

Yolo Bypass ROA Update

Presentation to BDCP Steering Committee
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Existing Uses

- Flood Management
- Agriculture
- Private and Public Waterfowl Management
- Recreation including Outdoor Education



Delta Habitat Conservation & Conveyance Program



Photo Credit: Dave Feliz



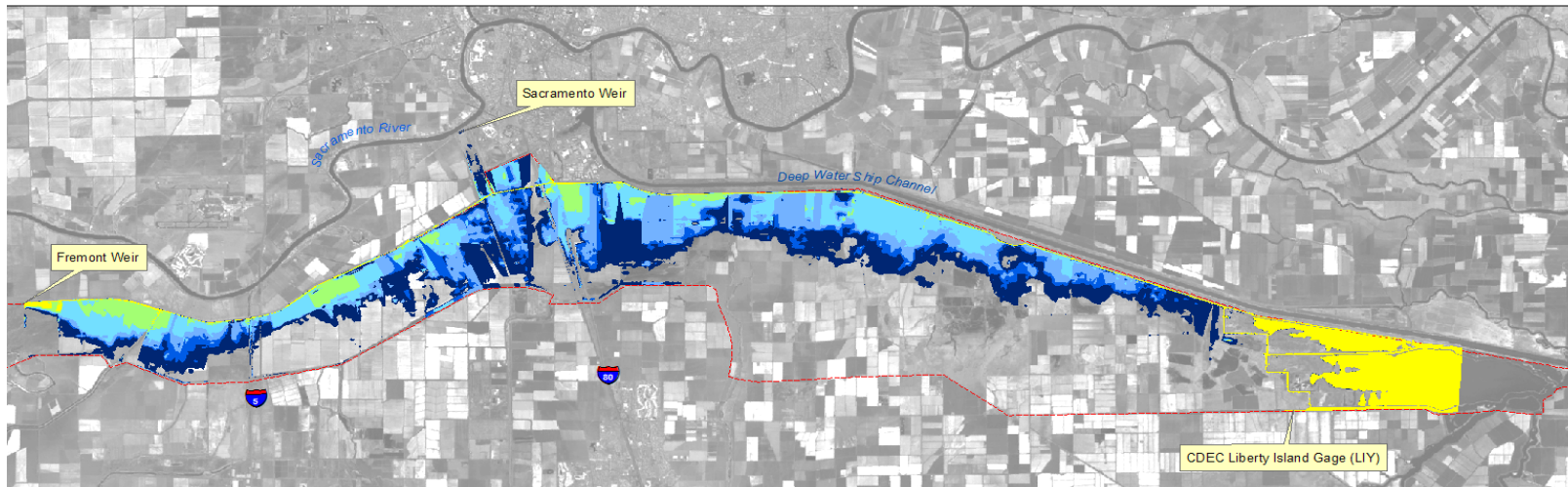
Proposal

- ***Continued***
 - Flood Protection
 - Agriculture
 - Waterfowl & Wildlife Management
 - Recreation
- **Improved** fish habitat and fish passage

Controlled alteration of hydrology

More frequent events Dec-April 15

Extension of short events to last 30-45 days



Historical Hydrology

Some flooding in 70% of years

Occurs Intermittently Oct-June

Most typically Dec-April

Event duration <1 wk to 2 months or more

Gated Channel Scenario

Gates Control Additional Inflow



Open to facilitate 30-45 days' flooding
Eastern ~1/3 of Yolo Bypass Only

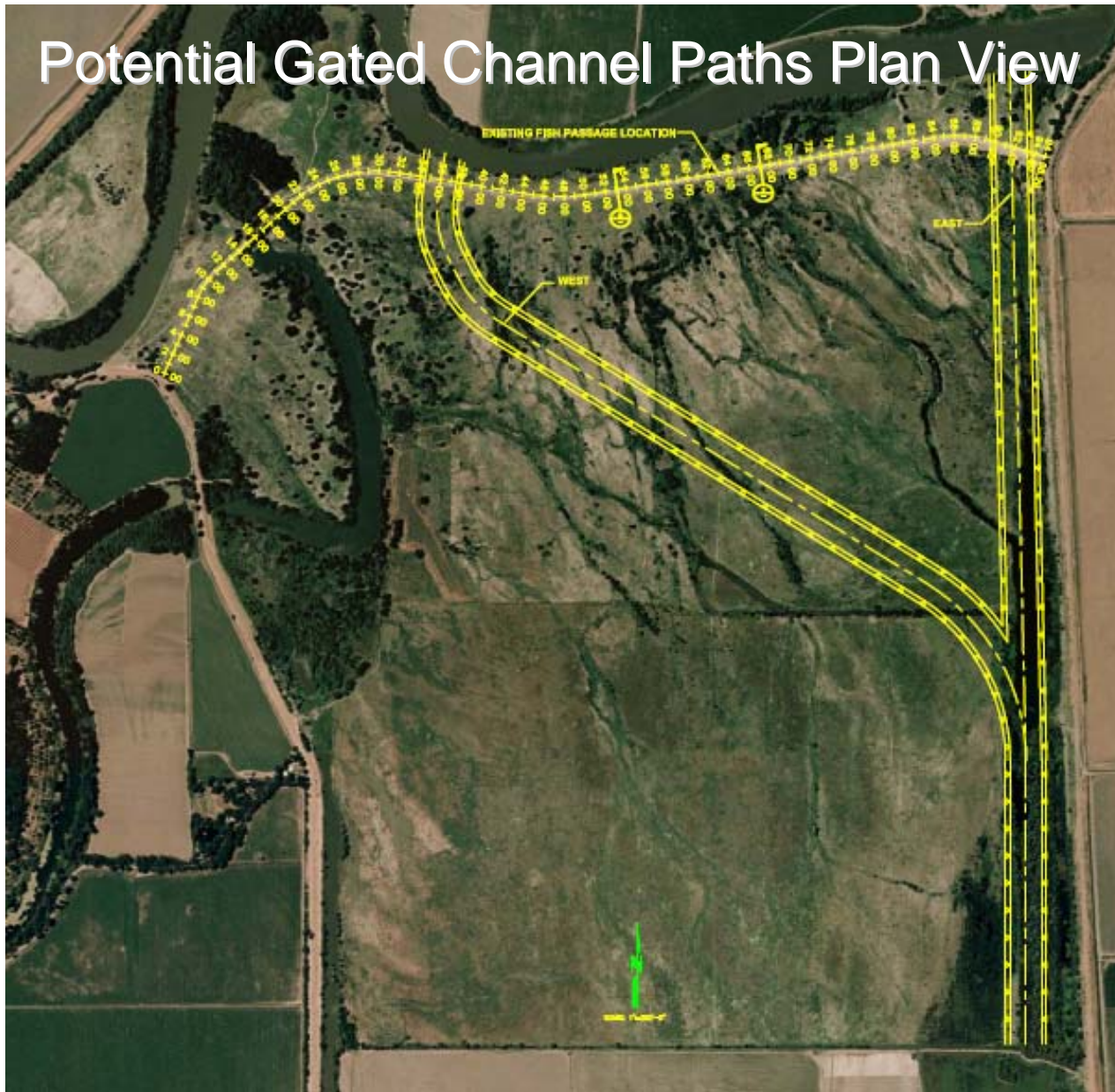
Inundation Gates Closed



Weir function not altered
Land use not affected

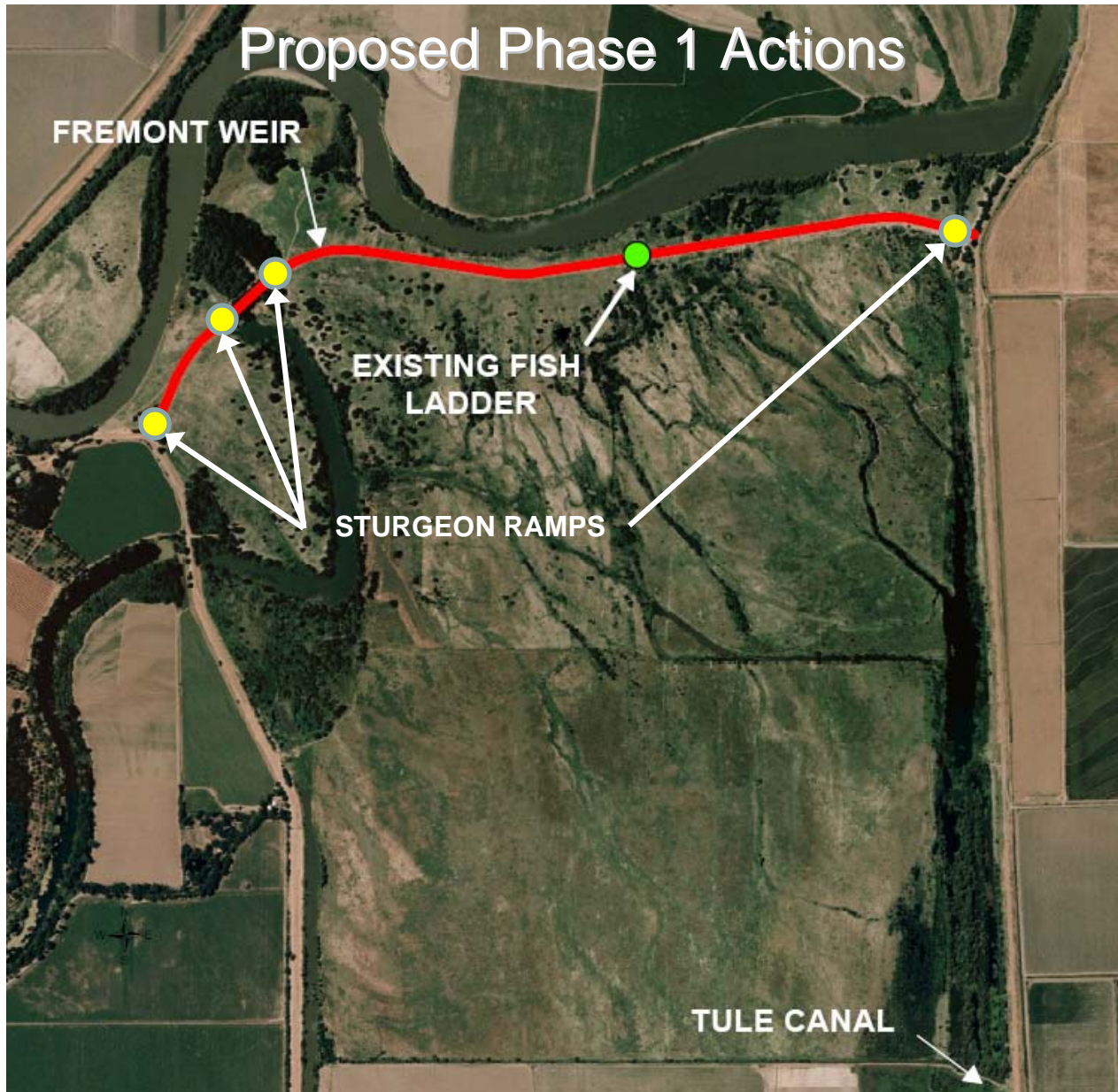


Potential Gated Channel Paths Plan View





Proposed Phase 1 Actions





CURRENT FISH PASSAGE



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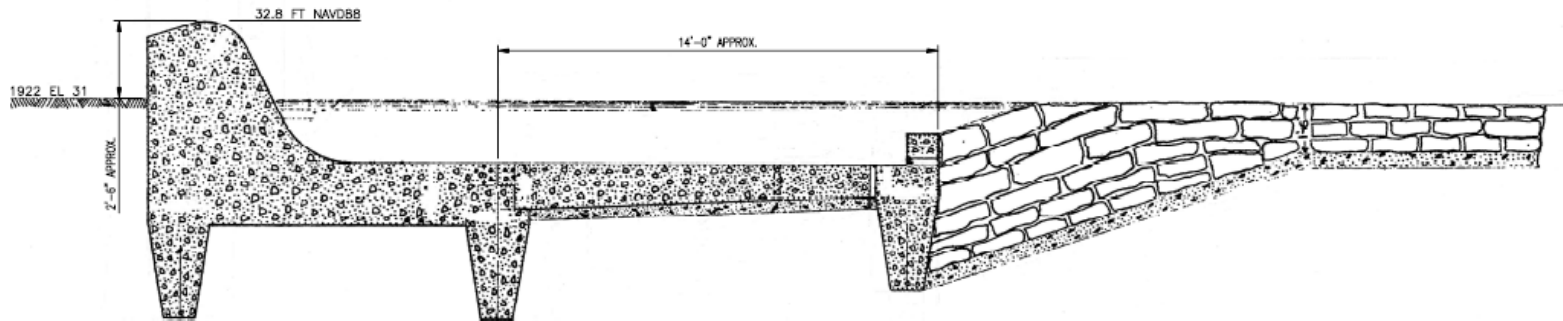




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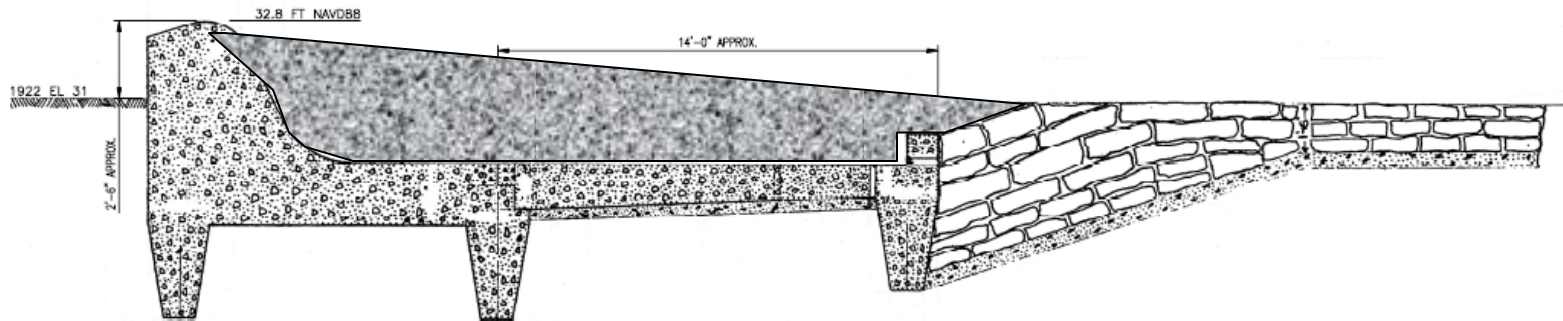
Typical Fremont Weir Cross Section



CROSS SECTION FOR
CREST HEIGHT OF 2'-6"
CROSS SECTION FROM
1922 AS CONSTRUCTED



Fremont Weir Cross Section with Proposed Ramp



**CROSS SECTION FOR
CREST HEIGHT OF 2'-6"**
CROSS SECTION FROM
1922 AS CONSTRUCTED



Presence of Fish Species in Yolo Bypass north of Liberty Island

updated 03/27/2009

Yolo Bypass Monitoring '98-'08

Probable Presence: DFG, FWS data and published literature
 Documented Presence: Yolo Bypass Monitoring Data

Solid color
 Bordered

Documented presence, but definitive Run classification undeterminable due to timing overlap, potentially could be one of several runs.

Fish Species	Life Stage	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
Fall-Run Chinook salmon	adult migration												
	peak adult migration												
Late Fall-Run Chinook salmon	adult migration												
	peak adult migration												
Winter-Run Chinook salmon	adult migration												
	peak adult migration												
Spring-Run Chinook salmon	adult migration												
	peak adult migration												
Juvenile Chinook salmon, all races	fry/parr < 70mm												
	smolt ≥ 70mm												
Steelhead trout	adult migration												
	juvenile emigration												
White sturgeon	adult												
	juvenile												
Green sturgeon	adult												
	juvenile												
Sacramento splittail	1 adult												
	2 juvenile												
Pacific lamprey	3 adult												
	4 juvenile												
Delta smelt	adult												
	juvenile												
Longfin smelt	adult												
	juvenile												

Note: Our Rotary Screw Trap does not routinely begin sampling until early Jan (1 yr was started mid Dec) so species such as DSM/LFS/PL or juvenile CHN may be present before then. For the months of July-August we do not run our FYKE or Rotary Screw Trap.

* Size chart for juvenile salmon was developed for river systems, not floodplains, and due to increased growth rate on floodplains (Sommer 2001b) size criteria alone is not fully applicable and Run determination is at times questionable without DNA verification.

¹ Adult splittail have been caught as early as Oct. 5, and as late as April 14. The trend is a migration pulse approximately 1 week following a flow pulse.

² Juvenile splittail have been caught as late as July 27, but the majority are sampled in April through June.

³ To date we have caught a single adult Pacific lamprey, but Moyle has reported spawning adults in Putah Creek in April/May.

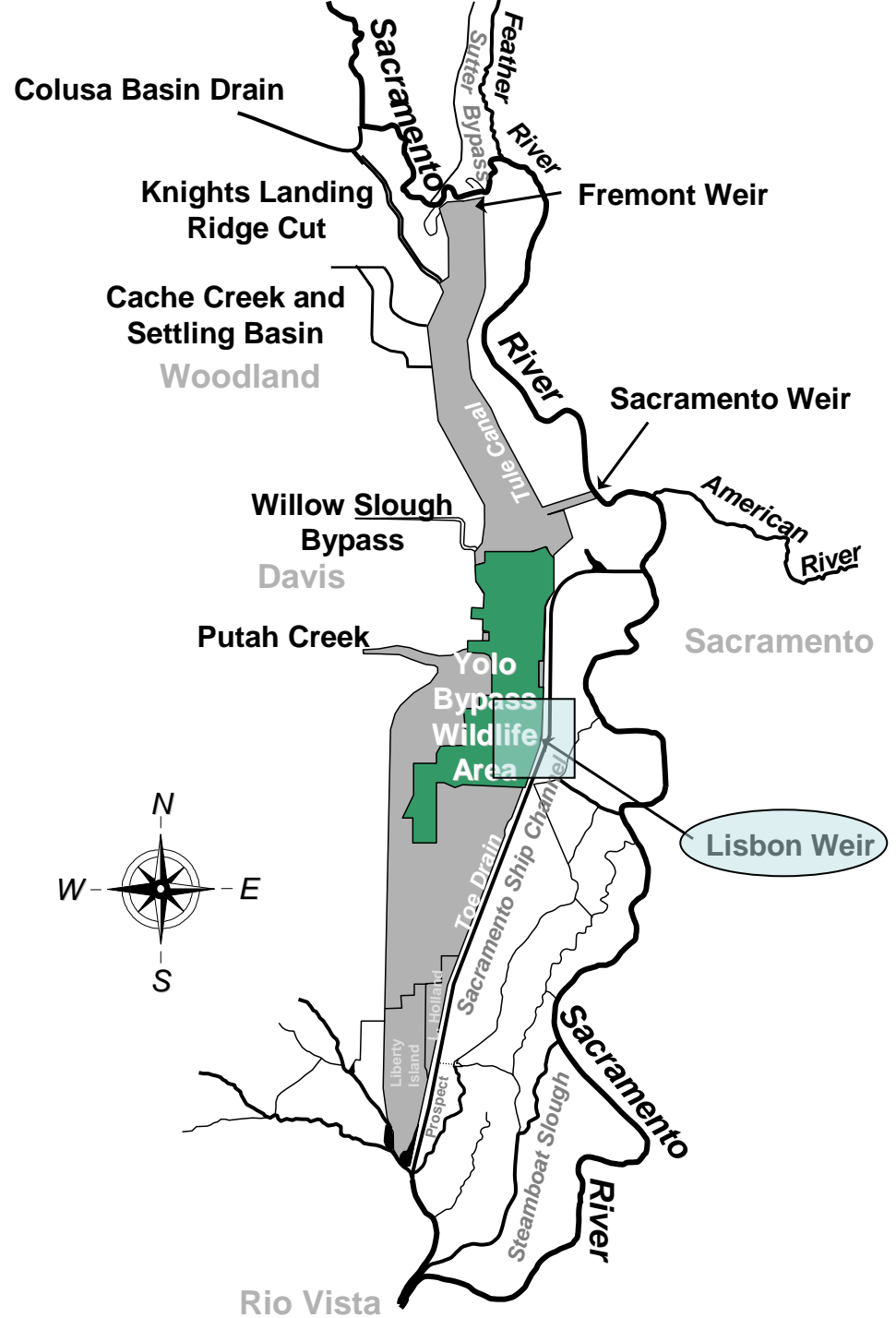
⁴ Juvenile lamprey caught during the winter period are likely washed out during high flow events.



Agricultural Structures in the Tule Canal

An aerial photograph showing a dirt road crossing a large, shallow pond. The road is made of compacted earth and gravel, with a stone-lined edge on the left side. The pond's water is a murky, yellowish-brown color. In the background, there is a large, rectangular field with a distinct grid pattern, likely a solar panel array. Various trees and shrubs are scattered around the pond and the road. The overall scene depicts a rural agricultural or utility site.

Earthen Agricultural Crossing

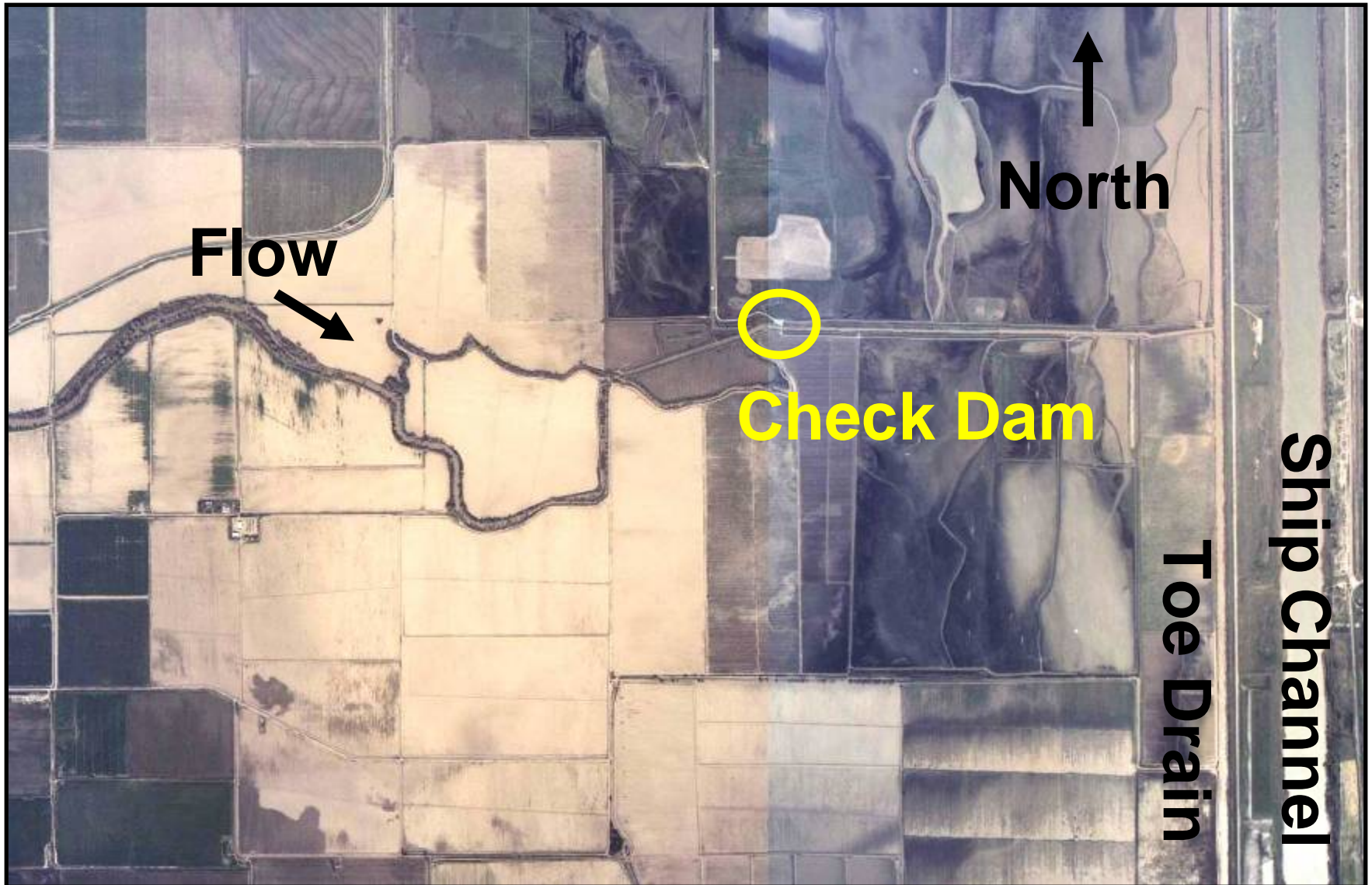




Lisbon Weir



South Fork Putah Creek





Los Rios Check Dam

A landscape photograph showing a wide river with a dam in the middle ground. The foreground is filled with tall, dry reeds. The sky is blue with large, white, fluffy clouds. The text "Questions?" is overlaid in the center in a bold, yellow font.

Questions?