

Water Quality Problem Statements

The water quality in the Delta must be managed to meet the beneficial uses of the Delta water. At times, drinking water quality standards have not been met and contaminants have been found in some fish and wildlife species triggering public health warnings.

The major problems can be categorized as follows:

- A. Water quality is often inadequate or is perceived as inadequate for **Drinking Water needs**.
 - 1. Certain water quality parameters present in Delta water have or may have **Adverse Human Health Effects**.
 - 2. Certain water quality parameters present in Delta water have or may have **Adverse Aesthetic Effects**, in particular concerning taste, odor, and appearance.
 - 3. Levels of certain water quality contaminants may increase the **Cost of Treating** Delta water in order to meet the existing drinking water quality standards.
 - 4. **Fluctuating Raw Water Quality** increases the difficulty of water treatment plant operations.
 - 5. **Stricter Future Regulations** may be difficult to meet with the existing treatment techniques and raw water quality.

- B. Delta water quality is often inadequate for **Agricultural needs**.
 - 1. Certain water quality contaminants may reduce **Agricultural Economic Productivity** by reducing crop productivity, the choice of suitable crops, or by increasing costs.
 - 2. Certain water quality contaminants such as sediments may result in **Operational Difficulties**.

- C. Delta water quality is often inadequate for some **Industrial needs**.
 - 1. Certain water quality contaminants may increase **Cost of Treatment and Production** for industrial users or even prevent user from discharging effluent.
 - 2. **Fluctuation of Raw Water Quality** increases the difficulty of plant operation for industrial users.

- D. Delta water quality is often inadequate for water **Recreational needs**.
 - 1. Certain water quality contaminants may pose an **Increased Health Risk** to recreationists.
 - a. **Body Contact Recreational Activities** in the Delta may increase the risk of exposure to contaminants.
 - b. **Consuming Fish** caught in the Delta may increase the risk of exposure to contaminants.
 - 2. Certain water quality parameters may adversely impact **Aesthetic Conditions** in the Delta, in particular taste, odor and appearance.

- E. Water quality is often inadequate for **Environmental** needs for the Bay-Delta system. (see Ecosystem Quality)