

Inflow Projections and Variability



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- ◆ **Why evaluate range of inflows?**
- ◆ **Range of No Action Alternative Flows**
- ◆ **Causes of Variability**
- ◆ **Potential Range of Average Annual Flows**

Why Evaluate Range of Inflows?

◆ **Sizing of facilities and habitat**

- ☒ Pipelines and canals

- ☒ Example: A 15-foot diameter pipeline may be needed for each 1,000 cubic feet/second of flow

- ☒ Treatment wetlands or treatment plants

- ☒ Irrigated areas of habitat and air quality management

◆ **Alternatives will be designed to accommodate variability over 75 years**

Potential Range of No Action Alternative Flows

◆ **The No Action Alternative**

- ☒ Until 2017 - Mitigation Water will be provided to the Salton Sea

- ☒ Projected flows from 1,000,000 to 1,300,000 acre-feet

- ☒ After 2017 - flows range from 800,000 acre-feet to 1,000,000 acre-feet

- ☒ Average over 75 years = 984,000 acre-feet

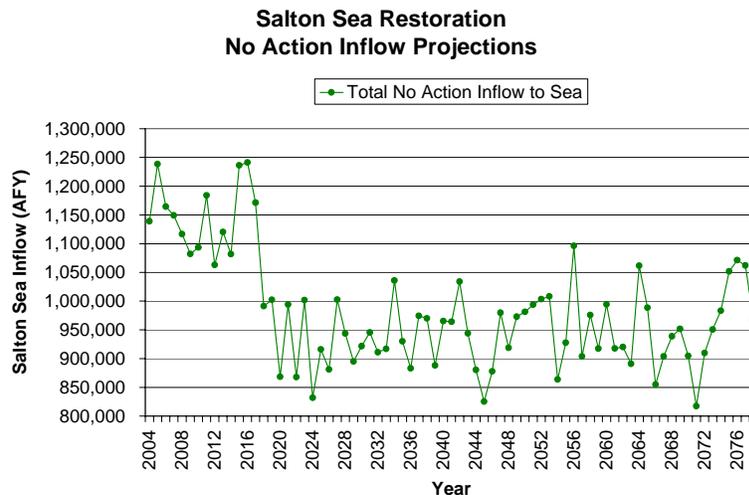
- ☒ Average after 2017 = 950,000 acre-feet

◆ **Flow Fluctuations**

- ☒ Up to 100,000 acre-feet between years

- ☒ +/- 20 percent between months in a year

Projected Variability in the No Action Alternative Flows



Causes of Variability

- ◆ **Changes in agricultural practices**
- ◆ **Conversion of agricultural lands to M&I**
 - ☒ May or may not change "water use/acre"
- ◆ **Reduction of inflows from Mexico**
 - ☒ Treated wastewater flows to Gulf of California
 - ☒ Conversion of agricultural lands to M&I uses
 - ☒ Variability of Colorado River surplus flows to Mexico
- ◆ **Extreme wet and dry years in the Salton Sea Basin and in the Colorado River Basin**

Potential Range of Inflows based on Future Actions

- ◆ **Difficult to predict or quantify**
- ◆ **Could assume +/- 20 Percent Annual Variability:**
 - ☒ Range of Average Annual Flows
(post-2017) = 800,000 - 1,000,000 acre-feet
 - ☒ Calculated Range of Average Annual Flows =
640,000 - 1,200,000 acre-feet
- ◆ **Include +/- 20 Percent Monthly Variability**

Calculated Values will provide Range of Average Annual Flows

Flows in acre-feet	Flows in cubic feet/sec	Flows in million gallons/day
640,000	884	571
800,000	1,105	714
1,000,000	1,381	893
1,200,000	1,658	1,071