**YOLO BYPASS SALMONID HABITAT RESTORATION &** FISH PASSAGE (BIG NOTCH) PROJECT **INFORMATION IN SUPPORT OF RESOLUTIONS OF NECESSITY** 

April 20, 2022





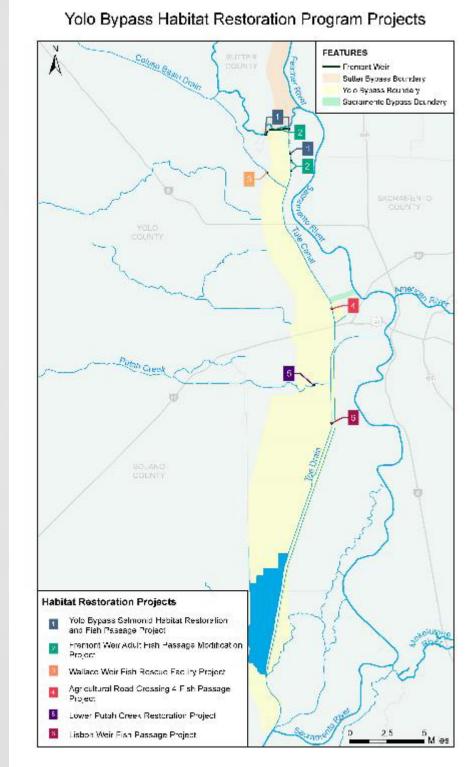
Liz Vasquez, PM Rachel Taylor, Attorney

### Project Necessity (CCP § 1245.230(c)(1)) and Public Use (CCP § 1245.230(a))

The Project will enhance floodplain rearing habitat and fish passage in the Yolo Bypass and is required for the long-term coordinated operations of the State Water Project and Central Valley Project compliance.

- 2019 National Marine Fisheries Service (NMFS) Biological Opinion (BO)
- 2020 California Department of Fish and Wildlife (CDFW) Incidental Take Permit (ITP)





### **Project Description**

- Fremont Weir
  - Originally constructed 1924
  - 1.8-mile-long concrete passive weir and apron
  - State Plan of Flood Control facility
  - Diverts flood water into the Yolo Bypass
  - Disconnects the Sacramento River and the floodplain during fish migration periods
- Proposed BNP includes excavated channels and a gated headworks that reintroduce the connection for fisheries purposes





## Project Location



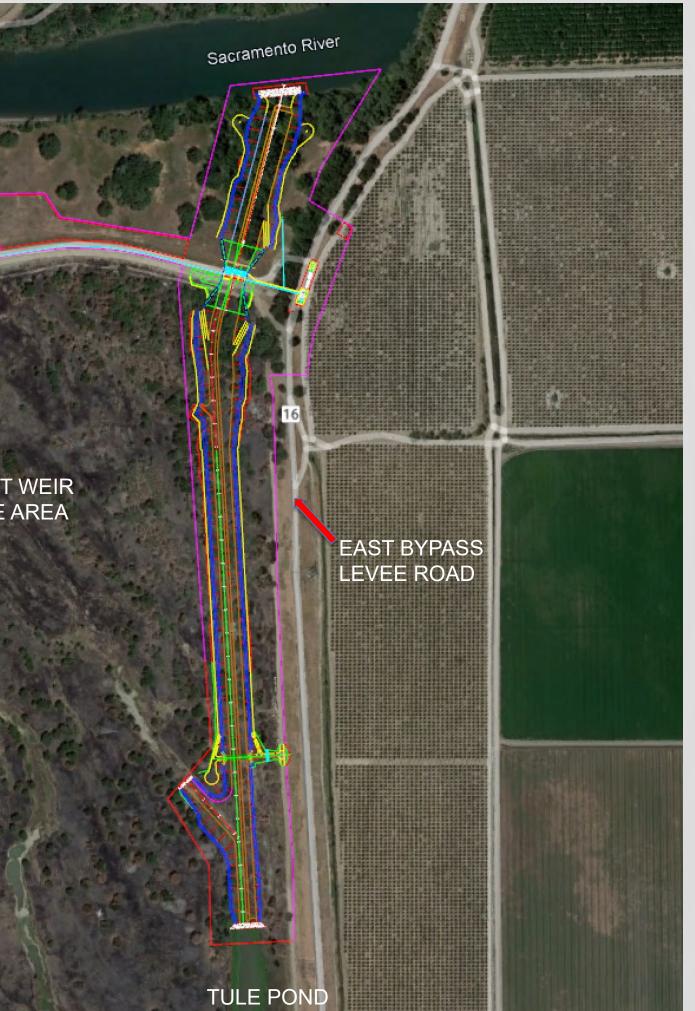


WATER RESOURCES

ADULT FISH PASSAGE STRUCTURE (17-18)

FREMONT WEIR WILDLIFE AREA

FREMONT WEIR



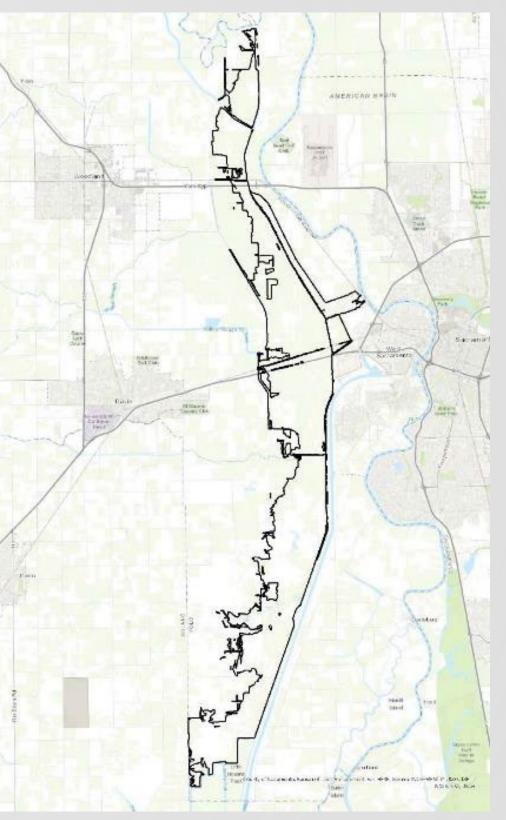
### Project Design (CCP § 1245.230(c)(2))

Alternative 1 - East Side Gated Notch Operation Period: November 1 – March 15

Three of the six alternatives studied were developed through coordination with various partners, including:

Department of Fish & Wildlife Yolo County Bureau of Reclamation NOAA - Fisheries NMFS Army Corps of Engineers US Fish and Wildlife Landowners Non-Governmental Organizations





# **DWR Eminent Domain Authority**

DWR is seeking flowage easements for the purpose of fish passage as required mitigation for the long-term operations of the State Water Project.

DWR has authority under Water Code §§ 250, 253, 258, 11575 and 11580 to acquire property rights required and necessary for the operation of the State Water Project.

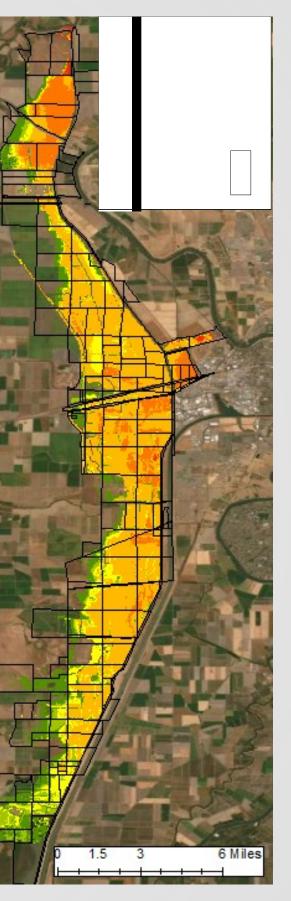
California Code of Civil Procedure §§ 1245.210 and 1245.220 requires DWR to obtain a Resolution of Necessity from the Commission, as the appropriate governing body.



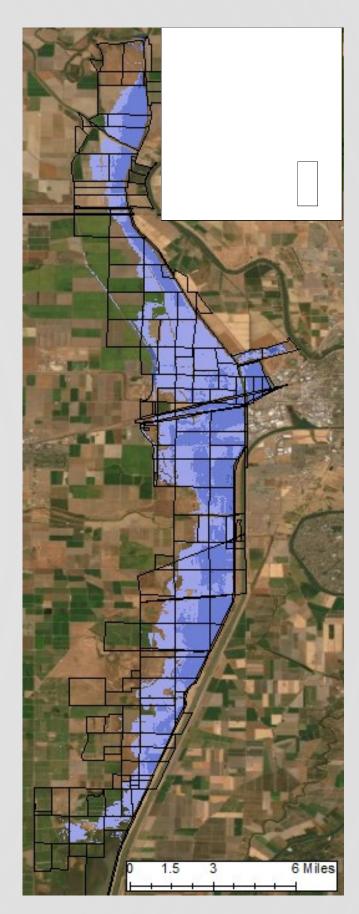
### **Properties Impacted** (CCP § 1245.230(c)(3))

- Impacts modeled using **TUFLOW** (inundation model):
  - I6 water years from 1997 to 2012
  - Figures averaged over those years
  - Analysis based on difference in wetted days and depth





**Average Difference in Wetted Days** 

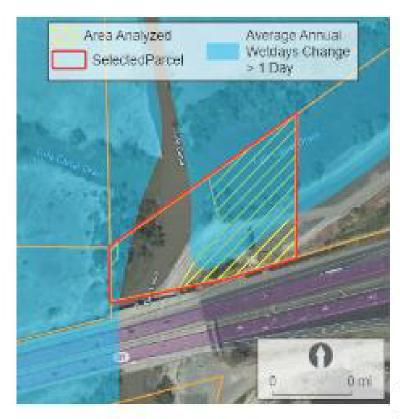


**Average Difference in Depth (ft)** 

### Example

#### Yolo Bypass Big Notch Project

APN: 008-010-013 Owner: PATRICK REALTY CORP. Parcel area: 3.0 acres Area within YB: 1.8 acres Annual wetted-days Current: 158.2 Project: 162.2 Change: 4.1 Average depth change: 0.6



	Monthly Average				Monthly Average Percent Area (%)													
	Depth (ft)		Wetdays		Dry		< 6 in		6-12 in		12-18 in		18-24 in		24-36 in		>36 in	
	Current	Project	Current	Project	Current	Project	Current	Project	Current	Project	Current	Project	Current	Project	Current	Project	Current	Project
November	1.2	1.2	4.9	4.9	92.4	92.2	2.5	2.2	1.0	8.0	0.5	1.2	2.2	2.2	1.6	0.9	0.0	0.4
December	2.6	3.3	16.2	16.8	73.5	71.6	2.7	1.9	3.0	2.2	2.9	2.1	3.5	3.5	5.4	5.1	8.9	13.6
January	4.5	4.9	22.8	23.2	59.0	57.5	3.2	2.4	4.2	3.3	3.8	1.5	2.2	2.4	2.5	4.4	25.0	28.4
February	4.1	4.5	25.4	26.3	50.9	48.0	2.8	3.0	5.0	3.5	4.7	4.0	2.5	2.2	7.4	5,9	26.7	33.5
March	3.8	4.1	30.1	30.4	48.1	46.5	5.6	3.5	6.6	5.4	4.3	4.8	3.9	3.7	5.6	5.6	25.8	30.6
April	3.1	3.3	25.4	26.0	56.4	54.9	8.5	8.3	4.3	3.8	4.3	3.4	4.4	3.1	5.1	5.5	17.2	20.9
May	2.2	2.6	17.2	15.2	72.5	70.2	6.0	6.0	3.5	3.5	2.3	1.3	2.7	2.1	4.0	3.8	9.1	13,1
June	1.7	1.7	16.1	16.3	74.2	73.8	6.5	6.6	4.9	5.0	4.5	4.2	2.5	2.6	3.2	3.3	4.2	4.4

All information provided by the Department of Water Resources made available to provide immediate access for the sources of a tension to be leaves the information to be responsible for any errors or emissions, or for the use or leaves for the use of the information. No line information to of the information access for the sources of the information access to access the sources of the information access for the sources of the information access fo



### WATER RESOURCES



CALIFORNIA DEPARTMENT OF WATER RESOURCES

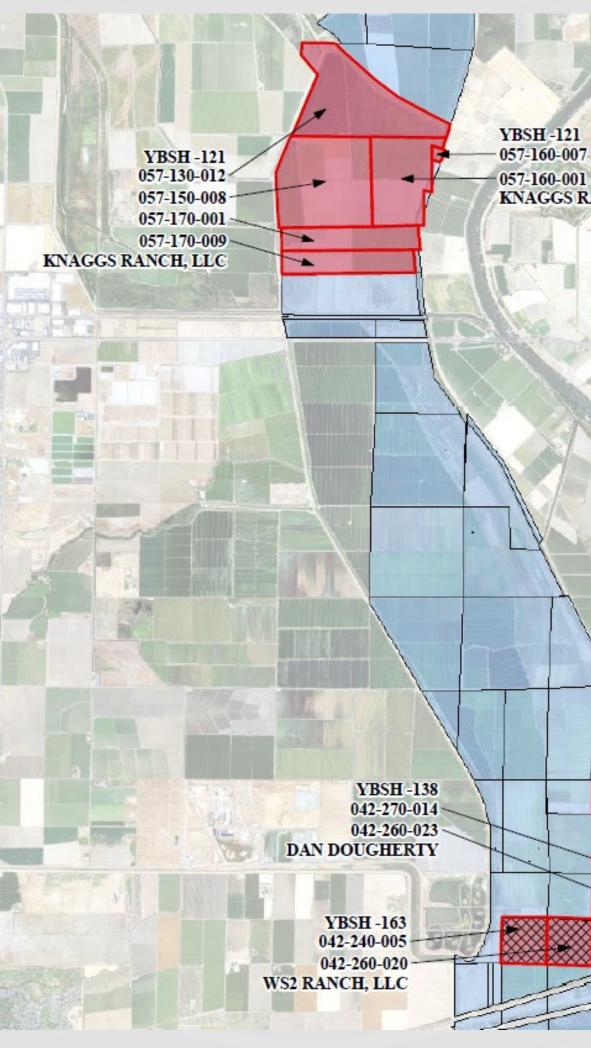
Water	Last Da	ay Wet1	Weto	lays <sup>1</sup>	Average Depth (ft)				
Year	Current	Project	Current	Project	Daily Change <sup>2</sup>	Current	Project		
1997	06-30	06-30	178	180	0.3	4.7	4.8		
1998	06-30	06-30	211	212	0.3	5.3	5,5		
1999	06-26	06-28	179	188	1.2	3.4	4.2		
2000	06-30	06-30	153	153	0.6	3.8	4.2		
2001	06-29	06-30	133	136	0.4	1.5	1.8		
2002	06-30	06-30	184	168	0,5	1,9	2.2		
2003	06-30	06-30	189	190	0.8	3.0	3.8		
2004	06-30	06-30	178	178	0.6	3.4	3.8		
2005	06-30	06-30	242	242	0.2	3.0	3.2		
2006	06-30	06-30	198	200	0.3	5.5	5.7		
2007	04-21	05-08	139	147	0.6	8.0	1.2		
2008	05-01	05-01	110	111	0.4	2.3	2.6		
2009	04-17	06-07	63	71	1.0	1.6	2.4		
2010	06-01	06-02	127	129	0.6	2.7	3.1		
2011	06-30	06-30	204	205	0.7	3.4	3,9		
2012	05-18	05-18	83	86	8.0	1.0	1.5		

\* Parcels are classified yet if 30% or more of a parcel area is wet to ignore shallow standing water i

<sup>12</sup> Daily change is calculated for pixels and then averaged and may not be equal to project - current.

Properties in Relation to the Project





VBSH -121 057-160-007 057-160-001 KNAGGS RANCH, LLC

> YBSH -136 042-270-013 WHITCOMBE, JOHN

> > YBSH -139 042-270-017 THOMPSON TRUST

> > > YBSH -162 042-270-015 WS2 RANCH, LLC

YBSH -140 042-260-003 LYNCH FAMILY TRUST, ET AL. Agenda Item 10A

Dan and Neil Dougherty, et al. APN(s): 042-270-014 and 042-260-023 DWR Parcel No. YBSH-138 Acres: 323.54± First Written Offer: January 24, 2022 Notice of Informational Hearing: March 24, 2022

Conservation Easement: US Fish and Wildlife Service Notice of Intent to Acquire: January 24, 2022



#### Agenda Item 10B

John and Judy Whitcombe, et al. APNs: 042-270-013 DWR Parcel No. YBSH-136 Acres: 338.21± First Written Offer: January 24, 2022 Notice of Informational Hearing: March 24, 2022

Conservation Easement: US Fish and Wildlife Service Notice of Intent to Acquire: January 24, 2022



#### Agenda Item 10C

**WS2 Ranch, LLC** APN: 042-270-015, 042-240-005, and 042-260-020 DWR Parcel No. YBSH-162 & -163 Acres: 493± First Written Offer: January 24, 2022 Notice of Informational Hearing: March 24, 2022

Conservation Easement: US Fish and Wildlife Service Notice of Intent to Acquire: January 24, 2022



Agenda Item 10D

Ray and Della Thompson Trust, et al. APNs 042-270-017 DWR Parcel No. YBSH-139 Acres: 142.09± First Written Offer: January 24, 2022 Notice of Informational Hearing: March 24, 2022

Conservation Easement: US Fish and Wildlife Service Notice of Intent to Acquire: January 24, 2022



### Agenda Item 10E

Lynch Family Trust, et al. APN: 042-260-003 DWR Parcel No. YBSH-140 Acres: 160± acres First Written Offer: January 24, 2022 Notice of Informational Hearing: March 24, 2022

### Agenda Item 10F

#### **Knaggs Ranch, LLC**

APN: 057-130-012, 057-150-008, 057-160-001, 057-160-007, 057-170-001, and 057-170-009 DWR Parcel No. YBSH-121 Acres: 2,140±acres First Written Offer: January 24, 2022 Notice of Informational Hearing: March 24, 2022

