factor

## **Final Determination for Endangered Listing**

Based mostly on the status of the species - the decline and the PVA

"Although the precise cause(s) of the decline have not been determined, it is likely that the current condition is caused by a combination of the factors specified under section 4(a)(1) of the ESA." (from proposed rule)