



Special Meeting

AGENDA

PARADISE CUT BYPASS EXPANSION AND MULTI-BENEFIT PROJECT ADVISORY COMMITTEE MEETING

San Joaquin Council of Governments, 555 E. Weber Ave, Stockton, CA 95202

May 28, 2026 | 10:00 am – 12:00pm

Advisory Committee Members:	Advisory Committee Alternates:
Darren Suen, San Joaquin Area Flood Control Agency	Glenn Prasad, San Joaquin Area Flood Control Agency
John Herrick, South Delta Water Agency	Mary Hildebrand, South Delta Water Agency
Sarah Puckett, American Rivers	
Lea Emmons, City of Tracy	Robin Kloepfer, City of Tracy
David Strecker, RD 544	Mario Jacques, Reclamation District 1, 2, 544, 2089
Bob Pombo, Reclamation District 2095	Daniel DeGraaf, Reclamation District 2095
Alexis Stevens, Reclamation District 2058, 1007	Greg Pombo, Reclamation District 2058, 1007
Susan Dell’Osso, Reclamation District 2062	Ramon Batista, Reclamation District 2062
Jesus Esparza, Department of Water Resources (non-voting)	
Andrea Buckley, Central Valley Flood Protection Board (non-voting)	Dustin Sanoski / Greg Harvey, Central Valley Flood Protection Board (non-voting)
Campbell Ingram, Delta Conservancy (non-voting)	Lauren Damon, Delta Conservancy (non-voting)

Meeting Objective: Provide consultant team with input on the proposed phased implementation strategy for the Paradise Cut Master Plan, proposed Phase 1 priorities, and implementation considerations.

1. Administrative Matters (L. Randall, 15 minutes)

- A. Roll call
- B. Approve 3/25 Meeting Summary (Attachment A) **[Possible Action]**
- C. New Advisory Committee Member

2. Master Plan Overview (M. Weymiller, 15 minutes)

- A. Refined Master Plan B

B. RD 2058 and RD2095 Concerns

3. Phased Implementation Strategy (M. Weymiller, 45 minutes)

A. Proposed Phase 1 and Phase 2 (Master Plan Phased Implementation Memorandum, Attachment B; Staff Report, Attachment C)

B. Initial Hydraulic Modeling Results

4. Sedimentation Analysis and Dredging Implementation Update (B. Haines, 15 minutes)

5. Next Steps for Technical Analysis and Schedule (M. Weymiller, 10 minutes)

6. SJAFCA Update (D. Suen) (5 minutes)

7. California Department of Water Resources and Central Valley Flood Protection Board Updates (5 minutes)

8. Advisory Committee Comments (5 minutes)

9. Public Comments (5 minutes)

10. Adjournment

Virtual Attendance:

To JOIN via ZOOM

Link to meeting:

<https://kearnswest.zoom.us/j/85020320211?jst=1>

Meeting ID: 850 2032 0211

Passcode: None



Advisory Committee Meeting Paradise Cut Bypass Expansion and Multi-Benefit Project Master Plan Alternatives

Meeting Summary

March 25, 2026

Meeting Objective: The primary objective of the March 25 Advisory Committee Meeting was to receive input on the proposed Master Plan alternatives and advise SJAFCA and the study team on the alternative that should be carried forward as the Paradise Cut Master Plan. Discussion from the meeting has been summarized below.

John Herrick, Chair, opened the meeting at 10:02 a.m. Terra Alpaugh, facilitator, Kearns & West, advised attendees that Kearns & West stepping in for Consero on facilitation; this is the first Advisory Committee meeting supported by Kearns & West.

1. Administrative Matters

a. Roll Call

Leanne Randall, SJAFCA, led roll call. Please see Appendix I for a full list of attendees and their affiliations.

b. Approve January 12, 2026 Meeting Summary

Sarah Puckett made a motion to approve meeting minutes with a second from Glenn Prasad. The minutes were approved with a verbal “aye” vote with Susan Del’Osso abstaining due to absence at the 1/12 meeting.

c. New Advisory Committee Member

Glenn Prasad, SJAFCA, announced that there is an Advisory Committee member vacancy for the seat representing Reclamation Districts 1, 2, 544, 2089, or 773 with Nick Mussi recently vacating the position. Notice of vacancy was posted Friday 3/20 with an application due date of April 3, and John will conduct outreach to RDs 1, 2, 544, 2089, or 773 in coordination to solicit applications to be acted on at the next SJAFCA Board Meeting. The hope is to have the member in-place by the next Advisory Committee meeting.

d. Tentative Advisory Committee Meeting Dates

The next Advisory Committee meeting had been planned for November; however, additional conversation is needed to discuss phasing in mid-May. The study team recommended moving the next meeting up to May, with the subsequent meeting scheduled for early 2027.

2. Paradise Cut Feasibility Study Update

Melissa Weymiller, Larsen & Wurzel Associates, provided an update on the current status of the technical work supporting the feasibility study. The amendment needed to support the

additional analysis on the master plan is being processed at DWR and could be executed by the end of this month. Jesus Esparza, DWR, provided an update on the amendment, noting that it may take longer to get through the approval process. A site visit occurred at end of February for the sedimentation analysis scope, and the analysis is moving forward. Melissa reviewed the master plan approach with phased implementation and a smaller set of projects first with current funding opportunities. Melissa provided an overview of actions included in the master plan alternative B, including Kisst Dairy Setback, RD 2062 Levee Degrade, RD 2058 Setback at Paradise Rd (Downstream of Bend 16), RD 2058 Setback I5 – UPRR West, RD 2095 Setback Levee, RD 2095 2,000 Weir Upstream, Channel Restoration, Hydraulic Mitigation, and Four Corners Island Habitat Enhancement (Salmon Slough), with a focus on early implementation actions such as Kisst Dairy. Melissa noted that the incremental analysis of the modeling started with the EIP project and then added in weir modifications, levee degrades, setbacks, and the second weir upstream.

Glenn Prasad, SJAFCA, emphasized the desire to consider the master plan through the lens of how it can fit into early implementation actions, and conversely, how early implementation actions can be phased into the master plan. Jesus Esparza, DWR, explained that previous analyses grouped actions together and looked at combined results, which made it difficult to understand which individual action contributed which benefit. The current incremental analysis stacks one action at a time, providing a clearer understanding of the benefits associated with each action. Melissa summarized that one master plan includes everything (A) and the other removes some items that do not show as much hydraulic benefit relative to cost (B). Melissa clarified that the Advisory Committee has three options: support Master Plan A, support Master Plan B, or identify specific elements that should be added to or removed from either master plan.

Discussion

- Jay Ziegler, Delta Watermaster, asked if the project team has looked at a setback alternative that might encompass all of Kisst dairy and adjacent property.
 - Ric Reinhardt, Wood Rogers Inc., responded that the setback defined is built on their parcels. The setback levee line maximizes their property as parcel numbers were conveyed to them.

3. Incremental Hydraulic Analysis Results

Ric Reinhardt introduced the incremental hydraulic analysis results, noting that the team completed approximately 26 different hydraulic runs to understand the hydraulic performance of each increment and its associated cost, so that hydraulic benefits and cost of actions can be compared together. Ric reviewed changes in stage for 100- and 200-year events. Scenarios 1 through 6 build progressively, each adding one new element to the previous scenario. Scenarios 7 through 11 mirror Scenarios 2 through 6 but exclude the RD 2107 Weir Extension to evaluate its specific contribution. Scenarios 12 and 13 represent the most comprehensive configurations,

with Scenario 12 (Master Plan A) including all evaluated elements except the RD 2107 Weir Extension, and Scenario 13 including all evaluated elements together. Ric highlighted that the RD 2058 setback at Paradise Road (Scenario 4) is helpful from a habitat perspective and also in reducing the hydraulic mitigation requirements. He noted that the location used to understand benefits to urban areas is the San Joaquin River at I-5, and the location used to understand impacts is Paradise Cut at I-5. See table below for a high-level overview of each scenario, their added benefit, and associated costs.

Table 1: Scenarios, Benefits, and Costs

Scenario	Benefit	Cost Associated
Scenario 1	Early Implementation Project (EIP) actions only: Kist Dairy Setback, I-5 Sediment Removal, Bench Lowering Downstream of Paradise Cut Weir with Riparian Thinning, and Hydraulic Mitigation. Stage change at San Joaquin River at I-5: -0.8 ft (100-yr) / -1.5 ft (200-yr). Stage change at Paradise Cut at I-5: +1.03 ft (100-yr) / +0.06 ft (200-yr).	\$123,239,700 (Kist Dairy Setback \$64,025,900; I-5 Sediment Removal \$15,808,300; Bench Lowering and Riparian Thinning \$43,405,500)
Scenario 2	Adds RD 2107 Weir Extension (600 ft) and RD 2095 Weir Extension (930 ft south) to Scenario 1. Stage change at San Joaquin River at I-5: -1.33 / -2.57. Stage change at Paradise Cut at I-5: +1.61 / +0.45.	+\$24,607,400 added (RD 2107 Weir Extension \$17,483,100; RD 2095 Weir Extension \$7,124,300)
Scenario 3	Adds RD 2062 Levee Degrade to Scenario 2. Stage change at San Joaquin River at I-5: -1.37 / -2.65. Stage change at Paradise Cut at I-5: +1.51 / +0.37. Minimal hydraulic change relative to Scenario 2.	+\$34,259,500 added (RD 2062 Levee Degrade)
Scenario 4	Adds RD 2058 Setback Levee at Paradise Road (downstream of Bend 16) to Scenario 3. Stage change at San Joaquin River at I-5: -1.46 / -2.71. Stage change	+\$93,731,800 added (RD 2058 Setback Levee at Paradise Road)

	at Paradise Cut at I-5: +0.92 / -0.23. Helpful from a habitat perspective and reduces hydraulic mitigation requirements.	
Scenario 5	Adds RD 2095 Setback Levee (UPRR East to I-5) to Scenario 4. Stage change at San Joaquin River at I-5: -2.5 / -3.49. Stage change at Paradise Cut at I-5: +1.65 / +0.76.	+\$16,884,800 added (RD 2095 Setback Levee UPRR East to I-5)
Scenario 6	Adds RD 2058 Setback Levee (I-5 to UPRR West, including 500-foot opening with wind/wave buffer) to Scenario 5. Stage change at San Joaquin River at I-5: -2.63 / -3.62. Stage change at Paradise Cut at I-5: +1.03 / +0.14. Reduces flood stages at Banta-Carbona Canal by approximately 1.1 ft.	+\$56,554,800 added (RD 2058 Setback Levee I-5 to UPRR West)
Scenario 7	Mirrors Scenario 2 but excludes the RD 2107 Weir Extension (i.e., EIP plus RD 2095 Weir Extension only). Used to evaluate the contribution of the RD 2107 Weir Extension.	[Not covered in meeting. Reference memo for details.]
Scenario 8	Mirrors Scenario 3 but excludes the RD 2107 Weir Extension (adds RD 2062 Levee Degrade to Scenario 7).	[Not covered in meeting. Reference memo for details.]
Scenario 9	Mirrors Scenario 4 but excludes the RD 2107 Weir Extension (adds RD 2058 Setback Levee at Paradise Road to Scenario 8).	[Not covered in meeting. Reference memo for details.]
Scenario 10	Mirrors Scenario 5 but excludes the RD 2107 Weir Extension (adds RD 2095	[Not covered in meeting. Reference memo for details.]

	Setback Levee UPRR East to I-5 to Scenario 9).	
Scenario 11	Mirrors Scenario 6 but excludes the RD 2107 Weir Extension (adds RD 2058 Setback Levee I-5 to UPRR West to Scenario 10). This is the configuration referenced in discussion as a potential reduced-scope alternative for further analysis.	[Not covered in meeting. Reference memo for details.]
Scenario 12	Builds on Scenario 11 by adding the New 2,000-ft upstream weir (RD 2095, with 500-foot opening and wind/wave buffer) and Additional Management Actions from Alternative 6b (Channel Restoration, Hydraulic Mitigation, and Four Corners Island Habitat Enhancement). Excludes the RD 2107 Weir Extension. This is the Master Plan A configuration. Stage change at San Joaquin River at I-5: -4.16 / -4.38. Stage change at Paradise Cut at I-5: +1.30 / +1.29.	Master Plan A total \$1,121,191,700 (includes shared infrastructure: Channel Restoration \$385,950,000; Hydraulic Mitigation \$80,103,900; Four Corners Island Habitat Enhancement \$18,227,400)
Scenario 13	Adds the RD 2107 Weir Extension to Scenario 12, representing all evaluated elements together. Stage change at San Joaquin River at I-5: -3.72 / -4.22. Stage change at Paradise Cut at I-5: +1.58 / +1.25. The added 2107 element does not improve hydraulic benefits relative to Scenario 12.	+\$17,483,100 added relative to Scenario 12 (RD 2107 Weir Extension)

Ric reviewed the scenarios cumulatively, noting that Scenario 12 has everything in it that Scenario 13 does, except the RD 2107 Weir Extension. He emphasized that from a technical

perspective the RD 2107 Weir Extension has no value. Master Plan B excludes the RD 2062 Levee Degrade, the RD 2058 Setback Levee from UPRR West to I-5, and the RD 2107 Weir Extension, and thereby reduces costs by around \$100 million while flood damage reduction benefits remain about the same.

Discussion

- Glenn Prasad, SJAFCA, asked to clarify the blue versus the red colors on the hydraulic analysis result table and their significance. Red indicates stage increase from design water surface elevations.
 - Ric explained that blue equals the greater the stage reduction, and red darkening signifies a scale of the greater the stage increase. As a result, stages in Paradise Cut are increasing including the downstream tributaries.
 - Glenn confirmed that there will be more water moving towards Paradise Cut and downstream areas, and stage increases. The cost estimates account for any impacts.
- Susan Del’Osso, RD2062, noted concerns from RD2062 and RD2107 about the red. She observed that two feet of increase on surface water elevation are fairly significant, and noted that she was not aware of conversations about hydraulic impact mitigation.
 - Ric responded that the email traffic between all the district engineers is included as an appendix to the cost estimate, where he corresponded with each of them and what was agreed upon for inclusion in the cost estimate. Ric explained that this isn't an agreement on what the hydraulic mitigation will actually be. That'll be determined in a design phase in the CEQA process, but it was making sure that we had it adequately captured in the cost estimate, and he offered to present that in more detail to the 2107 Board.
 - John Herrick responded that it's his understanding that this analysis is the first step in future resolution of issues. The red numbers are concerning, and the project team will try to address those if the process moves forward. Agreement on mitigation and other work is key to maintaining support from the surrounding areas, and the goal is to reach a point where the proposed mitigation makes the project acceptable.
 - Melissa emphasized there's a significant difference between the 100-year and 200-year scenarios, and that should be kept in mind when discussing mitigation measures. The 200-year only applies to urban areas. The 100-year requirement is a FEMA requirement, regardless of land use.
 - Ric further explained that the hydraulic mitigation costs were developed based on the 100-year for all of the districts except 2062. Because 2062 is an urban district, they use the 200-year basis to be more conservative since it is an urban district and has ULDC certified levy.

- o John Herrick concluded that for the 200-year everyone is flooded, and the 100-year is more important for the analysis.
- John asked which 3 things were removed in master plan B.
 - o Ric responded that from the hydraulic benefits analysis, they concluded that the RD2062 degrade, RD2058 setback from UPR West I-5 and the 2107 Weir extension were not producing hydraulic benefits that supported their costs.

4. Master Plan Alternatives

Terra Alpaugh directed the Advisory Committee to consider if there are individual actions that should be added or removed from either alternative, or additional considerations that should be addressed or noted alongside any recommendation.

Melissa Weymiller, LWA, summarized Master Plans A and B. Master Plan A was the Scenario 12 that was included in the incremental analysis. It does not have the 2107 weir extension, it maximizes the hydraulic benefits, but also the environmental benefits with added acreage to the floodplain. There is some added regulatory complexity with the removal of the 2062 levy degrade, because the River Islands Levy has to be re-designated as the federal levy and it does include all 49 miles of dredging. Master Plan B does not include the 2058 setback between I-5 and UPRR West, and it reduces the regulatory complexity since the Army Corps is not involved. These changes do reduce the restoration acreage. The Plan still includes 49 miles of dredging.

Master Plan A has a total estimated cost of \$1,121,191,700 and adds approximately 3,257 acres to the floodplain. Master Plan B has a total estimated cost of \$1,020,165,900 and adds approximately 2,916 acres to the floodplain. The cost difference between the two plans is approximately \$101 million, with Master Plan B providing approximately 90 percent of the floodplain acreage of Master Plan A. Both plans include the same shared infrastructure: Channel Restoration (\$385,950,000), Hydraulic Mitigation (\$80,103,900), and Four Corners Island Habitat Enhancement (\$18,227,400 / 100 acres). The RD 2107 Weir Extension is excluded from both master plans because the hydraulic benefits do not justify the cost and complexity of the measure. See Table 2 below for a side-by-side comparison.

Table 2: Master Plan A vs. Master Plan B Comparison

Project Element	Master Plan A	Master Plan B
Kisst Dairy Setback (\$64,025,900 / 267 acres)	Included	Included
I-5 Sediment Removal (\$15,808,300)	Included	Included
Bench Lowering D/S of PC Weir & Riparian Thinning (\$43,405,500)	Included	Included
RD 2062 Levee Degrade (\$44,471,000 / 187 acres)	Included	Excluded
RD 2058 Setback Levee at Paradise Road (\$93,731,800 / 352 acres)	Included	Included

RD 2058 Setback Levee I-5 to UPRR West (\$56,554,800 / 154 acres)	Included	Excluded
RD 2095 Setback Levee UPRR East to I-5 (\$16,884,800 / 97 acres)	Included	Included
RD 2095 Improvements Upstream of UPRR East (\$294,904,000 / 2,093 acres)	Included	Included
New RD 2095 Weir (\$7,124,300 / 7 acres)	Included	Included
Channel Restoration (\$385,950,000)	Included	Included
Hydraulic Mitigation (\$80,103,900)	Included	Included
Four Corners Island Habitat Enhancement (\$18,227,400 / 100 acres)	Included	Included
Total Cost	\$1,121,191,700	\$1,020,165,900
Floodplain Acreage Added	3,257 acres	2,916 acres

Melissa reviewed feedback received from small group meetings, noting that it is unclear whether landowners in 2095 and 2058 will support either master plan concept under discussion. For 2095, there is a concern that it would make farming unsustainable with the increased flooding. It it would include some crop conversion, and some of that area downstream of the weir would have to be turned to habitat, just because of the frequency of flooding. Melissa acknowledged the threat to individual farmers and the sustainability of the Reclamation district in terms of the loss in profit. It is unclear to landowners that they will receive enough compensation for the losses. From 2058's perspective, there is a concern over the setback at Paradise Road. It does not seem that there is any controversy with the setback at Kist Dairy. There are similar concerns about making farming more difficult and challenges in maintaining the RD with the reduced assessments for the setback at Paradise Road, downstream of Bend 16. The project team would be able to realign the setback to avoid homes and other structures. It is unclear whether the RD would receive enough benefit for the impacts. Melissa noted that the team is planning to do the economic analysis and more detailed hydraulic analysis on the master plan and initial phase, and selection of a more amorphous plan would not allow for more detailed information desired.

John Herrick checked for confirmation that the Advisory Committee recommends that the process continue with the next phases of examination pursuant to Master Plan B's outline. Susan Dell'Osso made a motion to proceed with further analysis of Master Plan B, recognizing that various aspects of the process still raise concerns and that the goal of the process is to have full local support. Lea Emmons seconded the motion. Bob Pombo reiterated RD 2095 concerns that any development be through mutual agreement and that any future study of potential flooding of lands within the district must indicate frequency, duration, and depth.

Roll call vote: motion passed.

Discussion

a. Alternatives

- Daniel DeGraaf asked whether there is a more modest alternative. Looking at the hydraulic analysis, Scenario 11 may not have the biggest impact at the Banta-Carbona Canal where the larger weir would be, but it provides comparable downstream impacts at close to \$300 million less in cost, with significantly less impact on RD 2095. He noted that Scenario 11 still provides 2 to 3 feet of stage reduction at Paradise Cut compared to over 4 feet under Scenario 12, and that a 30 percent cost reduction with substantial benefits would make the project easier to support from a 2095 perspective.
 - Melissa Weymiller noted that the upstream weir is the only project element that benefits the rural Reclamation Districts, so removing it would compromise the objective of supporting flood risk reduction in those areas. She acknowledged recent discussion about continuing analysis on an upstream weir while exploring different configurations that might reduce the impact.
- Sarah Puckett asked why the Advisory Committee would not choose Master Plan A and remove scenarios as needed, with the option to add them back later.
 - Susan Dell’Osso responded that there will be opposition to the elements included in A that are not in B, specifically the 2107 weir extension and the 2062 levee degrade.
- John Herrick noted that the current analysis shows very little additional benefit from the elements that distinguish Master Plan A from Master Plan B.
- Daniel DeGraaf recommended moving forward with Master Plan B and including a detailed alternative analysis at the reduced scope of Scenario 11, focused on the 2095 area. The recommendation was for the full scope of Master Plan B paired with an alternative analysis of the smaller 2095 project, with downstream elements remaining the same.
- Sarah Puckett emphasized keeping the project’s overall benefits in mind, noting that nearly 5 feet of stage reduction on the San Joaquin River and approximately 3,000 acres of habitat are significant outcomes.
- Jay Ziegler supported the direction of integrating a Master Plan B alternative, while emphasizing the need to assess benefits and to put together a framework that is ultimately implementable with a fair cost share formula.

b. Cost estimates

- Daniel DeGraaf noted that Scenario 11 is approximately \$300 million less in cost than Scenario 12 while providing significant benefits, representing roughly a 30 percent reduction in project cost.
- Alexis Stevens asked whether the feasibility study is worth continuing when funding appears infeasible to Army Corps standards, and whether time and effort would be better spent on obtaining funding through other means.
 - Melissa Weymiller explained that the next phase likely would not have federal funding and would probably look to state funding, with the project moving

forward through CEQA. The feasibility report is a necessary step in bringing the Army Corps along to partner on a federal funding component.

- Ric Reinhardt clarified that completion of the feasibility study is a prerequisite for applying for funding.
- Melissa noted that early implementation actions are being identified with a benefit-to-cost ratio that could qualify for Army Corps or FEMA funding, with Phase 1 anticipated to be in the range of a few hundred million dollars rather than the full \$1 billion plan.
- Glenn Prasad emphasized that the \$100 million difference between the two master plans is significant and will likely be viewed as such by potential federal funding partners. SJAFCA leans toward Master Plan B in part for this reason.

c. Feedback from small group meetings

- Daniel DeGraaf raised RD 2095 concerns about the portion of the project that lands on 2095. He emphasized that landowners do not want eminent domain and that any land acquisitions must be through mutual agreement. He raised questions about the financial framework, including who is responsible, how the project will be paid for, and how it will be maintained long-term. Landowners and the board do not have clarity on the frequency, depth, or duration of potential flooding.
 - Glenn Prasad summarized his understanding from the recent meeting with Daniel DeGraaf and Bob Pombo: RD 2095 may proceed with support for one or either of the master plans, but that support could change depending on the results of future analysis. He noted that performing more robust outreach with the 2095 board and community may help inform the decision-making process.
- Bob Pombo emphasized that landowner support is needed before moving forward. He noted concern about a large parcel with an almond orchard, where the landowner would not be expected to support flooding because it would kill the trees.
- John Herrick stated that if any local government agency tries to use eminent domain to accomplish project elements, the South Delta Water Agency will oppose it strongly.

d. Selection of master plan alternative

- Susan Dell’Osso noted that “approval” is a strong word and asked that the language surrounding any selection reflect that the Advisory Committee is making a decision to move forward with further analysis rather than approving a master plan per se.
 - Ric Reinhardt clarified that the master plan is intended to be a living plan that will change over time. Selecting a master plan today is not a CEQA-type decision; the Advisory Committee is deciding what should receive further analysis to inform whether the project is ultimately implemented.
 - Susan Dell’Osso expressed appreciation for that clarification, noting that this reflects the kind of language she would like to see surrounding any selection.
- Alexis Stevens stated that she is comfortable approving what should be studied in more detail moving forward but is not comfortable with the project generally at this time. She voiced concerns similar to RD 2095, noted she does not see the benefits as offsetting

the impacts, and explained that while she understands the concept of mitigation, the concept remains amorphous.

- In response to a question from John Herrick about whether the Paradise Cut Road setback is acceptable for further study, Alexis Stevens indicated that the farther downstream setback is acceptable for further study but that RD 2058 is not on board with saying it is acceptable as a project element.
- John Herrick acknowledged that it is difficult to come up with something that gets everyone on board and asked DWR to recognize that the process could reach the end without local support.
- Jesus Esparza, DWR, noted that the hydraulic modeling scope is currently under approval. The initial modeling was completed for 100- and 200-year events, and the next step is to hone to two or three scenarios and run further hydraulic analysis at 2-, 5-, and 10-year events to address concerns raised by Daniel. He noted that DWR is trying to find a place that touches as many interests as possible in a positive way and is in a similar position to everyone else.
- Glenn Prasad emphasized that the recommendation to the technical team is not affirming support of any specific features but is simply for the purpose of advancing the next steps of the study. Master Plan B provides many of the significant benefits the project was first formulated for, including flood risk reduction, dredging, and restoration. SJAFCA leans toward Master Plan B.

e. Considerations for phasing

- Glenn Prasad explained that a larger framework is needed to maintain the broad support that will be critical throughout the process. This study would not replace the necessary feasibility analysis for CEQA. The steps include agreement on the large framework, CEQA documentation, funding the larger program, and funding the incremental program.
- Ric Reinhardt explained that the team will update the environmental technical memo to present a CEQA strategy for navigating a phased implementation. At the conclusion of this feasibility study, if a Phase 1 is identified and there is a desire to move forward, the next phase would be developing design, permitting, and completing CEQA to get it shovel-ready for federal grant applications.
- Ric explained the role of the May meeting: after selection of the master plan, the team will develop a suggested phasing strategy. The May meeting was moved up so the Advisory Committee can weigh in on what is included in Phase 1. For example, the 2095 weir extension will not be in Phase 1 because there is no support for it, while elements like the Kist Dairy setback may be appropriate for Phase 1 given broad support. The May discussion is not a decision to implement, but rather what is being supported to advance into the CEQA phase.
- Steve Mayo, program manager for the San Joaquin County Multi-Species Habitat Conservation Plan, noted that levee facilities may not work with existing habitat conservation easements, so eminent domain or another approach may need to be considered. Replacement of impacts to easements is typically at a 2-to-1 ratio, with permits in place through 2051 to meet federal and state requirements. He emphasized

the importance of continuing dialogue with landowners and interested parties because the conservation plan has thousands of acres of mitigation in the affected areas.

- Glenn Prasad thanked Steve for his comment and expertise, noting that the agencies share many of the same member agencies and aligned missions, and that engagement will continue to ensure they proceed in a common direction with a common goal.
- Daniel DeGraaf requested that the next phase of hydraulic analysis include a historical-based view of how often the project area would actually flood based on past stage elevations. He noted that the next phase needs to include further public outreach to RD 2095 and other district landowners.
- Ric Reinhardt noted that the phasing approach would address what Daniel described, with the exception of analyzing another setback variation.
- Terra Alpaugh confirmed that advancing Master Plan B would include incremental analysis cumulatively building toward the end-state plan.

5. SJAFCA Update

Glenn Prasad, SJAFCA, noted he has no updates.

California Department of Water Resources and Central Valley Flood Protection Board Updates

Jesus Esparza, DWR, announced he has no updates.

Central Valley flood board provided an update that at this Friday's board meeting, DWR will provide an informational briefing on the paradise cut project.

6. Advisory Committee Comments

Bob Pombo announced that he appreciated the considerations and declared that it was a good meeting.

Terra affirmed that Kearns & West will send out the presentation to all attendees and apologized for the meeting link snafu.

7. Public Comments

None.

8. Adjournment

John Herrick adjourned the meeting at 11:59 a.m.

Appendix

Appendix I

Table of in-person meeting attendees

Advisory Committee Members	
Name	Organization
John Herrick	South Delta Water Agency
Sarah Puckett	American Rivers
Lea Emmons	City of Tracy

Bob Pombo	Reclamation District 2095
Alexis Stevens	Reclamation District 2058, 1007
Susan Dell'Osso	Reclamation District 2062
Jesus Esparza	Department of Water Resources (non-voting)
Glenn Prasad	San Joaquin Area Flood Control Agency (alternate)
Daniel DeGraaf	Reclamation District 2095 (alternate)
Dustin Sanoski	Central Valley Flood Protection Board (non-voting alternate)
Project Team	
Name	Organization
Leanne Randall	San Joaquin Area Flood Control Agency
Terra Alpaugh	Kearns & West
Brita Romans	Kearns & West
Melissa Weymiller	Larsen & Wurzel Associates
Ric Reinhardt	Wood Rodgers Inc.
Steve Mayo	San Joaquin County Multispecies Habitat Conservation Plan

Additional virtual attendees: Don Trieu, MBK Engineers; Chase Hildeburn, Department of Water Resources; Jay Ziegler, Delta Watermaster; David Weisenberger, Central Valley Flood Protection Board; Brian Haines, ESA Associates; and Kelly Wright-Le Force, Banta-Carbona Irrigation District.

Attachment B

Paradise Cut Bypass Expansion and Multi-Benefit Project Master Plan Phased Implementation Memorandum May 9, 2026

Purpose

The purpose of this memorandum is to present a framework for phased implementation of the Paradise Cut Bypass Expansion and Multi-Benefit Project Master Plan (Master Plan). The Master Plan represents a large-scale, multi-benefit project that integrates flood risk reduction, ecosystem restoration, and actions to maintain water supply reliability. Given the overall scale, cost, and complexity of the Master Plan, full buildout will require implementation over multiple phases and will likely involve multiple state and federal funding programs. A phased approach allows the Master Plan to be implemented in manageable increments while delivering meaningful benefits to each of the benefit categories at each stage.

This memorandum identifies an initial phase of work that has independent utility and is expected to be competitive for existing State and Federal funding programs (e.g., USACE Civil Works, FEMA Building Resilient Infrastructure and Communities). The subsequent phase is structured to build upon earlier investments, incrementally expanding system performance and advancing the full suite of Master Plan management actions over time. This approach maintains flexibility to adapt to evolving funding, regulatory, and stakeholder conditions. It also ensures that each phase can be modified in the future while functioning independently and contributing to the project objectives.

Paradise Cut Master Plan

Based on the evaluation of two Master Plan alternatives and Advisory Committee and stakeholder input in March 2026, SJAFCA and DWR have selected a variation of Master Plan B as the conceptual alternative to advance as part of the Paradise Cut Bypass Expansion and Multi-Benefit Project for further evaluation. The Modified Master Plan B provides a balanced combination of flood risk reduction, environmental benefits, water supply benefits and system performance improvements, while reducing overall cost and regulatory complexity compared to other alternatives. The Modified Master Plan B is intended to be flexible, with later phases potentially changing to accommodate new technical information, changes in the regulatory landscape, and local agency and landowner input.

The Modified Master Plan B is shown in Figure 1. It includes the following key management actions: the Kisst Dairy setback levee; sediment removal at I-5; bench lowering and riparian thinning downstream of the existing Paradise Cut Weir; the RD 2058 setback levee

at Paradise Road downstream of Bend 16; the RD 2095 setback levee between UPRR East and I-5; the new 930-foot RD 2095 weir extension and setback levee; 49 miles of channel restoration (dredging); hydraulic mitigation measures; and habitat enhancement in the Salmon Slough (Four Corners) area. Collectively, these management actions are intended to improve flood conveyance, reduce flood stages in urban and upstream rural areas, create habitat, expand the seasonally inundated floodplain, and maintain water supply reliability in the South Delta.

A central component of Master Plan B had been the expansion of conveyance capacity into Paradise Cut through upstream improvements and levee setbacks, including the RD 2095 new 2,000-foot upstream weir. RD 2095 has communicated that their landowners are not supportive of a new 2,000 ft weir upstream of the existing weir that would lead to the agricultural lands added to the floodway becoming less productive and narrowing the crop types that can be farmed on these lands. As a result of this concern, the exact alignment, footprint, and design of management actions in RD 2095 upstream of the UPRR East will be further refined in the future. This refinement will occur through continued coordination with landowners, RD 2095, and upstream reclamation districts benefiting from the expansion (through reduced flood stages in the San Joaquin River), and regulatory agencies to identify a configuration that balances hydraulic performance with land use considerations, costs, operational needs, and landowner input. As a result, the RD 2095 area upstream of the UPRR East is carried forward at a conceptual level in the Master Plan B, with the intent of adjusting the configuration as additional information becomes available and coordination efforts progress.

Modified Master Plan B has an estimated total project cost on the order of approximately \$725 million, not including the costs of the RD2095 improvements, and is expected to provide substantial flood risk reduction and ecosystem benefits at a lower overall cost than the Master Plan A alternative. The cost of the RD2095 improvements will be formulated when the alignment is refined. It will reduce flood stages along the San Joaquin River in urban areas and provide meaningful benefits to upstream rural levees, while expanding the floodplain by nearly 3,000 acres. Overall, Modified Master Plan B is intended to achieve a high level of system performance and ecological benefit while improving cost efficiency and implementation feasibility relative to larger-scale alternatives.

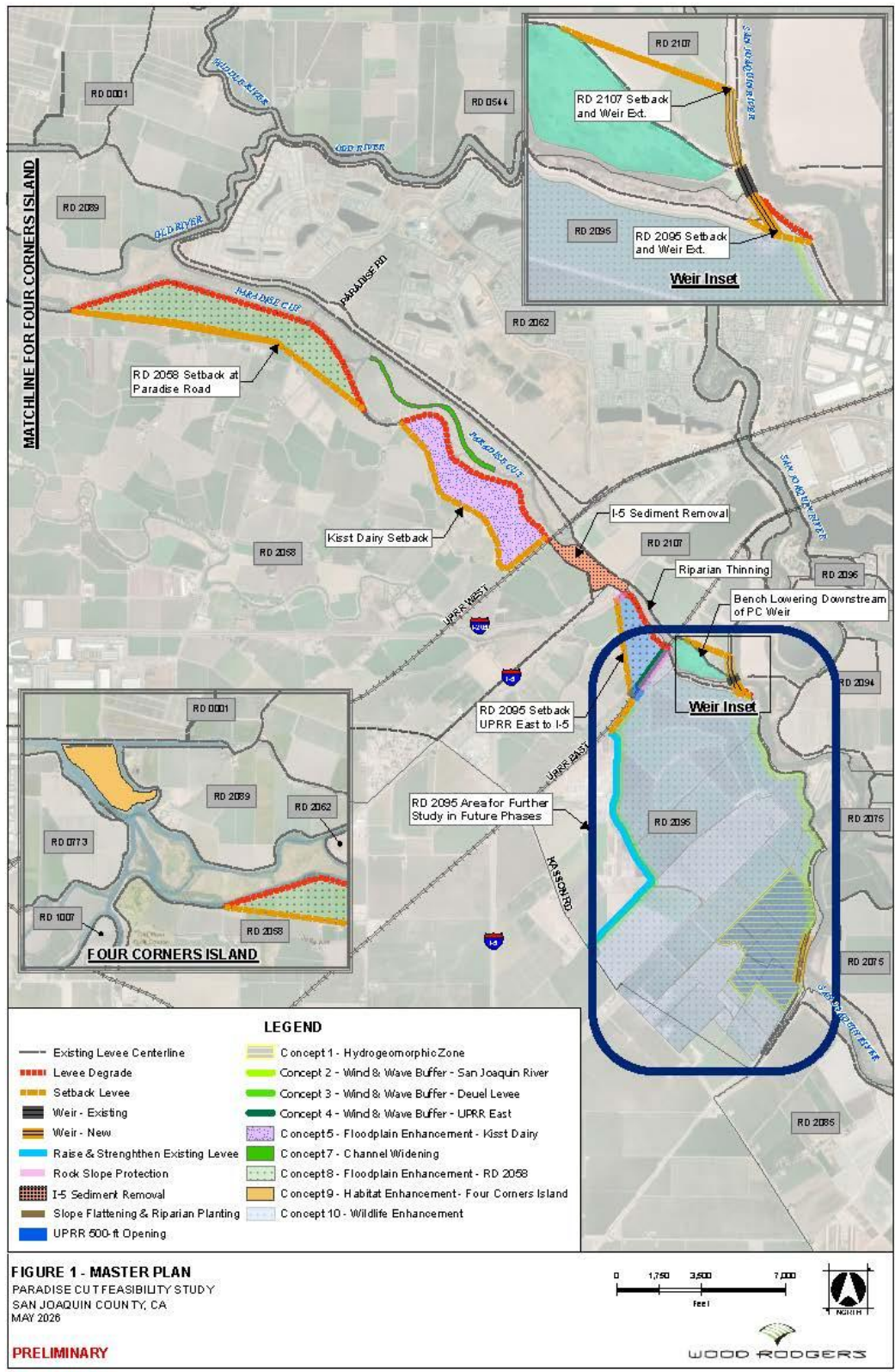


Figure 1 – Master Plan

Implementation Strategy

The phased implementation strategy is guided by principles that prioritize delivering early, measurable flood risk reduction and ecosystem benefits that align with available State and Federal funding. Initial phases focus on high-value, feasible actions that provide strong benefit relative to cost and complexity, allowing the project to advance as a standalone effort. Implementation will involve coordination with multiple federal and state regulatory agencies, resolution of permitting requirements, evaluation of potential environmental remediation needs associated with the former Kist Dairy operations, and development of a long-term operations and maintenance funding strategy. A table of the management actions and their proposed phase is below.

Management Actions	Cost	Acreage Added to Floodplain or Floodway	Proposed Phase
Kisst Dairy Setback	\$64,025,900	267	1
I-5 Sediment Removal	\$15,808,300	N/A (26 acres sediment removal footprint)	1
Bench Lowering D/S PC Weir and Riparian Thinning	\$43,405,500	N/A (38 acres sediment removal footprint)	1
RD 2058 Setback Levee at Paradise Road	\$93,731,800	352	1
RD 2095 Setback Levee - UPRR East to I-5	\$16,884,800	97	2
RD 2095 Improvements - Upstream of UPRR East	TBD	TBD	2
New RD 2095 Weir	\$7,124,300	7	1
Channel Restoration	\$385,950,000	N/A	All
Hydraulic Mitigation	\$80,103,900	N/A	All
Four Corners Island Habitat Enhancement	\$18,227,400	100	2
San Joaquin Habitat Restoration	TBD	TBD	2
TOTAL	\$725,261,900	823	

Phase 1

This phase builds upon the possible Early Implementation Project (EIP), described in the Master Plan Implementation Memorandum, to incorporate additional management actions that provide hydraulic, environmental, and water supply benefits that are economically justified. Phase 1 is proposed to include the core management actions of the Early Implementation Project, consisting of the Kisst Dairy setback, sediment removal at I-5, and bench lowering and riparian thinning downstream of the existing weir. In addition to the EIP, Phase 1 is proposed to include the new RD 2095 weir extension (930-foot extension to the south), and the RD 2058 setback levee at Paradise Road downstream of Bend 16. Hydraulic mitigation for these actions is included in Phase 1 as well as a yet to be defined increment of the proposed channel restoration. These management actions are shown in Figure 2. The extent of channel restoration ultimately included in Phase 1 will be informed by the work ESA and Anchor QEA are doing under a separate contract with DWR. Collectively, these actions provide substantial near-term hydraulic benefits in urban areas and rural areas along the San Joaquin River, expand the active floodplain and provide ecosystem benefits, maintain water supply reliability and are anticipated to meet the requirements for State and Federal funding programs.

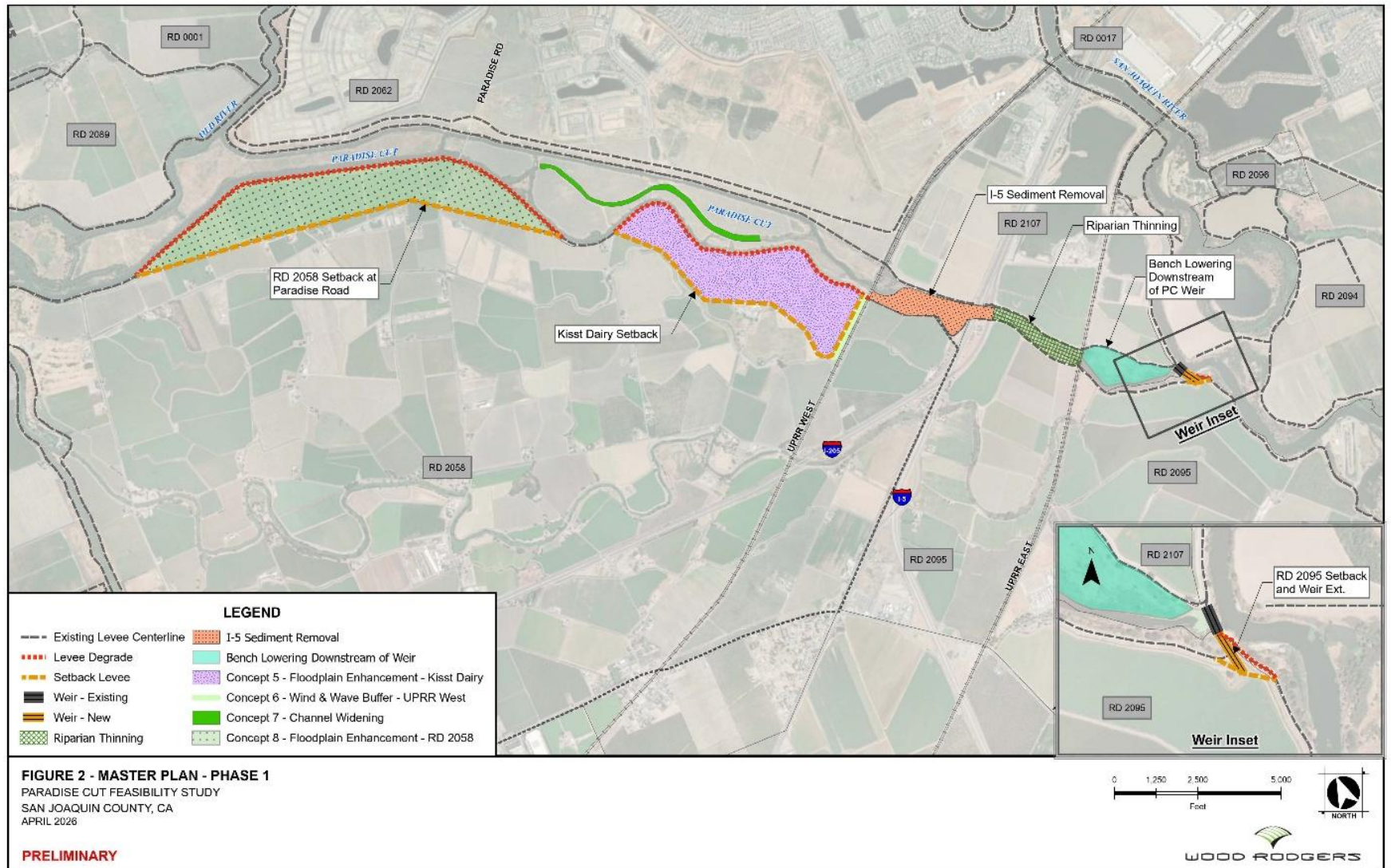


Figure 2 – Master Plan – Phase 1

The hydraulic mitigation measures are included as a core component of Phase 1 to address localized increases in flood stage within Paradise Cut and downstream tributaries associated with increased flows being diverted into Paradise Cut. These measures will be developed in coordination with reclamation districts and tailored to specific locations to address concerns such as seepage, erosion, and overtopping and will be refined during the design and CEQA phase of implementation.

Management Action	Cost	Acreage Added to Floodplain or Floodway
Kisst Dairy Setback	\$64,025,900	267
I-5 Sediment Removal	\$15,808,300	N/A (26 more frequently activated floodplain)
Bench Lowering D/S PC Weir and Riparian Thinning	\$43,405,500	N/A (38 acres more frequently activated floodplain)
RD 2058 Setback Levee at Paradise Road Downstream of Bend 16	\$93,731,800	352
New RD 2095 Weir (930-ft South)	\$7,124,300	7
Channel Restoration (Dredging)	TBD	
Hydraulic Mitigation	\$80,103,900	
TOTAL	\$304,199,700	626

Implementation of Phase 1

Phase 1 implementation may itself be further phased based on funding availability and the need to avoid triggering adverse hydraulic impacts downstream. Depending on these constraints, initial phases could include combinations such as the Kisst Dairy setback and I-5 sediment removal, the Kisst Dairy setback with only the weir extension, or a combined phase including Kisst Dairy, I-5 sediment removal, and the weir extension. In addition, the extent of sediment removal and downstream bench lowering could be reduced or implemented incrementally to minimize hydraulic impacts. The specific configuration and sequencing of Phase 1 management actions will continue to be refined as these analyses advance, ensuring that early implementation efforts remain feasible, fundable, and hydraulically compatible with downstream conditions.

While these actions may be constructed in subphases, they are collectively intended to function as a single Phase 1 project rather than being advanced as a sequence of separate future phases. This approach avoids fragmenting implementation into Phases 2, 3, and 4, and instead maintains Phase 1 as a cohesive package that captures the full suite of flood damage reduction, water supply, and ecosystem benefits. By packaging these management actions as one integrated project, the effort will be better positioned to demonstrate the comprehensive benefits needed to justify State and Federal investment, while still allowing flexibility in construction sequencing to address funding and hydraulic constraints. It is expected that as Phase 1 advances, all components will be advanced together through CEQA into full design before implementing subphases of the project that would be constrained by available State and Federal funding programs.

Phase 2

Phase 2 builds upon the initial implementation phase by advancing key upstream improvements that enhance system performance and expand the functional floodway. This phase focuses on increasing the efficiency of flow conveyance into Paradise Cut while continuing to incrementally improve downstream channel capacity and address associated hydraulic impacts.

A primary component of Phase 2 is proposed to be the set of RD 2095 actions including the setback levee from I-5 to UPRR East and any additional setbacks and weir extension upstream of the UPRR East along both Paradise Cut and the San Joaquin River. The setback between I-5 and UPRR East improves the hydraulic efficiency of the weir by reducing tailwater effects and increasing conveyance into Paradise Cut. While this management action could potentially be implemented in advance of the upstream improvements in RD 2095, it may be inefficient from a cost perspective as there would be stranded investments to make this functional if the 500-foot opening in the UPRR East is ultimately included in the Master Plan.

Key restoration components of Phase 2 are the restoration of the Salmon Slough area (Four Corners), along with the potential inclusion of additional habitat restoration along the San Joaquin River at locations to be determined. These restoration areas were identified in the initial suite of management actions evaluated in the feasibility study and represent important opportunities to expand habitat, enhance ecological function, and support multi-benefit project objectives. The specific locations, extent, and design of these restoration features will be further refined in future phases based on continued technical analysis and landowner coordination.

Salmon Slough restoration is intentionally sequenced in the final phase due to the need to carefully evaluate and manage hydraulic effects associated with increased channel and

floodplain roughness. Habitat features such as vegetation and grading can increase resistance to flow, potentially raising water surface elevations within the bypass. As a result, additional analysis is required to ensure that restoration actions do not adversely affect flood conveyance or increase flood risk. Deferring these management actions to Phase 2 allows the project to first establish baseline hydraulic performance and incorporate lessons learned from earlier phases before introducing roughness-related changes.

Consistent with Phase 1, hydraulic mitigation measures will be implemented as needed to address localized increases in flood stage within Paradise Cut and downstream tributaries resulting from increased flow conveyance. Phase 2 also includes the next increment of channel restoration (dredging), continuing the phased approach to restoring conveyance capacity in downstream channels.

Ongoing Implementation Considerations

Implementation of the Master Plan will require continued coordination on several concerns identified early in the feasibility study. Future phases of study, with more detailed modeling, will refine exact setback alignments and details of the management actions. Conversion of agricultural lands to floodplain through levee setbacks will result in a decrease in RD assessment revenues, which would likely affect the ability of districts to fund ongoing levee and drainage system maintenance; future phases will need to consider approaches to address these revenue impacts. In addition, clear definition of operations and maintenance responsibilities will be critical, including long-term maintenance of the existing and new weir, levees, habitat areas, and ongoing dredging needs to sustain channel capacity and water supply reliability, all of which will require dedicated and reliable funding sources. Finally, the availability and timing of funding will remain a central constraint on implementation, reinforcing the importance of the phased approach to align project components with funding opportunities while ensuring that long-term costs, including O&M, are adequately planned for and supported.

Next Steps

The Technical team will conduct economic analyses to quantify flood risk reduction, ecosystem, and water supply benefits; revise the Environmental Tech Memo to include a strategy for CEQA compliance of phased implementation; and will conduct hydraulic modeling and cost estimating on the Phases. In parallel, ongoing landowner and stakeholder coordination will be critical to maintain support. The results of these efforts will be incorporated into the Feasibility Study report to document the Master Plan and phased implementation approach and to position the project for implementation of the next phase of study.

Attachment C

Staff Report to Paradise Cut Advisory Committee
May 28, 2026

TO: Paradise Cut Bypass Expansion and Multi-Benefit Project Advisory Committee
FROM: Darren Suen, Executive Director
San Joaquin Area Flood Control Agency

RE: Paradise Cut Bypass Expansion and Multi-Benefit Project
Master Plan Phased Implementation Strategy

DATE: May 28, 2026

RECOMMENDED ACTION

Provide consultant team with input on the proposed phased implementation strategy for the Paradise Cut Master Plan, the proposed Phase 1 priorities, and implementation considerations.

BACKGROUND

SJAFCA and the California Department of Water Resources (DWR) have continued development of the Paradise Cut Bypass Expansion and Multi-Benefit Project Master Plan following Advisory Committee review of the Master Plan alternatives in March. Based on technical evaluations and stakeholder input, SJAFCA and DWR selected a modified version of Master Plan B as the conceptual alternative to advance for further study and phased implementation.

The Modified Master Plan B is intended to balance flood risk reduction, ecosystem restoration, and water supply reliability objectives while reducing overall cost and implementation complexity compared to larger-scale alternatives. The Master Plan includes a combination of setback levees, weir improvements, sediment removal, channel restoration, habitat enhancement, and hydraulic mitigation measures that would ultimately expand the floodplain by nearly 3,000 acres.

PHASED IMPLEMENTATION STRATEGY

Because of the scale and cost of the Master Plan, implementation is proposed to occur in phases that can function independently while contributing toward long-term project objectives. The phased approach is intended to align implementation with available State and Federal funding opportunities and allow refinement of later phases as additional technical information, landowner coordination, and funding opportunities evolve.

The proposed Phase 1 management actions provide measurable flood risk reduction, ecosystem, and water supply benefits while remaining competitive for existing funding programs. These actions include:

- Kisst Dairy setback levee

- Sediment removal at Interstate 5
- Bench lowering and riparian thinning downstream of the existing weir
- New 930-foot RD 2095 weir extension
- RD 2058 setback levee at Paradise Road downstream of Bend 16
- Associated hydraulic mitigation measures and an initial increment of channel restoration (dredging)

The estimated construction cost of Phase 1 is approximately \$304 million, excluding the final extent of channel restoration, which will continue to be refined through ongoing technical analysis.

Phase 2 would build on Phase 1 through additional RD 2095 improvements, future habitat restoration actions, and additional channel restoration. Management actions associated with the new weir and setback contemplated as part of Phase 2 remain conceptual and will continue to be refined through coordination with RD 2095 landowners, reclamation districts, and regulatory agencies as Phase 1 is advanced.

ADVISORY COMMITTEE INPUT

The purpose of this item is to obtain Advisory Committee input on the proposed phased implementation strategy and priorities for Phase 1. Specifically, SJAFCA and the study team are seeking feedback regarding:

- Whether phased implementation approach generally and the proposed sequencing of items included in Phases 1 and 2 are appropriate
- Key implementation considerations, including landowner coordination, hydraulic mitigation, and long-term operations and maintenance

Input received from the Advisory Committee will help refine the phased implementation strategy and guide the next phase of technical, environmental, and funding analyses for the Paradise Cut Master Plan.