Winter-Run Chinook

Provide seasonal floodplain habitat for winter-run Chinook salmon.

Spring-Run Chinook

Provide seasonal floodplain habitat for spring-run Chinook salmon.

Fall-Run Chinook

Provide seasonal floodplain habitat for fall-run Chinook salmon.

Late Fall-Run Chinook

Provide seasonal floodplain habitat for young-of-year late fall-run Chinook salmon.

Steelhead

Provide seasonal floodplain habitat for steelhead (floodplain rearing habitat benefits for steelhead are unknown).

Splittail

Provide seasonal floodplain habitat for Splittail spawning and rearing.

Adult Fish Passage

Improve passage for covered fish species, particularly adult salmonids and sturgeon through notch or gate in Fremont Weir and additional fish passage structures.

Agriculture

(conservation easements or fee-title may be required for all inundation on agricultural land)

Harvest is usually finished during this time period.

No impacts on agriculture during this period. Willows and marsh plants must be managed to allow for subsequent crop planting.

A study by UC Davis for Yolo County indicates that inundation during this period, causes zero to some yield impacts on affected lands.

A study by UC Davis for Yolo County indicates that inundation during this period causes some to high yield impacts on affected lands.

A study by UC Davis for Yolo County indicates that inundation during this period could be too late to allow successful land preparation and planting by June 10, the reported last possible day to plant (with high yield impacts).

Waterbird and Wetland Management

Seasonal wetland flooding begins early September. Flood-up by late November. Flooded rice fields as early as possible after harvest.

Continue to flood new wetland habitat and maintain optimal water levels for foraging (<30 cm). Continue flooding rice fields, harvest completed.

Circulate water in wetlands and rice fields to maintain optimal levels for foraging (<30 centimeters). Water levels in most rice fields typically are drawn down in late February in anticipation of field preparation. Peak winter duck populations in the bypass in February.

Drawdown of wetland fields throughout this time period depending on target seed plants. Private fields start draining in early March and the YBWA starts draining 2-4 weeks later. Prolonged delays on draw down dates may result in less seed production and undesirable vegetation. Duck nesting in adjacent uplands begins during the latter half of this time period.

Peak nesting period for resident ducks (uplands) and shorebirds (wetlands/rice). Maintain some permanent wetlands for brood/chick habitat. Rice fields in the second half of this time period provide forage and habitat for breeding waterbirds.

Maintain some wetlands for breeding waterbirds and broods. Water-level nesting increases in rice fields and brood use continues until end of July. Follow rice fields (YBWA) flooded for shorebirds (July/August).

Potential Operations Pattern for Fremont Weir Gated Channel

If Yolo Bypass has not previously flooded (YBY Gauge >3,000 cfs)

Operations Concept: When Sacramento River Conditions Allow

No Fremont weir operations except to provide fish passage (up to 500 cfs, if appropriate)

Initiate Fremont Weir flows up to 6,000 cfs (only if harvest is complete or if westside tributaries are already flooding)

Initiate Fremont Weir flows up to 6,000 cfs to provide seasonal floodplain habitat.

Initiate Fremont Weir flows up to 8,000 cfs to provide seasonal floodplain habitat. Initiate ramping down flows starting March 24 to fish passage flow levels and continue ramping down to fish passage levels through April 10, unless the Yolo Bypass floods.

No Fremont Weir notch operations except to provide fish passage (up to 500 cfs, if appropriate).

If natural flood event lasting for 30 days has not occurred within 5–7 years during March 1–May 15, prescribe an inundation regime to meet or exceed a minimum duration of 30 days with small flooding footprint.

No Fremont Weir operations except to provide fish passage (up to 500 cfs, if appropriate).

If natural flood event lasting for 30 days has not occurred within 5–7 years during March 1–May 15, prescribe an inundation regime to meet or exceed a minimum duration of 30 days with small flooding footprint.

Footprint Targets

Out of concern flows not created by project (zero or negligible).

Small inundation footprint (operations would target 7,000-10,000 acres)

Large inundation footprint (operations would target 17,000 acres). Operate the notch prior to, during, and following natural flooding events (Fremont Weir overtopping or other tributary inputs) to prolong duration and provide continuity between natural flooding events. Ramp flows down to small footprint by March 1.