

Yolo Bypass Salmonid Habitat Restoration & Fish Passage

Environmental Impact Statement
Environmental Impact Report

August 16, 2018



State of California
Department of Water Resources



U.S. Department of the Interior
Bureau of Reclamation

Stakeholder Involvement History

- **Public Scoping (2013)**
Provided input on alternatives and the scope of environmental analysis
- **Yolo Bypass Fisheries Enhancement Planning Team (2012 to 2015)**
Identified initial components and alternatives
- **Value Planning (August 2014)**
Identified importance of integrating restoration and flood planning efforts
Recommended inclusion of water control structures to increase inundation area and duration

Stakeholder Involvement History

- **Yolo Bypass Biological Opinion Working Group**
 - Refined alternatives
 - Provided input on analysis
- **Public Workshop (June 2017)**
- **Cooperating Agency Review (2017)**
- **Public Draft Review and Comment (2018)**
 - Public meetings
 - Input on Draft EIS/EIR
- **Access to all technical documents (within DWR and Reclamation's authority) supporting the environmental analysis**

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Changes made based on stakeholder feedback

- **Coordination with State and Regional flood management planning**
- **Use of tools identified and/or developed by stakeholders**
 - Bypass Production Model (economic effects)
 - TRUEMET and GIS analysis (waterfowl effects)
- **Addition of three new alternatives**
 - Alternative 4: lower flow into the Bypass, inclusion of two water control structures
 - Alternative 5: lower flow into the Bypass, use of multiple gate structures
 - Alternative 6: higher flow into the Bypass through larger gated notch

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Changes made based on stakeholder feedback

- **Changes to operational window of alternatives**
Original dates considered included October 1 – April 30
Changed to November 1 – March 7 or March 15 to avoid impacts
- **Clarifications and improvements to analysis of multiple impacts, including more substantive changes regarding impacts to**
 - Grazing lands
 - Education opportunities
 - Recreation
 - Waterfowl

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EIS/EIR Alternatives

- **Alternative 1 – East Side Small Gated Notch**
- **Alternative 2 – Central Small Gated Notch**
- **Alternative 3 – West Side Small Gated Notch**
- **Alternative 4 – Managed Flow**
- **Alternative 5 – Multiple Gates**
- **Alternative 6 – Large Gated Notch**

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Range of Alternatives

Feature	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Notch Location	Eastern Fremont	Central Fremont	Western Fremont	Western Fremont	Central Fremont (Multiple)	Western Fremont
Maximum Notch Flow	6,000 cfs	6,000 cfs	6,000 cfs	3,000 cfs	3,400 cfs	12,000 cfs
Notch Invert Elevation	14	14.8	16.1	16.1	Multiple	16.1
Channel Bottom Widths	30' bottom, 30' bench	50' bottom, 30' bench	50' bottom, 30' bench	50' bottom, 30' bench	West: 40' 30' bench; Center: 90'; East: 90'	200' bottom
N. Bypass Water Control Structure?	No	No	No	Yes	Swanston 2° channels (program level)	No
Supplemental Fish Passage	West	West	East	East	West	East

Operations Alternatives 1, 2, and 3

- Allow flow up to 6,000 cfs through gated notch
- Rising river levels – notch opens when river level exceeds 15' at eastern location
 - When gate first opens, about 130 cfs would enter notch
 - As river rises, two smaller gates would start closing to maintain maximum flow of 6,000 cfs
- During overtopping gates would remain in last position
- Falling river levels notch closes when river level falls below 14' invert
- Gated notch could operate between November 1 and March 15

Operations Alternative 4

- Operate notch to limit flow to 3,000 cfs
- Rising river levels – notch opens when river level exceeds 17.1' at western location
 - As river rises, two smaller gates would start closing to maintain maximum flow of 3,000 cfs
- During overtopping gates would remain in last position
- Falling river levels – notch closes when river level falls below 16.1' invert
- Gated notch could operate between November 1 and March 7 or March 15

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Water Control Structure Operations Alternative 4

- Water control structures in the Tule Canal are raised when the notch is open to maintain water upstream of structures
 - Northern water control structure: 21.5'
 - Southern water control structure: 17.5'
- Bypass facilities allow fish passage at water control structures
- Water control structures lowered after March 15

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Operations Alternative 5

- Multiple gated notches that operate together (shallower gates open as the river rises and deeper gates close)
- Operate notch to limit flow to about 3,400 cfs (combined)
- Rising river levels – lowest notch opens when river level exceeds 15' at eastern location
- Falling river levels – lowest notch closes when river level falls below 14' invert
- Gated notches could operate between November 1 and March 15

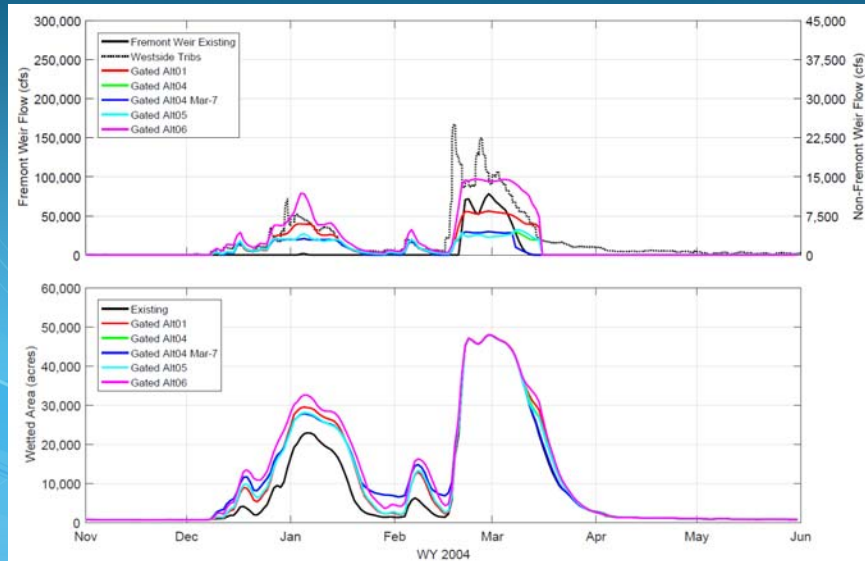
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Operations Alternative 6

- Operate notch to limit flow to 12,000 cfs
- Rising river levels – notch opens when river level exceeds 17.1' at western location
 - As river rises, three gates would start closing to maintain maximum flow of 12,000 cfs
- Falling river levels – notch closes when river level falls below 16.1' at western location
- Gated notch could operate between November 1 and March 15

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Flow through Notch in addition to Existing Overtopping Events



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Comments on EIS/EIR

- 39 comment letters, 7 commenters during public meetings
- Comments from Federal agencies, Tribal governments, State agencies, local agencies, non governmental organizations, and members of the public
- Responding to comments is underway and not yet complete

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Master Responses

- Initial responses include master responses for recurring comments
 - Does the project benefit the target fish?
 - How are the Science Review Panel findings incorporated into the process?
 - Can the dates of the inundation period change?
 - How will financial impacts to landowners and other users of land be addressed?

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Comment Responses that are Underway

- Recreation impacts under CEQA
- Recreation/education mitigation
- Impacts of fish passage flow after March 15

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Process to Reach Record of Decision/Notice of Determination

- Respond to public comments on EIS/EIR and make appropriate changes to document
- Release Final EIS/EIR, which will include a preferred alternative and environmentally preferred alternative
- After thirty days, the Director of DWR and the Regional Director for Reclamation will make decision on project approval based on the EIS/EIR and the entire record
- The decision will balance economic, environmental, legal, social, and technological factors
- The project approvals will be set forth in the Record of Decision (Reclamation) and Notice of Determination (DWR)

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Process after ROD/NOD

- Key topic for next meeting with this group (October/November timeframe)
- Next couple of years will focus on engineering, permitting, and real estate actions to implement the selected alternative
- Reclamation and DWR are developing a plan to continue stakeholder involvement during this period
- Reclamation and DWR will continue to work with NMFS and the FETT to develop metrics the project will target
- Following implementation, the team will focus on monitoring and adaptive management actions
- Reclamation and DWR will develop a plan to continue stakeholder involvement during the post-implementation period

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