



# Council High Level Indicators

Draft for Public Comment

June 11, 2008

# BIOLOGICAL INDICATORS

## Total Abundance

- Total adult salmon and steelhead returns to the Columbia.
- Abundance of adult fish in the Council's program.

## ESUs

- Trends in abundance and productivity for each ESU, especially listed ESUs.

# BIOLOGICAL INDICATORS,

## Continued

### Life-cycle mortality

- Life stage survival estimates for representative populations of Chinook and steelhead.

### Harvest and Hatcheries

- Harvest number and rate.
- Harvest of hatchery fish in the Council's Program.
- Relative fitness of supplemented stocks from hatcheries in the Council's Program.

# BIOLOGICAL INDICATORS, Continued

## Hydrosystem Survival

- Survival rates through the hydrosystem for adult and juvenile fish passing in-river and barged.

## Habitat

- Productivity of wild fish in select watersheds targeted by Council program.
- Alternatives for consideration: number of wild spawners or juvenile growth rates

## Wildlife

- Wildlife habitat units by dam: lost and acquired

# IMPLEMENTATION INDICATORS

## Passage Barriers

- Additional habitat made accessible.

## Water.

- Additional water available for fish, anadromous and resident.

## Land.

- Additional land acquired or leased for fish habitat.

## Improvement.

- Riparian habitat improved.

# IMPLEMENTATION INDICATORS, Continued Screens

- Diversion screens installed.

## Predators

- Number of juvenile salmon saved from all predators.

## Watershed Health Indicator

- Number and percentage of targeted watersheds that provide adequate fish habitat.

# Next Steps

- Precisely define indicators.
- Identify sources of data and reporting process.
- Incorporate indicators in reports to Congress and Governors as available.
- Develop management indicators.