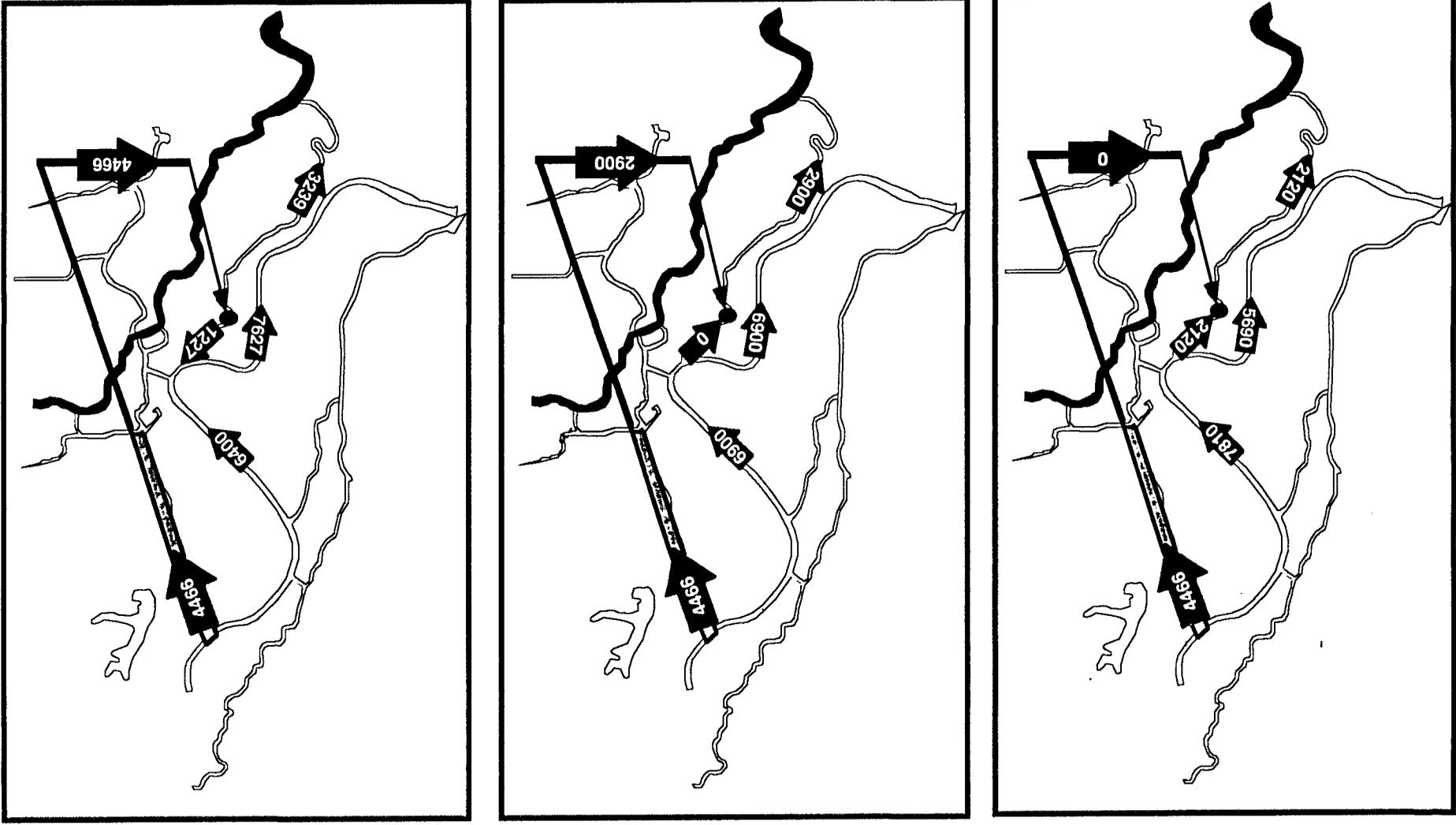


# Georgiana Slough Hydraulic Barrier

Purpose: Reduce the amount of fish moving to Georgiana Slough from Sacramento River

How: Transfer a portion of flow from Hood to Georgiana Slough. This will increase the head in Georgiana Slough, thus reducing the flow from Sacramento River into Georgiana

# Georgiana Slough Hydraulic Barrier



84% Positive Flow in Georgiana Slough

48% Positive Flow in Georgiana Slough

28% Positive Flow in Georgiana Slough

APRIL 1989 HYDROLOGY

D-002048

D-002048

## HYDRAULIC BARRIER in GEORGIANA SLOUGH

	BASE	PLAN 1	PLAN 2
<b>High Flow Conditions</b>  <b>Apr-82</b>	<b>Q = 0</b>  <b>AF = 6245</b>  <b>P = 100</b>	<b>Q = 7700</b>  <b>AF = 0</b>  <b>P = 48</b>	<b>Qm = 9916</b>  <b>AF = -1850</b>  <b>P = 0</b>
<b>Average Flow Conditions</b>  <b>Apr-89</b>	<b>Q = 0</b>  <b>AF = 2120</b>  <b>P = 84</b>	<b>Q = 2900</b>  <b>AF = 0</b>  <b>P = 48</b>	<b>Qm = 4466</b>  <b>AF = -1227</b>  <b>P = 28</b>
<b>Low Flow Conditions</b>  <b>Apr-90</b>	<b>Q = 0</b>  <b>AF = 1348</b>  <b>P = ?</b>	<b>Q = 2100</b>  <b>AF = 0</b>  <b>P = 56</b>	<b>Qm = 3269</b>  <b>AF = -784</b>  <b>P = 40</b>

**Plan 1 = Average Flow in upper Georgiana Slough is Zero**

**Plan 2 = Maximum diversion to Georgiana Slough**

**Q = Flow pumped from Snodgrass Slough to Georgiana Slough**

**Qm= Maximum possible which is equal to the Hood diversion**

**AF = Average Flow along Georgiana Flow**

**P = Percent time where positive AF exists**

# Water Quality Impacts

Comparison of EC Values with and without the Hydraulic Barrier

	BASE	PLAN2
Terminous	164	184
Jersey Point	190	190
Old R. at Rock Slough	284	288
CCFB	360	362

Base = No Hydraulic Barrier

Plan 2 Transfer the entire Hood diversion to Georgiana Slough

April 1990 - Dry Flow Condition

NET DELTA OUTFLOW - 9,855 cfs

QWEST - 2,955 cfs

Attempt to Create a  
Hydraulic Barrier in Delta  
Cross Channel failed,  
because Delta Cross Channel  
is much wider than  
Georgiana Slough